

Chapter 1  
**Research Outlines**

### 1.1. Introduction:-

By the end of WWII of the past century and till late 1960, several commodity export-oriented and foreign capital-dependent UUEs, among which was Sudan, attained their political independence. They rapidly issued their own independent inconvertible currencies and established their ERs against the ex-colonial internationally convertible currencies. Due to a wide range of long-run reconstructions, transformations, expansions, and booms, the international economy witnessed huge managed level after-WWII aggregate demand. That allowed the newly independent under-developing countries, which adopted the comprehensive central planning methodology/institutions, with different degrees, with their new currencies,<sup>1</sup> destined themselves to relatively rapid<sup>2</sup> social and economic development ideology with the assistance of foreign capital,<sup>3</sup> under the constraint/pressure of very meager national saving levels, and ratios,<sup>4</sup> without the need to change the socio-economic structure inherited from the colonial era or the creation of new socio-economic structure, mainly by failed and weak governments, in post-independent era.<sup>5</sup>

Advanced World Economies GDP performance was increasing during 1960 – 1970 that affected positively the performance of most under-developing economies performances. In the newly independent countries, after WWII, the main important strategies adopted were, as in the colonial era, "export-oriented" and/or "import-substitution" development strategies," from a Keynesian perspective that was internationally dominant till late 1970s, aiming at maintaining a sustainable<sup>6</sup> BoPs to meet the decided rapidity, through massive and coordinated planned investment in different sectors of national economy, for rapid social and economic development and transformation. But such *rapidity* led under-developing countries' BoPs and ERRs to fall into slow-motion difficulties that were sufficiently frequent so that the IMF and the WB<sup>7</sup> quickly responded to several of them annually during this period, although the bulk of their activities consisted of Stabilization Programs. However, their BoPs and ERRs difficulties didn't grow into serious problems or crises, as happened for the advanced countries during this same period<sup>8</sup> that led to serious real currency adjustment, mostly by devaluations or appreciations.

Despite these difficulties, the period till late 1960s was characterized, mainly, by: -

1. Relatively high real wage rates, to encourage the underdeveloped sectors to industrialize.
2. Low private capital flows<sup>9</sup> from rich to poor countries despite the un-committed 1% of the AWEs' GDPs stated in 1958 or the Pearson Committee's 0.7% in 1969;<sup>10</sup>
3. Slow-motion crises due to moderate and sustained BoPs' CAD that minimized the need for excessive or over-borrowing. This was reflected in relatively low levels of TED and EDS. It also witnessed stabilized, but adjustable, (nominal), fixed ER, of the BWIs' Rule, assuming that it will adjust the (real) ER for the adjustment of BoPs problem;<sup>11</sup>
4. Stable price levels and low inflation rates,<sup>12</sup> that helped alignment and consistency of employment levels with the achieved real GDP economic growth;
5. Relatively low and stable nominal interest rates with insignificant ups and downs.

As the scope and frequency of international CCs erupted by late 1960s<sup>13</sup>, due to the post-WWII pressures of the booming/expansionary policies for the advanced countries development and reconstructions, lifting exchange controls and deregulating financial markets with varying degrees since late 1950s<sup>14</sup>, and due to the pressures from the inflation fed by the Korean, and the Vietnamese Wars, the 1934 US\$ 35 price of gold was no longer sustainable, under the creeping pressure of the puzzling stagflation dilemma<sup>15</sup> and under the August 1971's speculative attacks' pressure, resulted into the USA *dollar convertibility crisis*, forcing the US to take the dollar off gold, the legal basis for relationship at the center of the international monetary system, and other advanced countries took their currencies off the dollar,<sup>16</sup> ending the BWIs' soft peg policy of "fixed, but adjustable, ERRs" and giving rise to "floating, but managed, ERRs,"<sup>17</sup> implying the break-down of BWIs' arrangements.<sup>18</sup> By 1973, also under another speculative attacks' pressure, the 1950-60's "Bretton Woods" system was collapsed and abandoned as major developed countries shifted to (managed) floating ERRs, indicating the end of the post-war boom.<sup>19</sup> Since then, the world witnessed new dynamism, which can be summarized as follows: -

1. The world shuffled itself with a new kind of barrier, that is the uncertainty accompanied with the "floating, but managed, ER system" and deregulated financial systems and

became much more vulnerable to speculative attacks, beside the, already existing, direct and indirect advanced countries' protection system;

2. Reduction in the international demand for primary goods and services that the underdeveloped countries specialized in their production and exportation, mainly those characterized by the decline in their long-run terms-of-trade;
3. Surge in private lending by the big multinational banks, corporate, and the petro-dollar markets in the 1970s, due to the negative real interest rate (trap) that gave DCs every incentive to borrow,<sup>20</sup> and due to relative decline in borrowing from official sources as conditionalities and utilization criteria were increased and complicated for the multilateral and bilateral assistances' use of aid and grants, particularly during the 1990s and 2000s' first half of the decade<sup>21</sup> in favor of high private surge of capital mobility;<sup>22</sup>
4. Increased prices of imports, mainly for developing and underdeveloped economies, that led to low positive, or negative, real GDP per capita growth rates and/or high increasing unemployment rates in many DCs. Besides DCs started to enter increasing unsustainable fiscal deficit<sup>23</sup> and high increasing inflation rates pressures;
5. Entrance of the world into a rapid-motion towards crises era since mid seventies, starting with different BoPs problems,<sup>24</sup> protectionism, and recessions in early 1980s,<sup>25</sup> and became at much more shorter intervals afterwards, mainly in the developing world.<sup>26</sup>
6. Advanced countries' adoption of sanction policies on developing countries, beside the domestic contractionary policies, through reduction of domestic real wages, to lower costs of production, since mid-1980s that reduced policies contribution of foreign trade to the per capita economic growth and poverty reduction;
7. Increased capital flight and brain drains from the third world towards the (ageing) advanced, rich, countries, mainly to Europe;
8. Eminence of China as a new super-economic power by mid-1990s, after the fall of the Soviet Union in 1989, and the unification of East to West Germany.
9. Emergence of the euro currency by the end of the 20<sup>th</sup> century as a new competitive alternative to the USA dollar, which its value declined relative to other major currencies.

10. By mid-1990s, floatation of the advanced countries' domestic currencies was strongly managed due to de-stabilization effects they caused, before and mainly, since 1973's speculation attacks, which proved to be, by time test, contrary to the speculators stabilization assumption of the 1950s.<sup>27</sup>

Despite this dynamically shifting real world, it remains out of control of every country of whatever size. During these wobbly period, developing countries, mainly the least developed ones, which became typified as debt-diseased, or BoPs crises, countries, like Sudan, were subjected to crisis management, not crisis prevention as was the 1950s, 1960s, and 1970s cases, through policy packages for economic stabilization programs<sup>28</sup> of the "one size fits all" policy prescription model, mainly during 1982-1985, which was instituted by the IMF in 1985, and adjusted in 1986.<sup>29</sup> The basic contents of such policy package<sup>30</sup> were **1.** Adoption of a sound policy environment for anti-inflationary fiscal, monetary, and interest rates policies; **2.** Liberalization of trade and ERRs; **3.** Structural policies that increase savings and investments and encourage the involvement of the private sector; **4.** Increased efficiency in the organization and management of the economy; **5.** A social policy to protect the weak economic segments of the society from the negative side-effects of such adjustments programs to avoid adding to the existing poor through safety nets.

Despite this shift<sup>31</sup> of crises from advanced to developing countries, mainly, by 1980s, as it maybe clear from above, through this excellently structured IMF Policy Prescription, under the name of reducing under-developing countries' domestic absorption, mainly aggregate consumption component, to increase domestic savings,<sup>32</sup> through export-oriented strategies by the proposed free trade regime that will be managed by any flexible band of ERRs, to help in eliminating the deficits in the BoPs Accounts, in order to make countries return to their credible solvency path,<sup>33</sup> absolve their arrears, sustain servicing their ED in due time in the long run, and regain confidence of the international capital markets and donors, to support their long-run developmental positive real growth rates GDP,<sup>34</sup> particularly by the private sector lead, not the public sector.<sup>35</sup> But as it is also clear from above that the "small open economy" assumption is false since every country can be crises-diseased. This means that

trade-partners (given) price-volatility/fluctuation, for example oil, even in the short-run, will put any economy's domestic internal and external balances on the edge to fall into real persistent fundamental imbalances, from which Sudan and USA are now suffering.

### 1.2. Research Problem and Questions: -

The Sudanese UUE's structure in its relationship with the world economy, as akin economies, via the unknotted H-STGLP, remained to determine the sizes of its macroeconomic variables and their equilibrium with each other in the face of different exogenous shocks and its population growth. The interaction of these macroeconomic variables is summarized in the overall macroeconomic GDP/Capita variable. Given the incentive-impact of domestic, relative to foreign, opportunity costs, the Sudan's latter variable remained determining the sizes of national savings (S) that financed, partly, Sudan's aggregate investments (I) for the GDP/Capita to grow. That (S – I) gap, as it is well-known, is equivalent to the CAD, which is equivalent, by definition, to NBKIs, hence to changes in the country's NFA. NBKIs, in turn, led to a series of shocking domestic spending beyond the economy's potential productive capacity, via its monetary and non-monetary policies, to sustain opened CADs. CADs, which are equivalent to changes in the economy's net foreign assets, remained representing the spent NBKIs-dependent ER buffering NIR.

The latter variable, relative to DMS, remained dwindling since independence to date. It continued to fail in sustaining the governments' committed ERR. So, the sustained structure of the Sudanese economy, hence, failed to close its IEIs problems that caused, not only deteriorated but also, several CCs.

(Nominal) devaluation is the rule of "*cutting off a cat's tail in slices.*" The continuous nominal devaluation of the Sudanese ER, which resulted in sustained persistent increasing IR and CADs trend, enforced the research for the working factors behind them. Of course, CC is defined by the sharp (nominal) devaluation magnitude that differentiates it from other mild/passive (nominal) devaluations or depreciation magnitudes. But the core problem that remained undefined or unclear is: "Which, and how such devaluation rate was a CC and what forces made it come about under NBKIs dependent UUE?"

Despite the failure of different (international) CCs models/theories in predicting them, the attempt to understand the outbreak of a CC in terms of alleged economic “models” from different Sudanese references and reports is extremely difficult to find. They are actually semi non-existent references. That includes the BWIs’ reports that concentrated on ED, rather than currency, crisis that was thought to be solved by *small* and *sharp* devaluations. What can be found in these references is the needed nominal devaluations either for (vague) international competitiveness or for (vague) sustaining ED-servicing in due times *raison d’être*. There exists no threshold in these references by which the prevailing nominal ER should be safely devalued nominally and without triggering a CC in Sudan.

In addition, there is a “failure” of the already-existing theories in accounting for the Sudan’s CC causes and threshold. For Sudan’s case, unfortunately, serious investigations of the CCs’ causes and threshold do not exist. The problem of continuing devaluation, from a practical-point-of-view, became intolerable by many circles and citizens in the country. That led, in many times, to confrontation to such phenomenon.

Unfortunately, many Sudanese and foreign expertise and consultants consider the foreign currency as a commodity that should be left to the free play of market forces. Few consider it as a policy tool that should be employed for stabilizing and structurally changing the prevailing Sudanese under-developed economy by boosting its real GDP growth. None of these two factions discussed the dynamics that caused CCs of the Sudanese pound’s international ER. Fortunately enough, history is biased to the second faction. It reveals that now serious developed and developing countries manipulated their (*fixed*) ER tool to develop, stabilize, and strengthen their national economy’s momentum to support higher rapid real GDP/Capita growth. On that basis, this research can be considered as a start in filling this gap in this area of extremely needed specialization.

Sudan’s problem, as data divulges, dawdles in its suffering from a very long-term combination of growing IEIs. That is very clear since the late 1960s. It was caused by inappropriate domestic macro-policies, deliberate international sanctions, domestic political instability, droughts, desertification, beside the non-stopped domestic civil wars. All of which,

in a dearth national saving Sudan, contributed to the buildup of public debts that reached 108.7% of GDP, equivalent to US\$ 55 billion, by 2015,<sup>36</sup> from 7.4% of GDP, equivalent to US\$ 248.75 million, in 1972. That remained to be and accompanied by sustained devaluations of the Sudanese official pound's ER from LS 0.345 per dollar in 1956 to LS 0.394 per dollar in 1972 to LS 6,414 per dollar in 2015.<sup>37</sup>

These, beside other socio-economic factors, such private and public investments, were reflected in **1.** excess real aggregate demand; **2.** high unemployment and inflation rates; **3.** persistently appreciating real ER; **4.** weakening domestic currency purchasing power; **5.** widening national budget, BoPs' CADs, and capital flight during the period under study.

This means that the Sudanese economy and its population unbearably suffered from preventing the Sudanese economic authorities to adopt and implement the appropriate policy-packages for such small open non-advanced industrial economy assumption.<sup>38</sup> Sudan's economy, therefore, is not too much different from the diagnosed fragile allegory of textbooks' worlds and related studies. As the research text will show, the ideological cult belief in the philosophies backing-up the domestically adopted macroeconomic policies proved the contrary of their predictions. The consequences were increased external and domestic debts, debt arrears, poverty,<sup>39</sup> and CCs,<sup>40</sup> in the fiery mayhem of the dynamic world economy.<sup>41</sup>

This, in other words, means that the Sudanese economy must end-up in tough hard-landings.<sup>42</sup> This is despite any magnitude of revenue from any natural resources or for how long the governments' domestic and foreign allies are capable to meet their needed foreign finance to fill the economy's widening, mainly, external and, generally, internal imbalances. This implies that their diminution or reversal will force alteration of policies through the indispensable povertizing Cold Turkey adjustments.

As will be shown later, most of the policies adopted were totally unsuccessful in solving the economy's IEs. On the contrary, it brought with it more complications to the existing problems by adding to them the sanctions from the USA and its allies around the world. The problem becomes more severe as it is rarely to find discussions about these problems, which do not facilitate, and hence delay, the prompt solutions before its aggravation and their impact



on the economy and social welfare in Sudan. This neglect resulted from the 1950s traditional economic development theories that stated the importance of rapid processes to escape the poverty and ED traps in the under-developing countries, although they didn't determine the right policies for the quantity of NBKIs' levels into the country to avoid the loss the economy's international competitiveness, and maintain the internal and external balances.

These unbroken problems raise many important questions about policy implications under these dynamic setting of the world. Among these are the following two most important ones: -

1. Despite the quantity of NBKIs to the economy, for its rapid development, since independence, at least from the perspectives of different plans and peace agreements, why the Sudanese CADs kept widening, although NIR increased tremendously in recent years? Also, why devaluations, since 1978 till 2012, according to the recommendations of what became known as "IMF Policy Prescription", didn't help in adjusting the widening CADs, in specific, and the economy's overall imbalances, in general?
2. What is the right and appropriate (strategic) stabilizing policy-mix for rapid economic development in the case of Sudan while managing/controlling a non-dependent-NBKIs committed ERR, which is unlike the advanced and middle-income economies, otherwise, the conceived rapidity has to be adjusted, stopped, or become even negative by the force of sudden stop or sign reversal of NBKIs that always sustain crises and increased poverty levels in the country.

### **1.3. Importance of the Research:** -

Although Sudan prepared different plans and programs and, at least nominally or partly, implemented them,<sup>43</sup> their non-debt creating development and poverty reduction ultimate goals were never achieved and remains considered by the multilateral international institutions as a poor low income country with unsatisfactory ratings in different international publications during the period under study. But the most important feature of all these plans was their increasing heavy reliance on (conditional) foreign financing to achieve their conceived rapid economic development objectives. This failure raises the important question of "what went wrong with all the employed policies?" or "why those policies didn't realize

their economy's targeted structural changes, growth or/and macroeconomic stability goals and objectives?" This means that the justifications made for their existence were actually superstitious in the absence of alternative convincing solutions that can be seen on reality.

Unfortunately, financial, but mainly currency, crises, and their economic, political, and social costs, have frequently been experienced throughout the World countries' history, as will be shown in chapter 2. Despite constant endeavors to purge them, it seems dubious that they will not recur in the future. Here, it is very important to stress the seriousness of this problem which relies on the thoughts of some ruling Sudanese development planners who believe that the Sudanese economy cannot work without the inflow of foreign technical, physical, and financial, capital.<sup>44</sup> The concentration was, unfortunately, on the positive side of NBKIs without discussing its negative sides, to maximize the benefits and minimize the costs. Accordingly, the continuation of such ruling development planners' replica *must always* be jeopardized, as it increased the vulnerability of the economy and society's welfare, and hence, threatening the hard landing of the economy which must be avoided. So, filling this policy gap in the Sudanese literature becomes indispensable, at least to minimize CCs recurrences.

#### 1.4. Research Hypotheses: -

History is always the right place to dissect economic controlled experiments to spot trusted causes governing the frequent recurrence of a specific phenomenon. From the perspective of Sudan's different plans and programs, since late 1950s and Jan. 2005 CPA's S-JAM as well D-JAM, the resort to NBKIs was justified on the basis of rapid development for eradicating Sudan's rampant poverty<sup>45</sup> through financing targeted investments that cannot be met by the existing low national savings,<sup>46</sup> including the monetary authorities' foreign assets. *In other words, erratic NBKIs were, as will remain, as indication of adopting policies for stimulating domestic aggregate demand for foreign goods and services. Hence, it, therefore, supported expansionary domestic policies that overheated domestic economy. Thus, the government, by resorting to NBKIs, is signaling for an incremental pressure on its committed ER.*

*Erratic NBKIs, which are equivalent to opened or worsened CADs, not only create international creditors' claims but also, make the economy and its people to consume and*

*invest beyond their import-dependent economy's income-generation capacity. That was the Sudan's case whether before, or after, the end of the civil war or for development purposes, as was decided since 1960, or to smoothen shock-disasters.* Hence, the opened CAD, due to NBKIs, is an addition, not only to the existing ED stock but also, to the excess demand for foreign currencies as it remained financing or/and supporting the excess government expenditure. That is because government revenue, by its nature, is considered exogenously low and volatile since it is pre-dominantly dependent volatile natural resources export quantities and/or prices.<sup>47</sup>

As can be seen from the available historical (nominal) data, private and government policy-makers always manipulate their nominal variable tools at hand to achieve real objectives. They always crash in nominal terms when they manage their nominal tools ineffectively or due to sudden exogenous shocks. Without understanding clearly how these nominal variables were manipulated, real variables cannot be managed to be realized in the targeted date. Sudan experiences with currency crashes showed that the nominal ERs were crushed sharply due to imperfectly manipulated nominal variables.<sup>48</sup> According to governments' plans, it can be found that it neglected the impact of heavy and increasing dependence on erratic NBKIs, despite its structure, on the external balances in the face of erratic international political relationships and commodities' prices. In addition, the impact of policy responses on people's living standards and the economy's structure that differs from one country to another.

Given the excess ADD, it is hypothesized that international NBKI, which drops during hard time of severe export prices drop of the dominant commodity, low NIR, and worsened international political relationships, must lead to CCs. Erratic NBKIs played a great role in inflating real ERs. Consequently, it determined negatively the degree of Sudan's domestic prices competitiveness,<sup>49</sup> which includes import prices. So, if foreign financed ADD is not managed properly, the economy's internal and/or external balances will worsened severely as NBKIs drops relatively sharply. Ultimately, it will force the committed ER to crash.

The major reasons for Sudan economy's IEIs that led to CCs were: -

1. Increasing domestic demands for NBKIs under the name of unrealized structural changes;

2. Increasing claims of the rest of the world on the Sudanese residents,<sup>50</sup> i.e. ED, were, not sanctions and civil wars but, the inflationary budget and monetary policies due to heavy reliance on expansionary BoPs policies, beside domestic monetary policies, beyond the economy's income-generating capacities. The internal and external balances deterioration forced the economy to fall in CCs once NBKIs rapidly fell;
3. Besides, rapid economic transformations, under long-term sanctions and civil wars, leads to social and economic difficulties and problems as a result of short-term disruption to the consistency, if existed, in the adopted lethal policy mix.<sup>51</sup> Adjustment of such lethal policy mix to sustain growth may result in the loss of the private sector's confidence in the stability of the government policy package during anyone period of time, which might defeat the achievement of that growth itself.

#### 1.5. Research Methodology: -

The real world is a complex place. And the solution to complexity is often to satisfy specified decision-rules or models that are good enough. A *model is simply a framework that is designed to show complex processes*. It helps in logically isolate and sort out complicated chains of cause and effect and influence between the *numerous interacting elements* in an *economy* as worked-out by the adopted *socio-political system*. Its **core function** is both a **discovery of tools as mechanism for generating truth and as a way of organizing and codifying thought**. So, a good enough *model*<sup>52</sup> **tries to correctly explain and predict the working of the complex real world system**, and, in particular *how things are, how logically their interactions are producing consistent outputs, and how they will change if something exogenous to the real world system changes*.

In economics, a *model* is defined as a *theoretical* construct that represents real economic processes through *a set of logical quantitative or qualitative variables relationships between them*. Economic *models* are definitely not the **Truth**. They are **mechanisms** for generating that **truth**. They are, therefore, a way to make sure that told stories dangle together, involve some credible blend of individual *behavior*, and interaction of those credibly behaving individuals. So, models are always the right guide for policy preferences that should be disciplined to

conclude good guiding messages, implications and insights, rather than instincts that are based on just experience, which might reflect other environment or historical experience.

Most models use mathematical techniques in order to investigate, theorize, and fit theories into economic real situations. In the end, economists use these models to study and portray these situations in as much simple framework as the simplest methodologies can permit. They portray *how things work* by using the historical (resulted) numerical magnitudes or logical events. Finally, models aren't sacred, but disciplines of thinking about things in terms of the simplest models are really important.<sup>53</sup>

*The focus of a model is to gain a better understanding of how things work, to observe patterns, and to predict the results or events. They are based on theory and follow the rules of deductive logic. An important feature of an economic model is that it is necessarily subjective in design because there are no objective measures of economic outcomes. Sometimes, they are dictated by the complications of the reality itself or rules that generate the same event for different periods of time. It important to stress that whatever their justifications might be, these models will remain forever school specific.<sup>54</sup> That is why different economists will make different judgments about what is needed to explain their interpretations of the same reality and events. Disagreement among economists proves shows that existence of one approach to deal with any economic problem is completely absent.*

Economic models, as always said, are things one should use, not to believe, them, because they are just models, and, as abstractions, are necessarily falsifications of the full reality being modeled. *Models are only fundamentally good in simulating reality as their founding assumptions, more than their adopted methodology. Economic models have two functions: 1) to simplify and abstract from observed data, and 2) to serve as a means of selection of data based on a paradigm of theoretical or logical, or mathematical or econometric study. Creating a model has two basic steps: 1) generate the model, and 2) checking the model for accuracy - also known as diagnostics. Models that are mathematical, directly or implicitly, are limited because they must be tractable, which is to say, they are useless unless they can be solved or manipulated to produce insightful results.*

As it is well-experienced, *what matters then is what works*. This is because (*subjective*) economic models have become increasingly sophisticated mostly because they are based on “*the world is flat assumption*.” Practically a lot of economic behaviors are "non-linear", to say the least, and non-linear mathematical systems are hard to solve as hard to interpret. To *predict* with (*objective*) models means to *rely on inferences from laws of nature*, whereas *forecasting with (subjective) models is much more probabilistic*. *Future forecasting-based models, hence, remain inherently much more uncertain relative to prediction-based models*. All forecasts have risks about which the public should be aware, despite the well-established ways to express them in the field of statistics.<sup>55</sup> *The longer the time horizon of the analysis, the larger the uncertainties involved in the forecasting-based, relative to predicting-based, models*. *That is why probabilistic-based forecasting, relative to law-based prediction, models are, and will, remain beneficial mostly for their generated insights than their generated numbers*. Accordingly, one should base arguments on law-based logic and evidence and ***not necessarily on the required traditional probabilistic methodologies or authority figures for generating insights and truths***.

Furthermore, modeling provides a logical, abstract, template to help organize the analyst's thoughts to generate insights and facts. Through the use of a model, the economist can experiment, at least logically, different scenarios that can be produced in an attempt to evaluate the effect of alternative policy options, or weighing the logical integrity of arguments presented in prose. Certain types of models are extremely useful for presenting *visually* the essence of economic arguments. Although they are the most dominant method for presenting evidence for analysis and policy formulation, they are done after some mathematical exercises on the backyard. That was the adopted methodology by the 2008 Nobel Laureate Paul Krugman. As he put it: -

*“My own mathematical intuition, and a lot of my economic intuition in general, is visual: I tend to start with a picture, then work out both the math and the verbal argument to make sense of that picture. (Sometimes I have to learn the math, as I did on target zones; the picture points me to the math I need.) I know that’s not true for everyone, but it’s true for a fair number of students, who should be given the chance to learn things that way.”*<sup>56</sup>

An econometric/empirical model is one of the tools economists use it, mainly, to forecast future developments in the economy, *given the domestic institutional degree of development, resource-employment, and data-reliability. Empirical models aim to verify the qualitative law-based predictions of theoretical models and convert these predictions to precise probabilistic-based forecasted numerical outcomes.* In the simplest terms, therefore, econometricians *measure past relationships among such variables and then try to forecast how changes in some variables will affect the future course of others.* All economic models, no matter how complicated, are subjective approximations of reality designed to explain the observed phenomena. It follows that the model's predictions or forecasts must be tempered by the randomness of the underlying methodologies by using the data it seeks to explain and by the validity of the theories used to derive its equations and its predictions.<sup>57</sup> At the end of the day, *one must remember that a model is a replica and never the actual world. And each model is based on certain economists' experience and degree of confidence about the validity of the model used.* So, one set of data could get very different results as models are different. That is, no econometric, i.e. probabilistic-based, model is ever truly complete. All models contain variables that fail to predict, precisely, because they are determined by forces "outside" the (subjective) model itself.<sup>58</sup> Diagrammatic models, for example, can predict the chain of events for the functioning of the economy. In all cases, facts confirm that there is no one tool is without disadvantages.

Macroeconomic models can be presented in different ways to arrive to the same result. A macroeconomic model is then an analytical tool designed to describe the present and the expected functioning of a country's or a region's economy that can be based on another analytical rules. They are used to clarify and illustrate basic theoretical principles, to test, compare, and quantify *different macroeconomic theories to qualify them.* They are used to produce "what if" scenarios and they may be used to generate economic forecasts. But although these different types of macroeconomic models serve different purposes, alas, they have also different advantages as disadvantages. Whatever these advantages and disadvantages, macroeconomic models remains to be widely used in academia, teaching, and

research where any complicated tool failed to qualify, as this research case. They are also widely used by international organizations, national governments and larger corporations, as well as by several economics consultants and think tanks organizations.<sup>59</sup>

As it is well-known, econometrics' emphasis is on estimation and inference within a world of stationary data. In its broadest sense, "econometrics" means "measurement in economics." It is an approach that is like dichotomous or dummy that represents the situation of (explained variables of) today in favour of (forecasted) future variables. The problem with econometrics approach is in variables that are exogenous in one model which might be endogenous in other models or vice-versa. From a very wide macroeconomic framework, variables becomes defeating each other unless policy targets one endogenous variable over another.

Econometrics modelling is extensively used in industrialized world as they are powerful tools *in circumstances where their economies are operating close to full-employment equilibrium and where even the most harsh policy choices, with their highly-developed and strongly intertwined institutional system, are not expected to change the underlying structure of the economy. Their relevance declines for analysis of "large" policy changes when the economy is below full employment. They always do not show when the ruling variable's changed date in causing the dependent variable to change since its same date.*

So, their robust estimation requires long and reliable data series and *it becomes most powerful in the absence of high unemployment rates, "regime shifts," or other structural breaks, due to the persistent growing imbalances.*<sup>60</sup> Also, in interpreting the estimated effects of exogenous variables on the targeted variables, it becomes important to underscore that the estimates that do not take into account of any offset by other sector's policy change or pressures. It is observed that the forecasting-based models or the models' forecasts were always revised frequently during macroeconomic disequilibrium cases. It is important to mention Alwyn Young, the brave masochist, who spent three years re-analyzing more than 50 experiments published in several major economics journals, and argues that more than half the regressions that claim statistically significant results don't actually have them.<sup>61</sup> As he put it, *"The lack of omnibus tests that link equations in ... published papers is not surprising, as these tests are near nigh impossible to implement using conventional methods. ... The fact that the multiple tests implicit in these*



*regressions are almost never jointly evaluated cannot be blamed on authors, because these papers have all gone through the scrutiny of seminar participants, referees and editors.’<sup>62</sup>*

Accordingly, it becomes a serious and risky problem to use advanced countries’ full-employment econometric specifications to model the UUE’s non-full-employment country-specification. They may not lead to the right consistent and effective policies on problems meant to be responding towards their resolutions. For the case of Sudan, this problem can easily be found in different literatures and data that are referred to in the text.

Also, Aris Spanos (1986) noted that: -

*“No economic theory was ever abandoned because it was rejected by some empirical econometric test, nor was a clear cut decision between competing theories made in light of the evidence of such a test.”<sup>63</sup>*

According to Econometrician Kennedy (2008), who maintained the quote above, mentioned that econometric models are not necessarily the certain tool for proving the validity or the invalidity of any theory whether for the advanced or the under-developing economies. *The point therefore is the establishment of strong evidenced theory that has strong predictive power whatever tool is adopted for whatever country at whatever degree of structural development and resource employment for the stability different macroeconomic variable.*

But despite all the above-mentioned weaknesses in using econometric modelling for UUEs, empirical literature on this subject remains limited and country specific. Their frameworks remain unspecified building block for an overall macro-econometric model for the country’s longitudinal studies. In part, the gap is due to the lack of related reliable data and/or disaggregated data, which is a major drawback to researches on such subject for UUEs. As the researches carried out been revised, it can be seen that it faced the lack of strong predictive powers, since analysis were conducted on the basis of **1.** not designing the right or specialized questions about the problems that is disjointed with the overall model of the economy; **2.** not using the right model specifications for the UUE specifications; **3.** even if the right specification were used, some suffer from using non-linear variables in a linear model specifications or relationships; **4.** past models that were used for Sudan proved to be simple, disjointed, and short-lived. Maybe, because they are not covering other related sectors, and their parameters have not been updated for a long time, as the Sudanese economy is now, for

example, more open than in the past; **5.** they didn't, in most models, consider the shifts in the economic policy regime and its structural breaks; **6.** marginalize the seriousness international dimensions of the problem in almost all specifications; **7.** poor formulation of the problem, hence, model specification.

Besides, the competing standard theories compromising this research subject, it did rely more on logical, backed by simple mathematical, rather than econometric, methods. They have helped in correcting the imprecision in understanding the subject in the UUEs. They also helped in avoiding the violation of the parsimony principle with the right functional forms and transformations.

In this research, due to extensive range and time limitation, concentration will rely heavily on a mix of deductive, statistical, and natural field experiment, as a simulation to the event-study, methodology for a UUE like of Sudan's specifics. The fundamental idea behind most direct field experiments remained in making use of randomization in an environment that arrests important varieties that affect the real world. Field experiments, as distinct from customary empirical economics, provide the benefit of permitting the researcher to create exogenous variation in the variables of interest and allowing him/her to establish causality rather than mere correlation. Relative to a laboratory experiment, a field experiment potentially gives up some of the control that a laboratory experimenter may have over the prevailing environment in exchange for increased realism. This forces the use of a multi-methodological technique to inspect the forces that led to CCs, to overcome data flaws, and major structural breaks in the economy and political regimes shifts.

A number of the key tests involve straightforward observations that required no more than a cross tabulation or a two-dimensional graph. It will be seen that the statistics that caused the problem by the exogenous variables act as robust as any econometric model. Moreover, it can be seen that the methodology can be used to measure and forecast policy changes on periodic, rather than on average, basis to avoid potential or farsighted crises.

But, what should be in the table or the graph is not at all obvious before a theory is developed to show the way. The significance of such uneasy approach lies in its strength of

the derived key prediction powers. The ultimate goal remains in extracting what macroeconomic policies went wrong in generating CCs in Sudan. The end result, of course, is an accumulation of useful knowledge, solving techniques, and understanding that other approaches target. Hence the researcher is actually trying to open the doors for hot policy discussions in this branch in the future to realize the overall objective of this research.

#### **1.6. Objective of the Research:** -

Based on the above-mentioned seriousness of the risks, the research is trying to disclose and obliterate the weakness and myths of such ruling development planners' believe in foreign capital inflows in achieving their conceived economic development objectives without calculating the risks to avoid high claims of the rest of the world on the existing and future Sudanese residents, and to evade different economic crisis that past and existing generations excruciatingly suffered from them,<sup>64</sup> and the hard-landing policies of the economy, maybe for the new generations. Hence, this branch of research needs intensive efforts to find-out pure Sudanese different approaches to the Sudanese economic and social problems.

More specifically, Sudan has a serious gap and disinterest<sup>65</sup> in this specialized field that needs to be filled. By this research, it is hoped to help in contributing to the progress of the prudent management of the national economy, from the international capital inflows perspective, to avoid the disruptive Cold Turkey policies, mainly like those adopted during the first half of the 1990s to face the Sudanese financial and CCs.

This research aims at examining the erratic NBKIs influence on internal, external balances, and ED dynamics through different transferring mechanisms and its impact on macroeconomic balanced economic development. Accordingly, it aims at extracting the appropriate policy prescription packages for Sudan from a pure Sudanese perspective to avoid the fall, specifically, in CCs quagmires, as the right policies can allow.

#### **1.7. Research Structure:** -

Trying to understand Sudan's existing serious crises, and their solutions under the existing rest of the world dynamic pressures and problems,<sup>66</sup> chapter 2 will be concerned with the standard CCs theories and paradigms literature and which has been neglected in the case of Sudan. Chapter 3 will be discussing the background experience with "The Global Return to

Fixed ERRs in History,” and governments’ efforts in eliminating macroeconomic imbalances in the national economy by considering the specifics of the economic development stage that was not considered seriously in different related literature. Chapter 4 will be discussing the negative role of “NBKIs and CCs in Sudan,” at independence and after the separation of the now “The Republic of South Sudan” to show prove that the Sudanese economy was not developed as it should be. Chapter 5 will be discussing the negative role of “Increasing Dependence on NBKIs and CCs in Sudan,” since 1960/1996 in generating CCs, given the adopted domestic macroeconomic policies under the instability of the World Economy. Lastly, this research ends with “Summary, Conclusions and Recommendations” that reflect the key lessons learnt from this research, with the hope that it’ll realize its objectives.

Chapter 2  
**Theoretical Background**

## 2.1. Introduction: -

Under the post-WWII rules of Bretton-Woods Institutions' of fixed,<sup>67</sup> but adjustable, ER, developing and under-developing<sup>68</sup> countries' major focus of economic policy, since their independence, was on rapid GDP per-capita growth. It was perceived that it could be achieved mainly through indispensable structural changes, notably, by encouraging industrialization, with heavy reliance on foreign financing and high-productivity advanced foreign technologies. By the end of the Post-WWII boom in 1973 to late 1990s, many countries were gradually distracted from these long-term objectives towards short-term macroeconomic and structural adjustment objectives to mitigate the pressures enforced by a series of major shocks to their economies, some imported while others were domestically propagated. The burden placed upon policy-makers in using all their dexterities in manipulating these mostly unwanted disturbances, which varied considerably from one country to another, were beyond their challenging powers, mainly with weak pecuniary facilities.<sup>69</sup> The theoretical backdrop of this dynamics in this long-run period will be briefed below as it can be allowed.

This branch of economic literature concentrated its discussions on poor countries using backward production technologies with scarce-physical-advanced-capital, savings, and unlimited supply of unskilled labor in economies/sectors. They remained to be characterized by the production of a greater proportion of primary goods, of relatively high comparative advantage, in their GDPs/incomes. They were also characterized by being subject to highly variable supply and demand prices in domestic and international markets. Moreover, their governments' policies are often erratic and ad-hoc, so that their relatively high volatility in a volatile GDP growth is a natural phenomenon. Consumption volatilities, however, is comparable across income groups of all idiosyncratic risks are internationally diversifiable. The classical development theorists viewed economic development as a growth process that requires the systematic reallocation of factors of production from low productivity in the primary subsistence sector, which is rampant with traditional decreasing returns to scale technology, to high productivity in an advanced industrial sectors,<sup>70</sup> which is rampant with

updated modern increasing returns to scale technologies, characterized by massive investments and associated necessary skilled labors and managers.

Theorists of the 1940s, 1950s and early 1960s assumed that the processes of economic and social structural transformations are endless series of successive stages of economic growth through which all countries must pass. It was primarily an economic theory of development in which the right quantity and mixture of saving, investment, and foreign aid were all that was necessary to enable under-developing nations to proceed along an economic growth path that historically had been followed by the most developed capitalistic countries. Development thus became synonymous with rapid, aggregate, economic growth, mainly in per-capita.<sup>71</sup>

Development economics is therefore considered as a comprehensive discipline characterized by multi-specializations that include, among others, Agriculture, Industry, Trade, Macroeconomics, Environment, Labor, Health Economics etc. The ultimate goal of this discipline is to sustain an uprising increase in economic real, not nominal, standard of living of a country's population, normally accomplished by improved stocks of human and physical capital, and updated production technologies that lead to increasing average and marginal productivities, at a higher rate than that in the traditional sector, by levels above a perceived income poverty line characterizing the traditional subsistence economies that are distinguished by high population growth rates that maintains living standards even below it,<sup>72</sup> and who are targeted to eradicate their poverty stance through increasing their productivity in the long-run by industrialization, as can be concluded from, among others, Arthur Lewis's dual-economy dynamic termination perspective.<sup>73</sup>

These criteria for the achievement of economic development's goals and objectives, and for the purpose of this research, can, therefore, be extended to include the conditional "process" that concentrates on, and leads to, a sustainable non-externally and/or non-domestically indebted<sup>74</sup> positive improvement of the Poor's living standard in the long-run, mainly in the traditional subsistence sectors of the economy,<sup>75</sup> through increasing its employed citizen's marginal and average productivities, at least, over and above a well and accurately defined country's national, sub-national, and regional, dynamic income poverty line, that economic

development theorizers took-off from,<sup>76</sup> but also which is accepted regionally by the concerned societies and communities during any period of time, and which, at the same time, indicate the elimination of the under-developing economy's duality."<sup>77</sup> So, it is more than just the theoretical structural and institutional changes for rapid growth that are perceived to be the main means, through the naïve trickling-down philosophy, to lift the majority of the population, of which are those working in the traditional-subsistence sector above their dynamic poverty-line, as assumed later by the WB and MDGs.<sup>78</sup>

## **2.2. NBKIs Justifications for Rapid Economic Development: -**

Development theories stressed the importance of balanced growth<sup>79</sup> for countries that suffer from the scarcity of advanced reproducible productive capital to achieve a desired new high-per-capita-growth path,<sup>80</sup> with support of their external sector, ala Leonitef Matrix.<sup>81</sup> Based on the above foundation, two schools became dominant, the "Big-Push for Balanced Growth"<sup>82</sup> and the, disregarded, "Unbalanced Growth,"<sup>83</sup> both cited for and against foreign finance. According to the Big-Push School, or the complementary and coordinated investment expenditure boom, under assumed sticky pricing regimes,<sup>84</sup> of different firms, using increasing returns to scale technologies, that are linked backwardly and forwardly to each other in different sectors as a critical minimum investment effort to achieve the right structural transformation to overcome, simultaneously, the narrowness of domestic market constrain of a closed-protected<sup>85</sup> or open<sup>86</sup> national economy, which determines the productivity and profitability of firms in different sectors, for sustained rapid growth.

These theories emphasized the importance of adopting supply-side push, rather than demand-pull, development strategies through planned massive amounts of government complementary investment, which are beyond poor countries' savings capacities, due to their low volatile incomes and consumption,<sup>87</sup> at least till the W. W. Rostow's take-off stage,<sup>88</sup> considering the premises that domestic financial markets in developing economies are at their infancy stage causing them to be imperfect and contracts are hard and costly to enforce.<sup>89</sup> Based on this, it is clear that these countries need to be strongly supported by concessional foreign savings, to import advanced technologies that these countries do not produce, or are



produced in negligible quantities or with less quality, at least during the pre-take-off of development stage,<sup>90</sup> or during their pre-Debt Reducer stage of the debt cycle hypothesis,<sup>91</sup> to help effectively in crushing all poverty vicious circles that are hindering these countries from rapidly overcome their under-development trap. As put by UNCTAD,<sup>92</sup> in other words, "*A principal aim of development assistance is to contribute to a process of rapid and self sustained growth.*" When these economies' economic development processes become autonomous,<sup>93</sup> and reach their mature creditor stage, they will become capable to service their EDs fully and in due time,<sup>94</sup> only if they were invested, of course, according to the correct pricing signals.<sup>95</sup>

From above reasoning, it can be easily seen, from ER angle, that almost all development economists and international financial institutions favored sustaining booming development plans by import expansion more than natural (volatile and in-elastically demanded) exports, i.e. importing more than exporting, to support financing larger gap between the level of high domestic investment and low domestic savings, i.e. investing more than saving, i.e. import of assumed NBKIs. Based on such conviction, most classical development economists, interest groups, and supporting policy-makers favored a slightly, although not high or hyper, manageable inflationary framework,<sup>96</sup> to maintain long-term domestic price stability, that supported competitive real ER of the "fixed, but adjustable, 'nominal' ER," and to mobilize necessary and (unrealized) sufficient domestic finance to close the deficit between expenditure that are growing more than (volatile) revenues in the budget, i.e. spending more than income.<sup>97</sup> As it can be observed, these theories' conclusions were well-established during the post-WWII Bretton-Woods' rules of the fixed, but adjustable, ERs, for all before the floatation of the major internationally convertible currencies, mainly the USA's dollar in 1973, and in many under-developing countries after that that time.

Despite the, criticized,<sup>98</sup> Harrod-Domar Model<sup>99</sup> that was used intensively<sup>100</sup> for the determination of the quantity of NBKIs, within the (void) static, not dynamic, comparative advantage framework,<sup>101</sup> by the following two-gaps equation: -

$$\mathbf{g} = ([\mathbf{s} - \mathbf{ds} - \mu] + \mathbf{b})/\mathbf{k}^{102}$$

But relying on such planned,<sup>103</sup> and large, although fluctuating, NBKIs for a long-time is, of course, risky within the context of the ruling surprises from different kinds of shocks ( $\mu$ ) that increases domestic expenditure and dynamic international political and economic powers and its rules of the game, and is clearly an explicit, although undeclared, proclamation by the government that it will enforce compulsory savings in the future to service those (past) NBKIs (ds), whether through inflationary pressures or high taxes or collateralization of future income from export of commodities like oil, i.e. confiscating or taxing directly exports revenues/incomes, of course, with no transfer problems. All such policies will lead to the overvaluing of the real ER i.e. defined as an increase in domestic relative to import prices,<sup>104</sup> that is not normally supported by cost-reducing productivities, causing, not only negative competitiveness that lead to losses of domestic production, employment, export markets, hence foreign currency incomes, and fiscal revenues. Such overvaluing consequence, of course, is a result of raising domestic aggregate demand, which is supported by increased NBKIs. Also, the available NBKIs support, not only the existing nominal ER but the, budget deficit, which will be complemented by the printing press, in the absence of efficient domestic capital markets, that depreciates the domestic currency value through inflation that overvalue the real, of the existing nominal, ER, due to its overspending,<sup>105</sup> which supports the building of expectations that the government will enforce future changes in its macroeconomic policy-agenda, including (sharp) ER devaluation,<sup>106</sup> or currency crash, mainly in a world of increasingly globalized economies.<sup>107</sup> The same undesired macroeconomic consequences will show up with the existence of the most serious risk of misallocating the available scarce resources in one or more activities which will inevitably lead to negative repercussions in other sectors' activities of the open economy model.

Also, increased NBKIs and budget deficits multiply DMS in the long-run under the limitations of sterilization and other monetary policies and instruments and the absence of cost-reducing technologies, hence worsening the real interest rates that creates the incentives for the NBKOs, may be at a rate higher than the NBKIs, hence causing a permanent ER problems, supported by the transfer problem,<sup>108</sup> mainly when EDS, in due time, exceeds the

economy's capacity to meet them, forcing under-developing government to devalue in the face of the inelastic foreign demand for the country's exports, otherwise it leads to the accumulation of arrears that probably ends into CC,<sup>109</sup> a consequence that is (rightly) informed by the long-term off-line, relative to the country's trade-partners on-line, macroeconomic fundamentals.<sup>110</sup>

Or from another perspective, if the Prebisch long-term, or secular, deterioration in the terms-of-trade trend, which is part of the real ER equation, and fluctuating NBKIs, with increasing population, budget deficits and CADs, is considered,<sup>111</sup> such countries must ultimately fall into EDs traps and a country-wide speculation on devaluations that put an end for even a short-term overvaluation, mainly for fixed ERRs, pushing speculators<sup>112</sup> and other investors to engage in massive NBKOs at a rate higher than the NBKIs, hence breeding the domestic economic environment, during booming development plans/periods, not only for general financial crises but also, for debt and CCs which are followed by the (very long) recessionary economic crises<sup>113</sup> that ruin the economy, peoples' standards of living, i.e. defeating the economic development end-goal of eradicating poverty, and maintains an increasing inflationary and unemployment rates, i.e. stagflation, and idle industrial capacities.

Hence, booming policies, actually in under-developing, or even developed,<sup>114</sup> economy, as implied by the Big-Push theories, if not managed efficiently and effectively to remain in-line, under the pressure of fluctuating terms-of-trade and NBKIs, it must overshoot the country's trade-partners macroeconomic fundamentals, at least before the take-off stages, must end-up into financial, hence to debt and currency, crises, as will be seen below. This undesired end is considered as a punishment for pursuing a domestic persistent booming policies, supported by expansionary fiscal, monetary, and NBKIs policies, that overshoot the economy's trade-partners' macroeconomic equilibrium that, as a rule, is reflected in a persistent expansionary trade or CAD, which explodes a stubborn necessitation for continuous NBKIs that multiply the initial, and the afterwards, expansionary policies that, in the long-run, and with the existence of small and large exogenous shocks, will lead the economy to fall in ED traps, and related sustainable, soft and/or sharp, ER devaluations, i.e. currency cataclysm, and landing,

reflecting financial and CC riddles.<sup>115</sup> This is consistent with what Frank Taussig, 92 years ago, wrote:

*"... loans from creditor countries ... begin with a moderate amount, then increase and proceed crescendo. They are likely to be made in exceptionally large amounts toward the culminating stage of a period of activity and speculative upswing, and during that stage [it] become[s] larger from month to month so long as the upswing continues. With the advent of crises, they are at once drawn down sharply, and even entirely."*<sup>116</sup>

In fact, the honeymoon of the booming periods survives when a developing economy enjoyed overloaded credibility attracted substantial NBKIs on concessional and cheaper terms that supported developing countries' governments' expansionary (modern) investment and consumption expenditures beyond their actual savings capacities. But of course, such NBKIs can never be expected to in-flow indefinitely, under the pressures of dynamically disastrous mayhems of the changing and dynamic world economy. On this basis, the NBKIs transfers were, as they can be, a powerful force/tool for sustainable expansionary policies to realize development and growth targets, as the unsettled debate about the relationship between them, in developing countries, but they are also capable of transforming that positive, into undesired consequences.

In fact, economic development processes failed due to the failure in sustaining an increasing (cost-reducing) productivity per labor and capital above the assumed development poverty line, as measured by zero or low productivity, mainly in the agricultural sector, ala Arthur Lewis approach,<sup>117</sup> due to the excessive non-developmental over-expansion policies that supported unsustainable CADs, which were covered by substantial NBKIs.

Over the past four decades, experiences with the NBKIs have generally been beneficial in East Asian, but much more disappointing in Latin American and African, countries, all of which were caught by many crises traps, mainly since early-1970s, after-which they were driven, as it always happens after big crises, to the well known IMF Policy prescription that was assumed to fit all. The potential dangers,<sup>118</sup> that may apply to different kinds of NBKIs, depending on the circumstances, by contributing to nominal real appreciation mainly through persistently increasing domestic prices, destabilize the adopted ERR and harm the utilization

of investment potentials, hence economic development, if not economic growth itself, causing confidence losses in the manageability capacities of the macroeconomic fundamentals, even under government active interventions.

At these ends, happy national and international interests revealed their inchoate liberalization views, as reflected by the IMF Policy Package mentioned in chapter I above. This meant that these countries didn't consider the seriousness of different external shocks and the dangers and risks of borrowing savings from the unstable rest of the world, mainly the conditional ones, whose demand for the under-developing export of raw-materials is featured as inelastic, which led them to fall into the debt trap, where creditors, not debtors, have the final words.<sup>119</sup> These reflected that external shocks and risks didn't become a central preoccupation of policy in under-developing, relative to Asian industrialized, countries.

Of course, no brilliant, rational, well experienced, or even well-educated brain can simply assume or believe, at whatever degrees of confidence, that the liberal blind market forces mechanics, during booming/overheating processes, which strengthen the powers pressures of the domestic aggregate demand on the domestic supply-side, can take care of, or capable to cure their own diseases for, themselves by themselves, or even find their own ways of corrections in the long-run<sup>120</sup> without high, pecuniary, social, and long adjustment time, costs for a balanced developmental and non-inflationary macroeconomic position for the economy except by chance or even an exogenous powers to reverse it. In due time, impatient (rich) investors, who might have lost confidence in self-market-correction, i.e. without government counter-policies flee from the afflicted currency to other domestic and foreign assets causing sustainable distress in the financial sector of the economy. Of course this is not case of well-managed economies around the world. That is why, as mentioned by Krugman: -

*“... government intervention became the natural logic, not the exception, as “currency crises - both crises that actually do happen and the sometimes desperate efforts of national governments and international agencies to head them off before they start – have become a defining force for economic policy in much of the world.”<sup>121</sup>*

Considering the ideological changes for achieving economic development from (rarely crisis-generation) central planning mechanism to (frequent and severe crisis-generation) liberalization policies of the vibrating national and international economy, mainly since mid-

1970s, and the challenges imposed by the dynamics of the equilibrium positions of a vibrating globalization, the following section will try to answer the questions of how such massive (net) NBKIs for supporting such rapid booming development, whether through import-substitution or export-oriented strategy, policies<sup>122</sup> on investors' confidence in government policies in general and on ERRs, in specific?"

### **2.3. CC Seriousness, Definitions, Features, and Business Cycle: -**

To understand how the severance of CC period is reached, it will be better to know why it is studied in the first place, then how it is defined. This is as follows: -

#### **2.3.1. Politically and Socially Intolerable Macroeconomics: -**

##### **Consequences and Impact of CCs:<sup>123</sup> -**

Financial and/or CCs are genuine features of the libertarian<sup>124</sup> capitalistic industrial economies since Tulip Bulb Bubble in 1636 and even before<sup>125</sup> and which are characterized by a collapse of the financial system and sharp currency depreciation. This collapse was always associated with huge NBKOs and a contraction in domestic aggregate demand and its related aggregate production processes that feed each other in a revengeful spiral relationship, as reflected in pulling down domestic prices, mainly in the asset markets at a speed higher than other goods markets. Financial and CCs frequencies of increasing severity became a normal phenomena of today's history and considered as an accepted cost for increasing globalization of liberalized trade, private NBKIs, domestic financial sectors and economic policies, mainly since mid 1970s, and particularly for the developing and under-developing world for their economic development since 1990.<sup>126</sup>

In general, CCs, as a standard idiom, covered all kinds of meltdowns, especially in developing and under-developing worlds. The above crisis-caused contraction of domestic aggregate demand is considered to be due to (maybe hidden, if not explicit) inflation<sup>127</sup> due to (past) booming of the domestic economy, for whatever intended or unintended displacement, causing sustained deterioration in the domestic currency's value and weak competitiveness<sup>128</sup> that promised investors and speculators future profitable opportunities from the law of "today's low general goods and services prices relative to their tomorrow's high general

prices,” resulting in fundamentals overshoot their rest of the world counterparts, mainly including distribution of wealth and incomes, before they were ended by crises, which occurs at times of very severe limitations of domestic and foreign resources, i.e. at time of real need from governments that seek resisting and resolving it.<sup>129</sup> Although, prevention and resolution of an economic crisis can be done up-front, it is unfortunately, as well-experienced: -

*“... that drastic changes in domestic policy don't happen unless there's an economic crisis.”<sup>130</sup>*

Hence, as booming policies overheat the domestic economy, it actually discloses existing fragilities of (even uncorrupted) infant/immature and under-developing industries and institutions in different sectors that needs protection from developmental perspective.

Anybody who qualms about the social significance of real economists' pains in avoiding such a disastrous event for raising citizen's living standards and the general social welfare should consider the discussions surrounding financial and CCs. Hundreds of millions of people who expected rapidly rising standards of living have seen them fall and added to those already living below poverty lines; the unemployed whose expectations were suddenly reversed, beside those who become increasingly marginalized and exploited with much lower real wages; highlighted humiliation, crimes, insecurity, increased jailed integer, prostitution, and corruption; hundreds of millions could not attain even primary health care mainly in under-developing countries; hundreds of thousands, if not millions, of children have been forced to drop out of school and go to work; hundreds of billions of domestic currencies of apparent wealth has been wiped-out and lost due to increased bankruptcies and debts causing contraction due weak inter-lending among financial institutions and to investors and consumers, imposing the liquidity crisis phenomenon. These (might) lead to political instabilities that (might) end the rule of, and change in, the political and economic regime. These facts are supported, for example, by the financial and CCs in post-World War I,<sup>131</sup> the social stance of the 'Great Depression' during and before World War II, and in post 1997-98 Asian crisis. And as events of late 1920's, early 1930's, and 1980-1990s remind all, central to global disintegration can be international financial breakdowns,<sup>132</sup> certainly, for all different varieties of government mistakes and failure.

Inconsideration of past lessons from CCs episode for crisis-prevention policy formulation enlightens an alarming critical red-line in decision-making, of course, for incredible sustainable balanced fundamentals and socio-economic development, despite governments' pledges for achieving a balanced big-push development strategy. As history revealed, they proved to be a promise for failure to control equilibrium macroeconomic fundamentals and strong competitiveness rules that created symptoms of promised future CCs as evidenced by developed, developing, and under-developing countries' by concerned literature. CC ultimately originates in domestic financial government policies, which actually affects, and been affected, by the domestic currency's real value that might lead to a riotous periods that involved one surprise after another, most of them horrible.

In addition to these unnecessary high costs, the following examples are revealed: -

1. Loss of confidence which have harmful effects of investment and consumption decisions;
2. The suddenness, scale, and speed of ER collapse pose difficult adjustment costs and problems for different sectors of the economy;
3. Surge in domestic prices, nominal interest rates,<sup>133</sup> more nominal ER devaluations, output contraction and crisis-misdistribution of economic growth in the future, causing unaccepted increased poverty stances, maybe for a long-time;
4. NBKOs or loss of NIR, which is of very particular concern of serious governments, when fears of devaluation arise especially when the central bank's NIR are low. By pushing NIR even lower, due to government fiscal deficit expansion, NBKOs may force the central bank to devalue sooner and by a larger amount than planned;<sup>134</sup>
5. Loss of confidence which have harmful effects of investment and consumption decisions;
6. The uncertainty, pessimism, and wait-and-see attitude accompanying the ER collapse lead to misallocation of resources in terms of sectoral and location of production activities, investment decisions, hence affect negatively, employment, growth, savings, and distribution of incomes;



7. Mainly in countries with low domestic savings, and low international demand for the countries exports, it increases the likelihood of defaults mainly on EDs, hence the eminence of arrears problems that grow into crisis;
8. Disruption of domestic goods and financial market relations, and increase bankruptcies and meltdown cases;
9. Increase of subsidies, transfers, and EDS in domestic currency in the budget and the private sector which lead to weak domestic demand for final goods and services which help in the slow improvements in the current account and budget deficits;
10. In federal system countries, lower central government revenues as a result of CC, leads to lower levels of transfers to them, causing lower government demand on domestic real sector's final goods and services, hence lowering the latter's demand, that leads to sustained increase in unemployment rates and idle productive capacities;
11. In low-income-earner countries, corruption, unemployment, and poverty shows upwards trend;
12. Political instability;
13. Changes of the economic system's policy rules and principles of the game, if not the whole system itself.

Based on historical eventual backdrop, it has been observed, as mentioned above, that CC usually do end up being contractionary in reality rather than expansionary, because of the responses of government to the CC itself by contractionary policies. In addition, in under-developing countries, a sudden (sharp) currency depreciation will directly raise import prices that passes to the general price level, which ultimately appreciate the real ER, hence defeating the (assumed) boosting of exports demand, which incessantly aggravate the CAD and affect negatively long-term growth, employment level, poverty, and create long-run domestic and EDS problems, if not crisis in the form of increasing arrears. As a result of this "trepidations of inflation," tightening finds its main justified logic in the manipulation of the size, depth, and spread of the crisis. It is this policy response to, rather than the direct impact of, the financial/CC that generates the recession, leading to the soft or hard landing of the currency

and the economy as a whole, depending on the availability of moral hazards from lenders of last resort. Such undesirable contractionary domestic policies, as proved, help counter this inflationary impact of CC in at least three, and perhaps four, difficult ways:<sup>135</sup> -

1. high domestic interest rates<sup>136</sup> directly help discouraging the NBKOs, hence lower NIR loss, and limit the depreciation of the currency, conditional only on sound fiscal policy;
2. without credit, mainly in advanced countries, most businesses would not be able to function, and many individuals would have to cut their spending; this leads to reduced domestic import demand, which also helps reduce the required currency real depreciation;
3. a domestic recession helps dampening the inflationary impacts of a declining ER, otherwise experience showed the run after “lenders of last resort” to smoothen the recession impact and/or the austerity policies, hence soft-landing the currency depreciation and the economy as whole.<sup>137</sup> But this last behavior leads to the accumulation of EDs and debt servicing, increasing the currency vulnerability for future crisis;
4. a possible helpful results from austerity is in helping to restore investor confidence;<sup>138</sup>

To the extent that CC represented a more or less rational assessment of the fiscal and monetary stability of the country, a change in policy may be as helpful as much for its effect on expectations as for its direct economic social impacts. In conclusion, contractionary policies are forced by “trepidations of inflation and credibility reputation problems.” These undesired social and economic intolerable consequences must be considered in any policy formulation to be avoided, at least domestically.

### **2.3.3. CC Definitions: -**

As mentioned by Krugman, the first<sup>139</sup> of CC theorizers in the Post-WWII period: -

*“... there is no generally accepted formal definition of a currency crisis, but we know them when we see them. The key element is a circular logic, in which investors flee a currency because they fear that it might be devalued, and which much (though not necessarily all) of the pressure for such devaluation comes precisely from that capital flight.”<sup>140</sup>*

Also, as he put it in another way, *“There is no universally accepted definition of a currency crisis, but most would agree that they all involve one key element: investors fleeing a currency en masse out of fear that it might be devalued, in turn fueling the very devaluation they anticipated.”* From its result, Glick and Hutchison<sup>141</sup> defined *“A currency crisis ... as a speculative attack on the foreign exchange value of a currency that either results in a sharp*

*depreciation or forces the authorities to defend the currency by selling foreign exchange reserves or raising domestic interest rates.”*

This can become clearer from the definitions below. Starting with Business dictionary,<sup>142</sup> it is found to define as CC: -

*"A situation in which the value of a currency becomes unstable, making it difficult for the currency to be used as a reliable medium of exchange. The effect of a currency crisis can be mitigated by sufficient foreign reserves." It considered "A currency crisis, as a type of financial crisis," is "a situation in which the supply of money is outpaced by the demand for money. This means that liquidity is quickly evaporated because available money is withdrawn from banks, (called a run), forcing banks either to sell other investments to make up for the shortfall or to collapse."*

Deardorff's Glossary of International Economics,<sup>143</sup> defined CC as one which: -

*"... occurs when participants in an exchange market come to perceive that an attempt to maintain a pegged exchange rate is about to fail, causing speculation against the peg that hastens the failure and forces a devaluation," or as a situation "When a country that maintains a fixed exchange rate is suddenly forced to devalue its currency because of a speculative attack, this is called a currency crisis or balance of payments crisis."*

Also, it defined a financial crisis, which covers many types of economic crises, as: -

*"A loss of confidence in a country's currency or other financial assets causing international investors to withdraw their funds from the country."*

Mcgraw-Hill<sup>144</sup> Dictionary also defined a CC as one which: -

*"Occurs when a speculative attack on the exchange value of a currency results in a sharp depreciation in the value of the currency or forces authorities to expend large volumes of international currency reserves and sharply increase interest rates to defend the prevailing exchange rate."*

Paul Krugman, considered that: -

*"Currency crises occur when investors lose confidence in the currency of a particular country, and seek to escape assets ... denominated in that currency and other assets whose income might be affected by exchange controls."*<sup>145</sup>

Prema-chandra and Warr mentioned that: -

*"Currency crises are rapid outflows of financial capital in anticipation of possible currency depreciation, inducing depletion of reserves, financial instability and subsequent economic contraction."*<sup>146</sup>

Goldsmith defined financial crisis as: -

*"a sharp, brief, ultra-cyclical deterioration of all or most of a group of financial indicators, short-term interest rates, asset (stock, real estate, land) prices, commercial insolvencies and failures of financial institutions."*<sup>147</sup>

Lawrence defined International financial crises as: -

"... a situation where the international dimension substantially worsens a crisis in ways that would not occur in a closed economy" while CCs are situations "in which countries are forced to adjust exchange rates although ... devaluations can frequently presage international financial crises."<sup>148</sup>

Barry Eichengreen et. al.<sup>149</sup> defined a CC as: -

"A crisis" that "... necessarily entails a speculative attack that causes the exchange rate to depreciate or forces the authorities to defend it by raising interest rates or expending reserves."

By adding debt default dimension, Abigail J. Chiodo and Michael T. Owyang<sup>150</sup> defined CC: -

"... as a speculative attack on a country's currency that can result in a forced devaluation and possible debt default."

Brent Radcliffe<sup>151</sup> considered CC to be: -

"... brought on by a decline in the value of a country's currency. This decline in value negatively affects an economy by creating instabilities in exchange rates, meaning that one unit of the currency no longer buys as much as it used to in another. To simplify ... crises develop as an interaction between investor expectations and what those expectations cause to happen" due to the erosion of "investors' confidence in the stability of an economy" leading them "to get their money out of the country ... referred to as capital flight. Government Policy ... when faced with the prospect of a currency crisis, central bankers in a fixed exchange rate economy can try to maintain the current fixed exchange rate by eating into the country's foreign reserves, or letting the exchange rate fluctuate."

Jim Saxton<sup>152</sup> considered CCs as: -

"... caused, or at least enabled, by inconsistent monetary policy."

From this perspective, his congress joint committee defined a CC as: -

"... a situation in which a currency experiences heavy selling pressure (also called exchange market or speculative attack pressure)."

This exchange market pressure can be indicated by: -

"... a substantial losses in the foreign reserves held by a country's monetary authority ... Another is depreciating exchange rates in the forward market ... Still another indication of selling pressure is a depreciating black-market exchange rate ... Finally, in extreme cases where inflation is high, selling pressure may show up as a general flight out of domestic currency into foreign currency or into goods that people expect will retain value, such as gold, real estate, or bricks."

As can be seen, these definitions determined the ingredients for CC as follows: -

1. It is seen through a monetary approach;

2. Dominance of loss of confidence in government policies as reflected in their flee from the currency en masse due to fear that it might be devalued, in turn fueling the very devaluation they anticipated, whether they are right due to the deterioration of the domestic currency's purchasing power or wrong causing a self-fulfilling currency-crisis;
3. Based on (2), investors and speculators, in the absence of trusted information, rely on the herd behavior of other people, during these hard times, due to the existence of stormy information and data base or rationally expect the flee from currencies that are deteriorating in their purchasing power<sup>153</sup> for the purpose of future risk-reduction to avoid asset and future income erosion (i.e., hedging) or risk-taking for expected future profits (i.e., speculation);
4. Such flee leads to the depletion of the government's NIR chest-defense in hard times, which, if not supported by NBKIs from abroad, will lead to the economy's hard-landing through large devaluation of the domestic currency and the default on public and private debt, and might fall into increasing EDs, and accumulation of more arrears, by increased resort to foreign savings, if its policies continue to deteriorate its currency's purchasing power. Of course, there will lead to the adoption of "Cold Turkey Policies";
5. A large fall in bank deposits that may lead to a large devaluation and to financial turmoil if the ensuing central bank intervention leads to a depletion of NIR.
6. Speculative attacks invest such circumstance to profit from the expected suddenness of future ER collapse;
7. As it can be observed, currency or financial crises do not differentiate between surplus advanced or under-developing Countries. Also, they do not differentiate between flexible/floating ER countries or fixed/banded ER countries.
8. As will seen below, each CC episode, and its severance, contains some different elements of its own existence that are different from its preceding. They can emerge from a variety of economic conditions, such as large deficits and low NIR. They sometimes appear to be triggered by similar crises nearby, although the spillover from these contagious crises does not infect all neighboring economies as those that are most vulnerable to the crisis.

Such differences in crises elements entail different economic and social costs and determine the speed of recovery.

9. Also, these definitions differentiated between crisis-breeding elements, i.e. long-term booming period, for a financial crisis, in general, or CC, in precise, and their triggering causes.<sup>154</sup> Mises' below and Lawrence's above definitions showed that, each CC was always preceded by a long-term of booming policies, i.e. crisis-breeding period, and explosive elements are not the same as its predecessors or its successor, but that does not mean the absence of some common elements that made the economy signaling a coming crisis. This is because triggering causes depend crucially on investors' sentiment and government reaction, which makes their prediction semi-impossible or illogic.<sup>155</sup>

10. Also, if it can be of a global nature, like the great depression or the 2008 USA financial crisis. Of course, it has nothing to do with any country's international relation with the afflicted economy or region. It is like an epidemic influenza disease that is transferred by some mean or carrier, and hence affects all living-creatures in the same globe.

As it can be observed, these CC definitions, and whatever indicators/criteria they included, are based on the domestic financial situation where money demand for foreign currencies is allowed to quickly rise relative to their supply, determining the speed at which the country's NIR are depleted, forcing governments to devalue the ER for limiting that demand's growth. In addition, these definitions concentrated on the end-result, despite their causes.

#### **2.3.4. Main Features of CCs: -**

Although most crisis-economists agree that CC, i.e. ER devaluation, which is a pro-rich mechanism, since it redistribute national income in favor of the rich, were always preceded by banking crisis, the other core ingredient of causes mentioned-above and the general impacts remained the same, despite the dynamics of international context and changes in the rules of the game on different countries and regions at different stages of economic and social development and the changing speed with which CCs happen.<sup>156</sup>

Mises,<sup>157</sup> in theorizing for the 1933 Great Depression, mentioned that: -

*"... crisis differs in some essential points from earlier crises; just as preceding boom differed from earlier economic upswings."*

Lawrence Summers<sup>158</sup> stated that: -

*“Every financial crisis is different and involves its own distinctive elements. There are, however, some elements that are common to many financial crises we have seen in recent years.”*

In his 2007 paper, and in a response to a panel discussion about the CC triggers, Krugman mentioned that: -

*“even ex-post it is not as easy to determine which event(s) triggers an exchange rate crisis. In fact, hundreds of explanations were polled ... It is not fully obvious today whether the baht devaluation, the Russian defaults really triggered the 1997 crisis.”*<sup>159</sup>

Also, as stated by Mark Jickling<sup>160</sup>: -

*“There is no precise definition of “financial crisis,” but a common view is that disruptions in financial markets rise to the level of a crisis when the flow of credit to households and businesses is constrained and the real economy of goods and services is adversely affected.”*

Aghion et. al.<sup>161</sup> considered a CC to occur: -

*“when an expectational shock pushes the economy into the “bad” equilibrium with low output and a high nominal exchange rate.”*

Schuler<sup>162</sup> is then correct by adding another feature to CCs events by stating that: -

*“...the surprising thing about currency crises is that they still surprise people.”*

Dani Rodrik considered a fact that: -

*“A sad commentary on our understanding ... is that every crisis spawns a new generation of economic models. When a new crisis hits, it turns out that the previous generation of models was hardly adequate.”*<sup>163</sup>

But, as stated by Krugman, that: -

*“... while ... crisis did not play exactly in the way posited by standard currency crisis models, nonetheless those models were helpful in providing at least a first-pass framework for both understanding and policy formation ... The point is that while any model we may make of the ... crisis will surely miss some crucial features of the next crisis to come along,” although “it will still be helpful.”*<sup>164</sup>

This is because, for example, as he stressed: -

*“... nothing in the past history of the subject prepared economists for the 1990s.”*<sup>165</sup>

In concluding, it can be stated that CCs repeat themselves with different causes and reasons, that caused the non-existence for a universal/standard model for past and future CCs events for different countries, regions, and the world, it is then true that there will no effective ‘warning system’<sup>166</sup> to prevent them.

Due to these deficiencies and difficulties in defining CCs and how they come-about to predict future ones, most economists of the field resorted to describing each past CC episode in each country by its own features, consequences, and policies used, according to their degrees of effectiveness and efficiency, to face them. Of course this policy response will differ in advanced country from an immature economy rather than the use of any disagreed-upon policy yardstick. The question which came-out from such dismal settings is "what causes led to such perilous setting of the national economies in different periods of time in different continents of the world, of course, in the past?"

#### 2.3.4. **Business Cycle and CCs:** -

Business cycles are recurrent sequences of alternating periods of expansion and contraction in economic activity. Financial crises, in general, and CCs, in specific, are genuine and recurrent features of the Liberal Industrial Capitalistic Economies.<sup>167</sup> These components of these business cycles return to happen from time to another for periods of equal or unequal intervals,<sup>168</sup> depending on the degree of liberalization of the capitalistic system and the effectiveness of government-interventions in smoothening each cycle. They are formed of a booming and recession stages, which might lead to a depression stage. The mechanics of a typical business cycle, mainly for open economy model, is normally featured by starting with:<sup>169</sup> -

1. **Stimulant and Recovery-Stage:** during which costs of production are low and growth rates are higher;
2. **Booming/Crisis-Breeding-Stage:** during which costs of productions start to increase as a result of increasing aggregate demand leading to increasing general prices levels, including the nominal interest rates and ER, hence nominal profits, at a rate more than increases in incomes, which results in a macroeconomic disequilibrium that result in the insufficiency of aggregate real demand in absorbing the profusion of goods and services generated during the pre-boom and boom stages;
3. **Crisis Stage:** This can be called the severance period that puts an end to the booming stage and starts the recession/contraction stage. It is characterized by surprising all in a



suddenly manner, as often. The severity of violence of the crisis period depends on the severity of violence of the preceding booming or crisis-breeding stage. It let its destructive powers to work during a recessionary period;

4. **Depression Stage:** which represents the end of the recession stage, that starts with the fall of prices, massive bankruptcies and collapses, increasing unemployment rate, prohibition of banks, as a result of weak balance sheets, mainly the credit-constrained ones, the increase of non-performing funds, and the dominance of pessimism about the future, in lending each other and to investors who limit their investments, despite the fall of interest rates to the quasi-zero levels. This stage is known to be the stage of “liquidity trap,” reflecting monetary authorities’ zero credibility and characterizes people by the liquidity preference.<sup>170</sup>

**Kindleberger<sup>171</sup> extended Minisky’s “Typical Financial Crisis,”<sup>172</sup>** for a standard pure liberal market economy, which are naturally featured by the boom-bust phenomenon, also dealt with that portion of business cycle that covers the final of upswing and the initial downturn. The anatomy is based on Minisky’s model,<sup>173</sup> and dependent on three consecutive circular stages of development that start with mania, then panic, and ends with crash. Mania stage emphasizes irrationality that takes place during an economic expansion cycle and during which economic agents transform their liquid, to real or financial, assets. Panic stage is distinguished by rush, race market, mainly savers, participants for transforming their real and financial, into liquid, assets. Mania and panic pave the way to, or breed the economic environment for, the financial crash, the ultimate outcome of the cycle. But jump from one stage to another in the circle come-up through five consecutive different periods which breed the germs in the economic environment towards crash. These are: -

#### **1. The Displacement Period: -**

Financial crisis starts by a kind of monetary shock, which include NBKIs in open macroeconomic system, or real shock(s) called by Hyman Minsky<sup>174</sup> "displacement." Some of them are sufficiently large, strong, pervasive, and exogenous to the macroeconomic system. They affect government’s objectives priorities, and hence the need for changes in the political

institutions for adjusting the economic policies packages. These exogenous shocks or some “news” alter fundamentally the economic outlook of the markets participants by shifting their expectations concerning future profits in some significant way. The nature and reason of this displacement varies from one speculative “boom” to another. Mainly, it can be stimulating or/and recovering.

Despite different kinds of displacements<sup>175</sup> or their sources or reasons, what is important is the strength of its pressure in opening opportunities for profit-making in some new and/or existing lines and closes out others. As a result, business firms and individuals with savings and/or credit lines seek to take advantage of the former and withdraw from the latter. If the new opportunities dominate those that lose, investment and production pick up and a boom/crisis-breeding period is triggered by an expansion of credit from, controllable instability in, old and new and, non-controllable (liberal) instability of the personal outside, banks to energize a speculative mania that enlarges the DMS.

## **2. The Boom/Crisis-Breeding Period: -**

This is the start for the risky crisis-breeding period, for example by big push economic development plans, which drives DMS-holders to “flee to assets and goods for hedging against money-value-erosion and to speculation for profits in the future.” It is important to pay attention to the uncontrollable instability of the (liberal/unregulated) personal credit that remains providing financing instruments to feed positively this boom/crisis-breeding period, given a sufficiently through-going stimulus. By assuming the existence of urge to speculate for future profits and its transformation into effective demand for goods and financial assets that press against the “capacity to produce goods or the supply of (maybe) existing (controlled) financial assets,” after a time, to cause prices to increase, at a rate higher than, the lagging incomes of other productive factors of production, giving rise to new profit opportunities and attracting still further firms and investors. Expansive feedback develops, as new investment leads to increases in income that stimulate further investment and further income increases. During this period, Minsky’s “euphoria” is enjoyed. Speculation for price increases is added to investment for production and sale. Although often, but not necessarily

inevitable, if this process builds up, the result ends by what Adam Smith and his contemporaries called "overtrading."

### **3. The Overtrading Period: -**

The process of ever-increasing investment and income is termed as 'overtrading.' Overtrading involves: speculation, buying for resale rather than use; overestimation, euphoric estimate of an object above its fundamental value; and gearing, buying by installments in which an obligation can also be sold along with the object for future payments. The process of overtrading continues.

As individuals and firms see others making profit, they tend to join the trend. Without a real understanding of the processes involved, more and more people seek to become rich. Large number of informed, and unwell-informed, firms and households indulge in the speculation activities for profit leading prices to deviate from normal or rational behavior. It is noteworthy that, the asset(s) of speculation are different. Generally, they may be foreign exchange, domestic or foreign securities, contracts to buy or sell securities, land, buildings, housing, goods manufactured for export, etc. To this extent, this period can prove to be just the "happy calm of today that precedes the coming destructive storm."

### **4. The Distress Period: -**

As speculative boom continues, interest rates, velocity of circulation, and all prices continue to mount affecting the expansion of domestic aggregate demand at rates higher than domestic aggregate supply, including foreign currencies. At some stage, a few insiders decide to take their profits and sell out. At the top of the market there is hesitation, as new recruits to speculation are balanced by insiders who withdraw. Prices begin to level off. There may then ensue an uneasy period of "financial distress."

For an economy as a whole, the equivalent is the awareness on the part of a large segment of the speculating community that a rush for liquidity may develop, with disastrous consequences for the prices of goods, securities, and other physical and pecuniary assets and excluding some speculative borrowers who default on loans. As distress persists, speculators realize, gradually or suddenly, that prices cannot increase further. It is time for withdrawal

decision. Competitive sale of real or long-term financial assets for money may revolve into a mad dash.

**Distress** is the preceding period of a classic crisis. It is the stage between euphoria and revulsion and when there is concern about the strength of the demand-side that may be flimsy or that the limits of liquidity may be near. Also it is an unsettled time and the reaction to this unsettled environment often deflates the bubble and defuses the mania. It can persist from lengths of time until the crisis is averted, or it can turn sharply into revulsion.

#### **5. The Revulsion Period: -**

Revulsion is a sharp shift in actions and expectations caused by new information or a significant event. “Insiders” realize the importance of news and sell first, perhaps at the top of the market, while “outside” instigators and preachers are still buying. Liquidity dries up, especially bank lending, causing “discredit.” It is the rush period for liquidity as the result of a loss of confidence in all but the most liquid assets.

The specific gesture that triggers the crisis may be the failure of a bank or firm stretched too forceful. The surprise of a fraud or defalcation by someone who sought to escape distress by dishonest means or fire-sale the primary object of speculation that is seen to be overpriced. In any case, rush continues. Prices decline. Bankruptcies spread. Liquidation sometimes is orderly but may relapse into panic as beliefs in the insufficiency of money spreads. This severe revulsion against commodities or securities leads banks to discredit guarantees on such assets and cease lending. In Minsky’s model, revulsion and discredit lead to crisis, as outsiders join insiders in selling off. It is the period of gate-shut panic for liquidity.

#### **6. The Crisis Period: -**

The crisis may be confined to a single market or it may spread, which is termed contagion. The main concern here is with crises that spread from one market to another, or from one sector to another domestically, or from one nation to nation through international linkages such as capital, currency, money, commodity markets, trade interdependence effects, and shifting market psychology. Paul Krugman<sup>176</sup> reserves the term “contagion crisis” for a financial crisis that spreads internationally to the extent that it causes a worldwide depression.

## **7. The Serenity or Crisis-end Period: -**

Revulsion and discredit may take a significant time to lead panicked people crowding to get through the gate before it pans shut. As panic feeds on itself, as did the speculation, till one or more of three things happen:-

1. as prices decline to sufficiently low levels, people, again, are lured to buy less liquid assets;
2. trade is cut off by setting limits on price declines, shutting down exchanges, or otherwise closing trading; or
5. a lender of last resort may step in to provide the liquidity necessary to bring the crisis to a “soft landing,” and avoid the “Cold Turkey Policies,” by convincing markets that money will be made available in sufficient supply to meet the demand for money. Confidence may be restored even if a large DMS, of whatever value, is not issued against other assets; it is the mere knowledge that one can get money is frequently sufficient to moderate or eliminate the desire.

It is clear from this model that the cause of financial and CC is passage of the economy through a “booming-displacement” period that lead to an increasing general, or maybe severe, expansion of the DMS, which feeds domestic effective demand of investors and speculators beyond the economy’s production capacity, reflecting the complementary role of the CAD, mainly via real ER appreciation, which distorts foreign trade competitiveness index, despite government interventions impacts. Besides, the flee for hedging and speculations, during this period of deterioration of DMS-value, affects negatively, beside other assets, the real ER, whether by overvaluation under fixed ERR, or unceasing nominal depreciation of the ER, under any degree of floating ERR, opening guaranteed profits from such assets till the inevitable point of currency collapse, mainly after a period that the domestic demand for foreign currencies and other foreign assets overshoot their supply rates of growth.

### **2.4. CCs Literature Review: -**

CCs theories are mostly based on standard or typical models with important changes for describing the mechanisms for their existence. Their frequencies and severity led to a flush-in

of innumerable varieties of literatures to explain the origins of the causes and mechanisms of different CCs incidences in different countries and regions during different periods. This is because it is effortlessly to find anyone of them does fit all other CC cases.

Since the ends of WWI and WWII, most under-developing countries adopted different kinds of economic development strategies and policies to achieve their goals under different respected and disrespected international rules of games for domestic management of national macro-economy, at their choice. Despite causes of failure of economic development processes and of management of macroeconomic regimes in Latin America and Africa and their success in South East Asia, China and India, the following theoretical models have been used to explain the origins of causes of their CCs.

#### 2.4.1. Mises's 1923 Classical Theory:<sup>177</sup> –

This is one of the earliest theories that recent literature do not refer to it in the literature, although it predicted the underdeveloped, primary-product producer and exporter, and post-conflict, Germany's 1923 CC and had even been used to interpret the causes of the 1929 – 1933 Great Depression in Post-WWI.<sup>178</sup> It considered CCs as result of using the printing press, after the exhaustion of domestic and foreign savings, to finance the expanding national budget deficits by many countries before, during, and after WWI, that increased drastically the domestic paper-money supply,<sup>179</sup> under the pressures of financing needs of the war and for the rehabilitation, reconstruction, development, servicing accumulated ED, and payments of reparations enforced on Germany by the Versailles Agreements arrangements and conditionalities. During the same period, the European and the USA economies were suffering from very long-term severe boom before the 1929 - 1933 Global Great Depression.<sup>180</sup>

Based on the 'Quantity Theory' assumptions, Mises, as others of his time, was an advocator for the return to the pre-WWI gold-standard monetary system.<sup>181</sup> This policy-recommendation was based on his belief that crises in European Countries became more frequent and more severe since the abandonment of the use of gold and silver coins in circulation and their replacement by the paper equivalents and bank paper credits, and its expansion by

governments and liberal/unregulated financial institutions that created a stronger and quicker impact on the purchasing power of the domestic currencies and ERs.

Since then, as he argued, for the reasons of the ‘1933 Great Depression’, for example, that: -

*“... crisis ... is ... the outcome of credit expansion. ... crisis is the unavoidable sequel to a boom. Such a crisis necessarily follows every boom generated by the attempt to reduce the “natural rate of interest” through increasing the fiduciary media.”*<sup>182</sup>

On this basis, he considered liquidation of an expanding national budget deficit, beyond borrowed domestic and foreign savings, as the causes of the expansion of domestic credit, mainly through the printing press, which reduces the natural rate of interest and crowd out the private sector’s investments, and the main source and direct cause for inviting in financial crisis as implied by past CCs experience which stated that: -

*“... the policy of expanding credit must come to an end if not sooner due to a turnabout by the banks, then later in a catastrophic breakdown.”*<sup>183</sup>

In connection to the ER, he believed in the law of one price that is:<sup>184</sup> -

*“... determined by the relative purchasing power per unit of each kind of money”* and which each of them *“... must eventually be established at a height at which it makes no difference whether one uses a piece of money directly to buy a commodity, or whether one first exchanges this money for units of a foreign currency and then spends that foreign currency for the desired commodity. Should the rate deviate from that determined by the purchasing power parity, which is known as the “natural” or “static” rate, an opportunity would emerge for undertaking profit-making ventures.”*

That is why he considered complains about the (undesirable) outflow of foreign money was simply and always the result of governmental interventions which has endowed differently valued moneys with the same legal purchasing power.

In analyzing under-developing economy and post-conflict country, like Germany after WWI, which was suffering from its inelastic supply of, and foreign demand for, its primary goods and services,<sup>185</sup> and when available investable funds allocation were distorted by the inflationary pressures,<sup>186</sup> the crisis-forces is the result of: -

*“The continuing increase in the quantity of fiduciary media [that] leads to continual price increases.”*<sup>187</sup>

Such intolerable long-term inflationary policy will force the ruling government: -

*“... to face the consequences of the fact that foreign exchange rates remain subject to continual, even if not severe, fluctuations.”*<sup>188</sup>

This, in turn, causes: -

*“... deterioration in the balance of trade, brought about by higher prices...”<sup>189</sup>*

But, he continues: -

*“Inflation can continue only so long as the opinion persists that it will stop in the foreseeable future. However, once the conviction gains a foothold that the inflation will not come to a halt, then a panic breaks out. In evaluating money and commodities, the public takes anticipated price increases into account in advance. As a consequence, prices race erratically upward out of all bounds. People turn away from using money which is compromised by the increase in fiduciary media. They “flee” to foreign money, metal bars, “real values,” barter. In short, the currency breaks down.”<sup>190</sup>*

The breakdown of the ER leads to higher inflation rates, complicating the stabilization of the ER itself. Since the slow, or abrupt, panic would keep on developing, the disproportionality between the depreciation of the monetary unit and the quantity in circulation would become still more exaggerated, leading to liquidity crisis at level of advanced inflation of unknown end-date. It is the other side of the turbulent purchases and prices; it is the other side of the “crack-up boom”, ending the need for the printing press and money paper boom.<sup>191</sup>

According to him: -

*“The policy of expanding credit is usually abandoned well before this critical point is reached. It is discontinued because of the situation which develops in international trade relations and also, especially, because of experiences in previous crises, which have frequently led to legal limitations on the right of the central banks to issue notes and create credit.”<sup>192</sup>*

This means that the currency’s value deterioration led to banking and/or liquid crisis. But before this critical point is reached: -

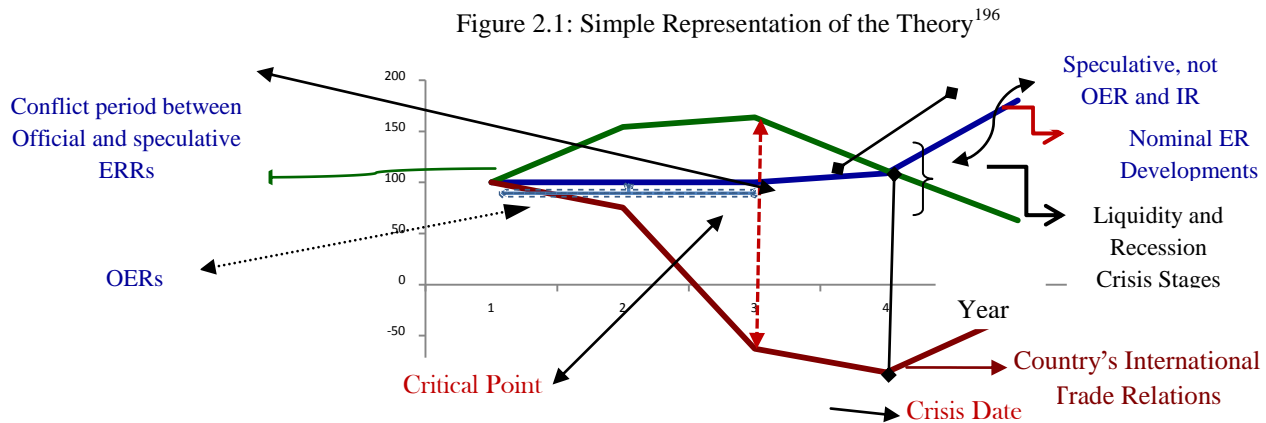
*“The quotations on the Bourse for foreign exchange always reflect speculative rates in the light of the currently evolving, but not yet consummated, change in the purchasing power of the monetary unit ...”<sup>193</sup> “that is, they arise out of the transactions of business people, who, in their operations, consider not only the present but also potential future developments. Thus, the depreciation of the money becomes apparent relatively soon in the foreign exchange quotations on the Bourse - long before the prices of other goods and services are affected.”<sup>194</sup>*

Such inconsistent policy package for the management of the macro-economy must make the untimed or undated: -

*“... day ... come without fail, sooner or later, when the monetary systems of those nations pursuing this course will break down completely,”<sup>195</sup>*



That is, must suffer the consequences of hard-landing and the economy's melt-down. Figure 2.1 below summarizes that mechanics.



Utilizing economic ignorance of the public and hence absence of mistrust may be due to rampant poverty mainly after war, it may be: -

*“... possible to calm down the stimulated liberal rational speculators and citizens once, twice, perhaps three or even four times. However, matters must finally come to an end. Then there is no going back. Once the depreciation makes such rapid strides that sellers are fearful of suffering heavy losses, even if they buy again with the greatest possible speed, there is no longer any chance of rescuing the currency.”<sup>197</sup>*

These peoples' responses, according to him, reduce total exports and increase the importation of even competing foreign goods and assets. Incidentally, as he clarified, it may become more difficult to amass foreign exchange to accumulate NIR that could help the economy buffer against, and weather away, the critical time which immediately followed by the collapse of the paper monetary standard. As a matter of fact, this policy could eventually lead to even more serious social and political troubles. This means, as it can be concluded, that deterioration of domestic purchasing power leads to an expanding CAD at a rate more than NBKIs, causing a depletion of the economy's buffering NIR, and the accumulation of arrears due to what Keynes named as the transfer problem,<sup>198</sup> which can be aggravated by the insoluble inelasticity of demand for exports.

Mises considered crisis resolution by itself as a complicated problem, because of: -

*“The fact that each crisis, with its unpleasant consequences, is followed once more by a new “boom,” which must eventually expend itself as another crisis, is due only to the circumstances that the ideology which dominates all influential groups - political economists, politicians, statesmen, the press and the business world - not only sanctions, but also demands, the expansion of circulation credit.”*

He considered that the ER cannot be maintained or defended by raising interest rates except through the achievement of “*favorable balance of payments*” to build the practical capacities to bring misaligned ER to the established “static” or “natural” purchasing power of various kinds of money.

Despite the above pure monetary portrayed mechanics for seignorage-driven CC, the key contributions of Mises’ theory are: -

1. in pointing-out that the inconsistency between central bank objectives, from the impossible tri-lemma perspective,<sup>199</sup> but this will necessary imply that the fixed ER must ultimately give way to a floating rate, without the need for perfect-foresight speculative attacks assumption;<sup>200</sup>
2. the seriousness of the lack of adopting sustainability rule in ending the government boom policies;
3. in pointing-out that the increase in domestic credit leads to widening and unsustainable current account at rate higher than the capital surplus, if existed, leading to the depletion of the country’s NIR, which makes fixing the nominal ER questionable, if not impossible;
4. its identification of the conflict or inconsistency between domestic fiscal policy for the liquidation of a persistent deficit, which leads to domestic credit expansion, in creating macroeconomic destructive vulnerabilities, and implicitly, from the DMS identity, depletion of foreign assets, in the payments of reparation and other debt-servicing obligations, and to meet the demand for foreign currencies as domestic currency is depreciating and the sustainability of the fixed ERR, which breaks down after the abandonment of the domestic credit expansion, leaving speculators, not the government at this critical point, to determine their speculative ERs (point 3 in the graph above). In other words, the model recommends the significance for paying attention to the seriousness of the persistent deterioration of the domestic currency’s purchasing power, relative to other assets, due to the growth of the domestic credit at a higher rate than the growth of the demand for it, i.e. once Greshams Law is activated;<sup>201</sup>

5. That once the panicked investors and speculators start earning high qualities of foreign currencies and assets, or metalize the government will be forced to change its policies if it has to maintain its monetary independence.

But much important, Mises' theory did not mention anything about the direct effects of contagion and the ruinous mismatch between short-term borrowing and long-term lending policies by the monetary sector on the ER and the role expectations building by investors and speculators even if these fundamentals were sound. Also, nothing is mentioned about the possibility of NBKIs, in increasing domestic demand for domestic goods, in appreciating the real ER with adverse effects on traded-goods production in the domestic economy. Also, nothing is mentioned about the persistent role of the real appreciation in setting a stage for a speculative attack on the national currency, putting an end to the economic boom fuelled by NBKIs, rather than the printing press.

#### 2.4.2. Keynes's 1936 Theory<sup>202</sup> about the Great Depression. -

The Great Depression was triggered by the October 24<sup>th</sup>, 1929 US Stock Financial Panic and Market Crash. In overall, the main reasons for the Great Contraction and Depression were actually due to the total restriction, destruction, and collapse of domestic and external effective aggregate demand due to preparation for, and financing WWI, and reconstruction after WWI. The sources, mainly after WWI, can be summarized as follows:<sup>203</sup> -

1. Over-production of so many farm crops that forced prices and incomes decline by 66% from 1920 to 1929, causing failure to meet different payments including mortgages and taxes on their land. That led to a steady stream of bank failures by late 1920s;
2. Low interest rates encouraged currency speculators to borrow heavily mainly in countries suffering high/hyper inflation rates, constraining them from exporting and importing foreign goods and services. Over-speculation of borrowed money weren't repaid when the stock market crashed in 1929 and stock prices collapsed.
3. The immediate problem was the uneven distribution of currency that was internationally accepted. This was due to the wartime purchases which had siphoned off a great deal of

European wealth to the neutral countries: the US owned 40 percent of the world's gold reserve;

4. Heavy EDs and debt services due to the WWI causing many European nations to further increase indebtedness and becoming unable to pay wartime debts, even those which were borrowed from the American Banks in post-WWI, due to the transfer problem;
5. Maintenance of the balanced budget and liberal markets principles and return attempts to the (failed) gold standard to sustain unsustainable ER;
6. WWI caused European countries to reconstruct through the booming strategies and policies, leading some European industries and agriculture gradually recovered from WWI and increase their industrial capacity, causing overproduction in both, mainly in the import substitution sector, which, beside different means and tools of protection, reduced post-war trade;
7. In 1922, to protect its over expanded industries from competition, the US began increasing its tariffs -The 1930 Hawley-Smoot Tariff raised US tariffs to an all-time high with ad valorem (in proportion to the value of something) rates that averaged from 32 - 40 percent. Such policies discouraged and inhibited trade and lowered international trade aggregate demand, hence international volumes and values; besides the adoption of dirty devaluation wars under the pressures of heavy EDS and decreasing international demand for exports;
8. With low savings rates in the belligerents' countries, mainly as many middle class members were disappeared and the adoption of the Federal Reserve loose monetary policy, while many bankers had small reserves as they attempted to capitalize on stock market growth, governments resorted to the use of printing presses to liquidate their national budget deficits;
9. Freezed wages policies that caused them to lag behind productivity between 1920 and 1929 where wages rose by 2 percent and productivity rose by 55 percent, leading to mismatch between domestic consumption relative to production growth rates. This was reflected in massive business inventories (up 300% from 1928 to 1929), and causing them

to live on credit, resulting in increased poverty among many farmers and factory workers which pulled down the economy, by destroying ADD;

10. Drastic increase in DMS in 1928 due to the Presidential Election;

11. The US Revenue Act of 1926 led to tax cuts for the rich. This means more money in the hands of the few that caused uneven distribution of income. In other words, the rich were becoming richer leaving little money being distributed to the working class to buy things they needed. Wealth mal-distribution,<sup>204</sup> supported the slowdown of consumption growth rate, hence the depth of domestic recessionary inflation;

12. Too many people invested in the stock market without adequate NBKIs to cover losses when there was no government regulation of the stock market or the financial system;

13. The interdependent nature of world-wide loans caused the depression to spread throughout the world from the US. Also, the depression produced disastrous social and political consequences: namely the triumph of totalitarianism.

As a protector of the liberal capitalistic industrial system from total collapse and its fall in the putrefy pool of the communist system, and to be clutched by it, Keynes, as rational liberal, adopted a real-side approach to explain the causes of this financial, and hence currency, crisis, in terms, not due to high interest rate at the later boom stages but to the alarm, uncertainty, and the sudden and rapid collapse in future marginal efficiency of capital (MEC) that leads to increased inventories, which naturally precipitate a sharp increase in liquidity-preference and hence a rise in the interest rate. This MEC is not necessarily a function of existing investment volumes, but as a result of loss of confidence in the future expected flows of revenue from investment, due to the fall in its current estimation and to the massive increases in inventories of durable goods, hence the resulting overproduction problem due to demand deficiency, as well as due to the expectations of future falling costs of production, forces entrepreneurs to postpone their investment decisions. Based on these investors' and speculators' estimations, mainly at the later stage of the boom, Keynes considered such expectations as very risky because it is based on "*shifting and unreliable evidence,*" which "*are subject to sudden and violent changes*"<sup>205</sup> that might open the traffic for the onset of the catastrophic crisis. This

explanation was put in the face of the classical Say's Law which considered that recessions cannot and are not caused by excessive production, and hence overproduction cannot and does not occur and hence demand deficiency is thus never a correct explanation for financial crisis.

According to Keynes, the financial crisis of the 1929 – 1933, was mainly characterized by the following:<sup>206</sup>

1. Fluctuations in the rate of investment and employment due to fluctuations of in the marginal efficiency of capital;
2. Misallocated investments, i.e. a clear waste of scarce resources, due to illusive high price signals illuminated by severe boom that led to over-investment, hence excess supply and idle capacities;
3. Due to disturbing the initial equilibrium, a rapid and sudden collapse in the marginal efficiency of capital as a result of increasing rate of interest rate by the end of the boom period, led to the collapse in confidence concerning the expectations of the future flows of yields, based on the current yields, which results in the “liquidity preference” when interest rates falls to near-zero rate;
4. **Firms cut back on investment** as activity levels decline and investors direct some part of their cash flow to servicing trade and speculative credits to banks;
5. **Low employment rate of the productive assets of the economy**, as a result of suspension of new investments, i.e. **lower levels of aggregate demand**;
6. As **short interest rates decline**, banks choose not to relend all their available funds but instead they utilize them to improve their own NIR positions, for credibility purposes. Thus the system as a whole shows an increased demand for high-powered money and simultaneously a decrease in bank money held by the non-bank sector.
7. **Low consumption rate**, not only due to high inflation and wage freezing during the booming periods but also, because the low marginal efficiency of capital is linked, mainly in countries with advanced and large financial capital markets, to the collapse in the psychological propensity to consume;

8. **Accumulation of inventories**, mainly of incomplete produced goods due to the suspension of in-complete investments.

9. Keynes's stress on "liquidity preference" rather than "demand for money" became understandable in such context since an increase in liquidity preference does constitute an increase in the demand for outside money and a decrease in the volume of inside money.

The overall crisis-policy-resolutions, and actually prevention, as recommended by Keynes, will take a longer time due to the loss of confidence. To short-cut this long-recessionary-period, the government must extract its policy intervention from the following conclusion: -

*"Any fluctuation in investment not offset by a corresponding change in the propensity to consume will, of course, result in a fluctuation in employment,"*<sup>207</sup>

That is, increasing (stabilized) marginal consumption will stabilize the growth of the economy's (unstable) capital stock, due to volatile MEC, and offset future depression crises. In other words, increasing poverty, i.e. destruction of domestic private demand for consumption,<sup>208</sup> will result in fluctuating, i.e. weak if not negative growth of, capital stock, causing increased idle capacities and unemployment rate,<sup>209</sup> hence create the expectations for reduced future MEC, increasing inventories that lead to another deeper crisis.

The main problems with this theory are: -

1. It is based on closed economy, where savings equals investments, i.e. zero NBKIs, implying a zero misaligned nominal and real ER triggering competitiveness in the world market unless diluted by competitors' undervalued currency;
2. MEC is affected by raising other (non-wage) costs of productions, during the boom stage. But this must include currency devaluations,<sup>210</sup> as it raises the costs of production and increase the supply of durable goods, mainly during the booming stage in countries that are heavily dependent on NBKIs;
3. Consumers are incapable to maximize their real incomes by asking to be paid in other currencies while the boom stage deteriorate the purchasing power of the domestic currency;
4. Monetary sector's and Speculators' roles are not clear in speeding-up the push towards the CC;

5. Unsatisfactory current yield from investment as the only indicator for a declining future yield of investment is not a sufficient conditions, because of existence of other economic and non-economic dynamic factors that might lead to the loss of confidence (even) in (maybe good) government policies for whatever reason, especially in open economies.

#### 2.4.3. Krugman's 1979 Seignorage - Push to First Generation CC Models.<sup>211</sup> -

As Mises above, Krugman re-stressed that crises have been a recurrent feature of the international economy ever since gold and silver coins were replaced by paper money, and played a large role in the economic turmoil of the interwar era, as well as after the termination of the BWIs' fixed, but adjustable, exchange regime in 1973. Numerous developing and under-developing countries witnessed large displacements after long booming periods due to foreign-financing dependent economic development till 1980, and in some others for war and others for internal and external negative shocks.<sup>212</sup> Most of them sought to stabilize their currencies in foreign exchange markets by borrowing cheap, although un-concessional, monies from the dollar markets, for several years during the 1970s. In virtually every case, however, the ER has eventually collapsed, often after paroxysmal perfect-farsighted inevitable speculative attackers that embarrassed governments whose policies caused their economy's fundamentals to get out-of-sustainability-line due to profligate overspending policies that overvalued their real fixed ER, causing the, ultimately, unsustainable due to the running down of its NIR. Inevitable speculative attacks, although hardly a new phenomenon, have arguably become harder to resist and more widespread as international capital markets have deepened since 1970s.<sup>213</sup> This was also followed by the early stages of the Latin American debt crisis of the 1980s. Since late 1970s, CCs have become a major focus of specialized academic and policy-makers concern.<sup>214</sup>

These currency-crisis models were the first currency-crisis models in Post-WWII, and they were essentially, as in Mises' Theory above, a seignorage-driven crisis models, where (inflationist) governments are taken for granted to have an uncontrollable need to liquidate their expanding budget deficits, that force them, in the long-run, to confront CC when this



need for persistent cashing of budget deficit clash with the challenge of maintaining the committed and declared fixed nominal ER.

Krugman's monetary approach to the BoPs crisis, for ER to collapse, is based on looking at the economy's NIR as chest-defender, to stabilize the ER. It used the following assumptions:<sup>215</sup> -

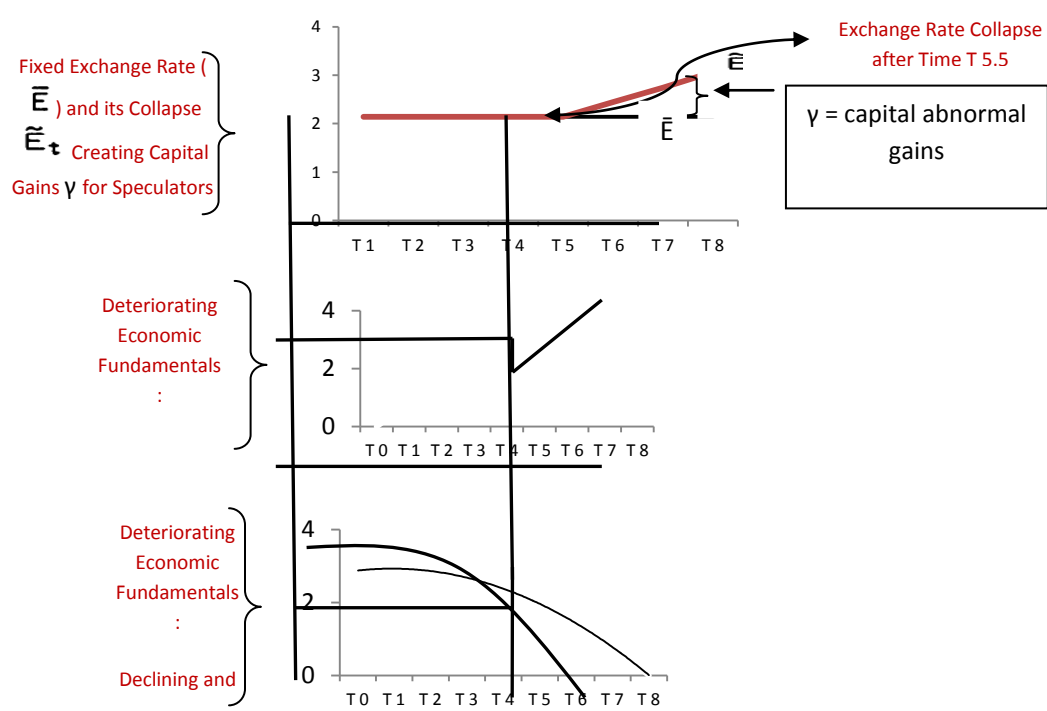
1. The demand for DMS is a function of the ER;
2. The ER that clears the domestic market changes over time;
3. The government is assumed to blindly keep on printing money to cover a budget deficit, regardless of the external situation;
4. the central bank is assumed to resolutely sell foreign exchange to assure that the ER remains fixed, i.e. to maintain investors' confidence, until the last dollar of NIR is gone;
5. Speculators are far-sighted;
6. Perfect asset-substitution as a necessary condition under a credibly fixed ER and perfect capital mobility, under interest-parity condition;
7. With limitations of other tools, central banks defend the fixed ER with its NIR and its borrowing from the IMF or the like;
8. Existence of different kinds rigidities;
9. Expansionary policies of the government, reflected in the long-term in the expansion of the domestic credit, creates inconsistency with the committed ERR;
10. Speculators and investors lose confidence and mistrust the reliability of the value of the paper notes due to government expansionary policies, leading them to invest a portion of their cash holdings in foreign money.
11. Backward induction methodology;
12. One or more of the macroeconomic fundamentals are unsustainable due to government mischievous management of the economy that depletes the financial sector's war-chest of defense, i.e. NIR and credibility;
13. Domestic-credit process is exogenous, meaning that the bank's reserves bear the full adjustment burden to balance-of-payments pressures.

14. Assumption 10 above, implies that NIR will be declining through time while the ER remains fixed;
15. The creation of contradictions between internal and external macroeconomic goals that are found in most of governments' policy packages, due to long or short period sustainable and unsustainable boom.
16. Government decisions are state-invariant and the degree of severity of policy-package inconsistencies will be determined by the speculators who observe these inconsistent policies and decide time of attack and the crisis.

First-generation models show how a fixed exchange-rate policy combined with mismatching fundamentals pave the way for a speculative attack against domestic currency that forces the government to abandon the fixed ERR, a phenomenon known as “peso problem”, for the free float, hence forcing the whole economy into crisis, from which rational speculators will profit from such dismantling of inconsistent policies at crisis-time.

This monetary approach to the BoPs problems justified CCs on the basis that inflationary governments resort to liquidating, sightlessly, its expanding national budget deficit by the use of the printing press that lead to the expansion of domestic credit in excess of money-demand, hence domestic aggregate demand, in spite of the sustainability of the external conditions in the medium to long runs,<sup>216</sup> causing the “shadow,” i.e. the price that would prevail after the speculative attack,<sup>217</sup> and a gradual depletion of NIR and exhaustion of the limits of borrowing capacities, for defending its committed (**overvalued real**) fixed ER, up to a critical level,  $R = EL(0) - EL(\pi) = M - EL(\pi)$ ,<sup>218</sup> after-which the last dollar of NIR is gone to far-sighted speculators, at time  $T = [r_0 - \alpha\mu]/\mu$ ,<sup>219</sup> when the BoPs problem is transformed into sudden crisis that frees the fixed ER to go to its own destiny, while speculators, who validated their attacks by triggering policy change, gain from their investments. Thus, the government is considered as responsible for the crisis by generating profitable opportunity for speculators by adopting inconsistent policies before speculators push the economy into high cost CC. Figure 2.2 below summarizes that mechanics.

Figure 2.2: Summarizing the Theory<sup>220</sup>



Also, as in Mises' theory, the key contribution of the first-generations CC models are their consideration of the seriousness of booming displacement in the deterioration of the domestic currency's purchasing power and in the role of domestic fiscal deficit liquidation policy in overvaluing the fixed ER till a critical level,<sup>221</sup> after-which NIR are totally depleted causing the ER to collapse. Hence, the model recommends paying attention to the seriousness of the persistent fluctuations in the economy's long-term exports and imports and their impact on the growth of the CAD at a higher rate than the growth of balancing capital account surplus, i.e. NBKIs, in the balance of payments, that lead to the accumulation of ED to avoid, at least, NIR depletion for defending the committed fixed ER, while booming the economy.<sup>222</sup> Therefore, the implication of the first generation models is their stress on governments to guarantee sufficient foreign currency to protect its commitment. This, of course, can only be achieved by an export-oriented strategy for economic development. Therefore, the failure in achieving such a strategy must lead to an explosive ED accumulation.<sup>223</sup>

This model has some important merits:<sup>224</sup> -

- First of all, many CCs clearly did, and remain do, reflect a fundamental inconsistency between domestic and ER policies; the specific, highly simplified form of that

discrepancy in the canonical model may be viewed as a allegory for more complex but often equally utter policy incoherence of many exchange regimes;

- Indirectly, it points to the seriousness of an opened gap between domestic investment and savings, as reflected in the dis-saving, and immeserizing, policies of the government, mainly in countries that are dominant by public sector. Of course, this domestic gap will be reflected in the CADs, which needs to be filled by an equivalent quantity of NBKIs. It can be seen from the depletion of NIR in the model for defending the fixed, or banded, ERR, that NBKIs will inflow at a relatively lower rate than the demand for foreign currencies, as domestic currency value deteriorates, as reflected by investors, holding domestic currency, in asking for hedging premiums, and investors holding foreign currencies for higher prices for them. The impact of such NBKIs relative slow-down on nominal and real ER and in feeding the country's NIR, hence the government's credibility as measured by it capacity to control the fixed ER fixed;
- Second, the model establishes clearly that the sudden, billions-lost-in-days character of runs on a currency need not reflect either investor irrationality or the schemes of market manipulators. It can be simply the result of the logic of the situation, in which holding a currency will become unattractive once its price is no longer stabilized, and the end of the price stabilization is itself triggered by the speculative flight of NBKOs.

These insights are important, especially as a corrective to the tendency of observers unfamiliar with the logic of CCs to view them as somehow outside the normal universe of economic events-whether as a revelation that markets have been taken over by chaos theory, that "virtual money" has now overpowered the real economy, or as prima facie evidence of malicious market manipulation.

But, although first-generation models help in explaining some of the crucial fundamentals that cause CCs, they are lacking key aspects: -

1. It is much adequate to under-developing countries stances where it represents much more governments' actions irrespective of market responses. That is, it also assumed that government continues to care about debt/deficit liquidation, i.e. disrespect a sustainability

rule, as the only root cause for CC, ignoring totally any other important objectives, such as its care about employment and debts stances, by assuming that speculators do not make mistakes in their judgments about the stance of the fluctuating NIR in attacking the fixed ERR;

2. it is an inadequate interpretation of the forces at work in most real crises, mainly in advanced and developing countries;
3. non-linear first-generation models' assumed speculative agents to suddenly increase their estimates of the likelihood of devaluation, mainly by diminishing real interest rates as well as diminishing domestic currency purchasing power, hence encouraging financial, rather than real, investments by speculators who foresee perfectly the future higher nominal ER, i.e. domestic currency's ER depreciation/devaluation;
4. more recent theories (of crises) emphasized the importance of economic fundamentals as broadly determining the potential vulnerability of a fixed rate regime to attack, but incorporate a multiplicity of equilibria so that the exact timing of the attack can depend on sunspots. In these models, CCs, like bank runs, can be self-fulfilling events in which speculators' loss of confidence create the economic environment for the crisis to explode even when fixed ER is sustainable;<sup>225</sup>
5. they do not explain why or how CCs spread to other countries, i.e. the role of contagion;
6. the theory didn't tell if there be an after-crisis contraction, as a punishment, will come-about;
7. the role of non-sterilized NBKIs in affecting the real value of domestic currency through inflation causing a reduction in the domestic real interest rate which encourage NBKOs;
8. the role of overvaluing the ER in affecting negatively export and import-domestic competitiveness;
9. they didn't analyze the trilemma of history<sup>226</sup> that force the trade-off between capital mobility, fixed ERR, and central bank independence, in favor of only two of them.

It is safely to say that Krugman's theory is a kind of extension of Mises' above-mentioned inferior inflationist policy theory, by explaining CCs as the product of financing budget

deficits by using the printing press: it is the ultimately irrepressible requirements of the government for seignorage to cover its budget deficit that guarantee the ultimate collapse of a commitment for maintain a fixed ER, while on the other side, investors' efforts to circumvent being ill with NBKOs (or to achieve NBKIs) when that collapse occurs provoke a speculative attack when the country's NIR plunge lower than a critical level.

#### 2.4.4. Obsfeld's Self-fulfilling-Driven CC: -

After the Soviet Union collapse in 1989 and the unification of East to West Germany, a boom in West Germany's DMS was inaugurated by expanding its national budget deficit although been counter-met by the contractionary impact of the monetary sector's high interest rates,<sup>227</sup> although violated the European Mechanism System (EMS) rules and conditions but also, helped in attracting increased NBKIs that supported the finance of merging and rebuilding East Germany. By early 1990's, Sweden and Finland, in the wake of their real estate bubbles, lost their Soviet Union export markets causing them to fall into deep depressions, i.e. reduction in the supply of foreign currencies, and to devalue their ERs. Also, during 1989-91, other five currencies have depreciated by 20% or more against the most stable currencies in the EMS.<sup>228</sup> From a continental perspective, the European Union witnessed hefty turmoil and sudden negative changes of many of its members' ERs, NBKOs beyond levels justified by economic fundamentals,<sup>229</sup> besides increased unemployment and poverty rates, i.e. destruction of part of domestic effective demand, and (short-lived) recession, by all unexpected scale and speed criteria since summer of 1992, due to the effects of contagion from the 1989 USSR Collapse and Germany Unification.

The success of speculative attacks on the 1992 EMS's **fixed band ERR** triggered its theatrical widening from  $\pm 2.25\%$  to  $\pm 15\%$  by August 1993 and opened a stronger test to the classical past CCs theories which failed to detect it coming or explain it. For industrial European countries with access to international financial institutions, advanced domestic and world capital markets, NIR adequacy per se has been far less of troubles than they were in the early 1970s CCs.<sup>230</sup> This time, simply expressed, it was the effects of high interest rates, as in Germany's case, associated by growing unemployment, as in Britain's, Italy's, and Spain's,

cases, and speculators' expectations about future devaluations that came into play in determining how different governments (endogenized) policies responded to the 1992 - 93 CCs and to the short-lived recession. Besides, the 1990s decade and after, and unlike the 1970s and 1980s, were also characterized by the absence of excess investors' confidence.<sup>231</sup>

These features of the crisis-inflicted countries and changed circumstances led to the generation of new models that considered CC to result without the conditions of the narrowly defined problematic fundamentals stated in Mises' and Krugman's models, but on the government cost-benefit analysis for defending the fixed ER, or not. As Obstfeld puts it: -

*"... a newer generation of crisis models suggests that even sustainable pegs may be attacked and even broken. The focus is on the government's continuous comparison of the net benefits of changing the exchange rate versus defending it."*<sup>232</sup>

This time, it is seen that: -

*"... the behavior of domestic interest rates and foreign reserves levels will naturally reflect the possibility of a speculative attack whether for a temporary or permanent currency devaluation."*<sup>233</sup>

In other words, a government that is pressed, and its policy becomes dependent, i.e. endogenized, on speculators' pushing forces, to make a trade-off is the one which drives or pushes the economy into crisis mainly by speculators who anticipate these actions, and without them the fixed ERR would have lasted indefinitely. On this basis, it is clear those second-generation models states that the motives for devaluation lie in the perceived need for more expansionary monetary policies, for the improvement of in the internal and external equilibrium positions, as in the advanced and developing countries cases, rather than just through the budget deficits and inflation, which worsens the internal and external equilibrium positions, as in the under-developing countries cases. Some economists considered that these new generation models have superseded the first generation models. This is because the scenario presented in these new models stress that CCs need not necessarily be driven by traditional, Mises and Krugman's, fundamentals, but can be results of pressures from self-fulfilling and contagion crises in which endogenized government macroeconomic policy ends-up justifying investors' pessimism, "herding" by investors, and the machinations of large agents.

Actually, they can be considered an extension to them by the use of a broader definition of fundamental. As stated by Obstfeld: -

*“The theory does not assert that exchange rates can be attacked any time, any place, irrespective of the state of economic fundamentals. But the theory does suggest that we broaden our definition of fundamentals to encompass the incentives and constraints under which governments operate, including political incentives and constraints. This perspective makes clear precisely ... that the ... preexisting economic problems make governments that peg exchange rates more vulnerable to the pain that speculative anticipations, in and of themselves, can inflict.”<sup>234</sup>*

This theoretical extension makes clear that it interprets CCs as emerging from shifts in speculative' expectations about the future path of economic policy even when (traditional) macroeconomic fundamentals are consistent with a fixed ER policy and that the root cause for CCs lies, not necessarily in the expansion of DMS by irresponsible governments but, in shift of speculators' expectations that are built for whatever suspicions by them due to, right or wrong, information or telltales,<sup>235</sup> or just due to the mistrust or lack or loss of confidence, in the government's policies future responses. Also, this quote shows clearly that the pressures of the economic and/or political problems create expectations and incentive, under the pressures of the fundamentals' constraints, that force the government to sacrifice the peg in favor of solving that problem, hence impose a cost-benefit analysis to decide on a trade-off, rather than simple reason for selling foreign exchange until the NIR are totally consumed, to minimize a social function:  $\min L = (\theta/2)\delta + [(\delta - E\delta - \mu - \kappa)^2/2]$ .<sup>236</sup> Of course, such trade-off decisions represent persistent contradictions between (controlled) internal and (uncontrolled) external macroeconomic goals that are found in most governments' policy packages, due to sustainable as unsustainable long or short period boom.

Besides, the theory add a new dimension by considering the multiple-equilibria question that relates to the coordination between expectations and actions of market-participants and the monetary authorities' NIR levels and other powerful and effective monetary instruments and the timing of the attack. In other words, the preexistence of these economic or political problems does not necessarily lead to an attack if the instruments backing the government's policies are strong enough to beat any attack on the domestic currency. Of course, as long as speculators do not attack, the ER can be maintained forever, but if many traders, equivalent to



a single large trader, sell the domestic currency simultaneously, during weak fundamentals and government policy tools, the peg must collapse. But if there are large numbers of small credit-constraint traders, they must move simultaneously to mobilize an attack of a magnitude sufficient to shift the system from equilibrium to another. As others have suggested, traders may also utilize prominent events, such as chaos in foreign exchange markets and successful attacks on other countries, as focal points for coordinating their actions. This means that coordination difficulties will make timing of an attack uncertain. Empirically, if the coordinating devices that trigger speculative attacks differ over time, speculative attacks may look distinctive rather than similar; it may be expected to see the clustering for attacks over time (instances of the phenomenon known as contagion).

Obstfeld emphasized reasons to depreciate, not to depreciate, and why expectations of depreciation alter the government's net benefit balance for maintaining its fixed parity, mainly when speculators are capable to make it costly for the government to defend the ER, forcing it to depreciate now if they expected that action in the past. Simply stated, the second-generation models considered, in general, that government devalue or float its currency to gain the freedom in following more expansionary policies that lower the interest rates and/or increase the employment rate on the account of the committed ER.

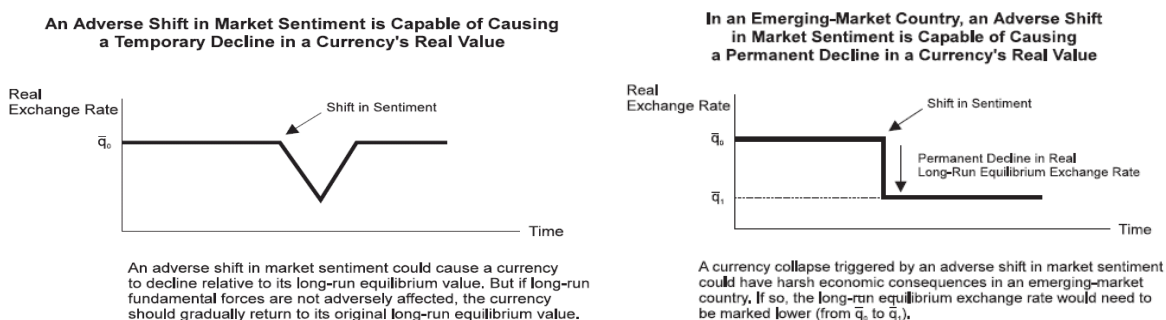
For example, a government, of advanced countries, may desire to pursue a more expansionary monetary policy to reduce unemployment rate in the economy but, at the same time, finds that will contradict with the adopted fixed ER. When investors begin to suspect that the government will choose to let the parity go, the resulting pressure on interest rates can itself push the government over the crisis-edge, and push the economy into CCs. Another example is when the government may want to promote price stability or signal the markets of its intention to pursue a disciplined monetary policy in the future. It can advance these sorts of objectives with fixed ER. On the other hand, the government may also wish to limit its debt service obligations or inject liquidity into troubled banking system. These objectives can better be achieved if it abandons the fixed ER to pursue monetary expansion. Speculators, whether collectively or follow herding animal-spirit, foresee these contradictions that shift

their expectations and decide that the government will aside its position in favor of servicing its debt obligations or bail-out the banking system, hence will devalue the ER. This shift of expectations in its turn creates pressure that causes the interest rate to rise, which increases the costs of investment, causing an increased unemployment rate, hence loss in output, i.e. destruction of the Keynesian MEC. In such situation, if the government sees that it is in the benefit to increase employment and growth that outweigh the interest cost, it will devalue the ER even if the change in expectations are not justified by fundamentals. Government devaluation validates the speculator's expectations, even if they were wrong.

Although, according to Obstfeld, first and new theories agree that arbitrary expectational shifts, due to the loss of confidence, can turn a fairly credible exchange-rate peg into a fragile one,<sup>237</sup> except that as in the new theory, an economy can be vulnerable to speculative attacks in a setting, not necessarily like the bad government-made macroeconomic fundamentals<sup>238</sup> but, of a government-decided action for achieving a well-defined policy goals that generate expectations that invite speculators to attack defenselessness ER regime, causing the possibility of self-fulfilling CCs to become central, implying that the government may ultimately be responsible for these kinds of crises. That is, the familiar terrain of "sunspot" dynamics, in which any arbitrary piece of information becomes relevant if market participants believed it as relevant. This shows the seriousness of information in the international finance area. Hence, countries with imperfect information system become much more vulnerable than others for speculative attacks.

In different words, models with self-fulfilling features explain countries only when macroeconomic policies and fundamentals are sufficiently weak so that the country becomes potentially vulnerable to speculative attack. A country whose government is expected to defend its currency firmly and effectively will probably would not need to do so, while a country whose government is very likely to abandon its peg eventually in any case will almost surely find its timetable accelerated by speculative pressure. It is also important to remember that a country whose fundamentals are persistently and predictably deteriorating will necessarily have CC at some future point in time.

Figure 2.3: Impact of Market Sentiment Shift on Currency's Real Value<sup>239</sup>



Remembering the existence of domestic policy rigidities, the key contribution of this theory is that it broadened the macroeconomic fundamentals definition to include situations in the real, not only the monetary, sector of the economy as in Keynes' theory, such as the unemployment, beside the pecuniary side like debt-servicing, but it didn't tell why they have been existed in the first place if there weren't any inconsistency in the applied policy package that led to increased unemployment and debts. This means that the existence of whatever bad real, or financial, fundamentals in the economy remains implying the inconsistency of the adopted macroeconomic policies mix of the ruling government with its commitment towards the, fixed or banded flexible, ERR. Also, nothing is mentioned about the direct effects of contagion and private NBKIs on the ER, in their relations to the DMS and expectations-building by investors and speculators and their impact in the sustainability and the speed of the economic development processes.

#### 2.4.5. Third Generation Models: -

Before crisis explosion in 1997, South East Asian economies enjoyed regular fiscal measures, high growth rates, low unemployment rates, low inflation, CA surpluses and increasing, not depleting, NIR, due to booming exports. These fundamentals, as can be observed, were in the reverse positions in the Mises, Keynes, first, and second generation anecdotes. Also, although, growth had slowed and some signs of excess capacity appeared in 1996, none of the countries faced the kind of clear tradeoff between the low employment and ER stability, as assumed by most second-generation models for the case of the 1992 EC, mainly Great Britain's Sterling crisis, and 1994 Mexico. Besides, in both Latin America and Asia CCs were followed by severe recessions.

By 1994, due to hyperinflation and over-investment, Mainland China controlled and adjusted its macro-economy via devaluation measures in the foreign currencies market. Concurrently, the continuous depreciation of the Japanese yen against the USA dollar since 1995 short-cut the policy-time-lag of the Chinese devaluation process on Asian Tigers exports on which their economic exports relies heavily. In 1997 to 1998, several Asian economies, including Thailand, Indonesia, Malaysia, and South Korea, experienced a sudden reversal of large international capital transfers which were made by confident foreign investors during the preceding few years and which allowed them to import considerably more than they exported.<sup>240</sup> But the crisis didn't live up to the worst fears, because it didn't bring about another Great Depression.

Despite the availability of nearly \$200 billion of official financial assistance during the 1990, they: -

*"... have not spared them from deep current account adjustments, gigantic output losses, and dramatic real depreciations; and they have failed to contain financial contagion from spreading to other emerging markets,"<sup>241</sup>*

That is irrespective of the efforts wielded to rescue the crisis-inflicted countries and to smooth the crisis impacts on consumption and employment.

The slide towards crisis began with an export slowdown in the region, appreciation of the dollar against the yen, growing competition from China and overbuilding of (dicey) real estate, especially in Thailand. There were also large CADs and several other countries were showing evidence of financial powerlessness with heavy booming investment in highly speculative real estate ventures financed by foreign borrowing, mainly on non-concessional terms. Domestic credit was also made available from unregulated and corrupted domestic financial institutions. The CCs were triggered by asset bubbles burst. What might have been a domestic crisis in these countries quickly turned into an international one as speculators began to wonder which countries would devalue.

The Asian tigers that encountered severe crises in 1997 - 98 practically shared several important characteristics before the crisis. All were manifested, to varying degrees, by:<sup>242</sup> -

1. Although “crony capitalism” existed for decades, it was only since 1990 that they encouraged extensive borrowing denominated in foreign currencies that placed them at risk of financial collapse when the real ER depreciated sharply;<sup>243</sup>
2. A surge in credit to the private sector;
3. Real estate or stock market booms, often fueled by the expansion of credit;
4. Very weak regulatory systems of the financial sector with highly opened capital accounts;
5. Unlike other developing economies, the financial sectors were generally large bank-dominated and lack of transparency;
6. Radelet and Sachs<sup>244</sup> pointed-out that in the run-up to the crisis all forms of investment in the emerging Asian economies were booming, including direct foreign purchases of equity and real estate, investments that clearly were not protected by any form of implicit guarantee;
7. Persistent large CADs in Thailand and Malaysia but relatively moderate in Korea and Indonesia;
8. In the Asian crisis-inflicted countries that were attracting different structure, in large quantities, of NBKIs, as encouraged by the international community,<sup>245</sup> suddenly found their currencies attacked. The CCs were associated with banking crises, and the economies suffered severe contractions and recessions;
9. Balance sheet weaknesses and external deficits were often financed by short-term foreign currency denominated debt, creating a large stock of short-term claims that had to be rolled over. Malaysia was something of an exception: it relied more on FDI and less on debt to finance its (quite large) external deficits at some times;
10. Despite some slowdown in growth in 1996, there was not a strong case that any of the countries needed devaluation for competitive or macroeconomic reasons;
11. It is striking that all the countries that had a ratio of liabilities to claims in foreign currency higher than 1.5 with respect to foreign banks and other financial institutions have experienced a serious crisis in the 1990s;

12. Most importantly, CCs occurred in countries where governments enjoyed Low unemployment rates, booming export sectors, and sound fiscal policies that did not rely much on seigniorage, i.e. the need for the use of the printing press;
13. The most stunning aspect of the GFC has been the way that events in small economies like Thailand or Russia have led more or less directly to crises in economies thousands of distant miles, with few direct trade or financial links.

As it is clear, the cause of these outbreaks, however, made the Asian 1997-98, as the Emerging 1994-95, market crises fail to fit the above Mises, Keynesian, first- or second-generation logic. As a result, most researchers<sup>246</sup> have therefore concluded that there was a badly needed different type of model that concentrates much on the financial intermediaries and liquidity effects. While there are rebellions, as usual, it seemed that academic attitude has dangled fairly strongly toward the self-fulfilling crisis view, largely because of the phenomenon of “contagion”: the way that a crisis in one country seems able to trigger a crisis in another, even when the economic links appear to be minor.

Third-generation models<sup>247</sup> were born to identify the CC’s causes of the major Asian economies during 1997-98 that unfolded suddenly and with little warning, as can be seen from the severity of the crisis itself and its contagion effect on countries that were not even major trade-partners, and yet they experienced a dramatically coordinated crash. The Asian crisis has actually settled some disputes and decisively resolved the argument between “fundamentalist” and “self-fulfilling” crisis versions, but also other dimensions that were not considered in them.<sup>248</sup>

The new crisis models focused explicitly on the most crucial single statistic that captured the violence of the most dramatic sudden contraction shock to Asia due to the huge reversal in the current account. The need to effect such a huge reversal represented what may be history's most spectacular paradigm of the classic Keynesian “transfer problem” debated between Keynes and Ohlin in the 1920s. Yet “... despite the evident centrality of the “transfer problem” to what actually happened to Asia, this issue has been remarkably absent from formal models.”<sup>249</sup> In practice, this swing has been achieved partly through massive real

depreciation, partly though severe recession that produced a compression of imports. In the developed basic model, the difficulty of affecting such a transfer, the need to achieve the current account counterpart, i.e. a reversal of NBKOs either via real depreciation or via contraction and recession, turned out to be the heart of the story.

According to this model,<sup>250</sup> the amount that domestic entrepreneurs, in the real sector, can borrow from foreigners to finance investment depends on their wealth. At the same time, however, the wealth of each individual entrepreneur itself depends on the level of such borrowing in the economy as a whole, because the volume of NBKIs affects the terms of trade and hence the valuation of foreign currency- denominated debt. Accordingly, the outlines of a story about the Asian financial crisis can immediately be seen: a decline in the NBKIs can adversely affect the balance sheets of domestic entrepreneurs, reducing their ability to borrow and hence further reducing the NBKIs.<sup>251</sup> The importance of the balance-sheet effect would depend on the level of the ER. At very favorable ERs, few firms would be balance-sheet constrained; so at low real ER ( $eP^*/P$ ), the direct effect of the ER on aggregate demand would be minor. At very unfavorable real ERs ( $eP^*/P$ ), firms with foreign-currency debt would be unable to invest at all, and therefore the direct exchange-rate effect on demand would be trivial at the margin. But in an intermediate range, the effect might be large enough to outweigh the direct effect on export competitiveness, so that over that range, depreciation of the currency would be contractionary rather than expansionary. This means that firms with poor balance sheets cannot invest, causing a real investment collapse<sup>252</sup> that validates the NBKOs, hence deterioration of the countries with large CAD and (low) NIR that leads to sudden free-float of the ER. This can be seen from  $\{(dI_f/dI) = [(1 - \lambda)(1 - \mu)]/\chi\}$ ,<sup>253</sup> i.e. the factors that can make financial collapse possible. These are: 1. High leverage; 2. Low marginal propensity to import; 3. Large foreign-currency debt relative to exports.

Of course, these factors matter as they make the circular feed-back from investment to real ER via NBKOs to terms of trade to balance sheets to investment more powerful. Therefore, the Asian economies have made themselves abnormally vulnerable to financial crisis by the high leverage. Given this high leverage, “crony capitalism,” which have been a characteristic

of Asian economies for decades, it was only after 1990 did these economies begin extensive non-concessional borrowing denominated in foreign currencies, as encouraged by the international community,<sup>254</sup> that positioned them at the perils of financial (hard) fall down, i.e. severe recession, when the real ER devalued/depreciated due to the mismatch between short-term borrowing and long-term lending which created the famous transfer problem. In the end, they also suffered severely from their resolution by kinds of “Cold-Turkey Policy Packages.”

This story of CCs has the significant advantage that it is based on two well-known facts: First, countries that are most likely to go into a crisis were those in which firms held a lot of foreign currency denominated debt. Strikingly, it has been observed that all the crisis-inflicted Asian Countries that were having a ratio higher than 1.5 have experienced a serious crisis in the 1990s. Second, there were substantial and persistent deviations from purchasing power parity following an ER shock. The Third Generation model often start from the assumption that government officials have a pot of resources that can potentially be used to bail out political cronies if they get into financial difficulty. This pot is mainly identified with the central banks' holdings of NIR. Well-connected banks are able to borrow from abroad to finance risky projects - such as real estate development or a new factory in the already-glutted steel industry. They were aware of the risk. But they believe that they will be bailed out by the government if things go badly.

The problem with this model is that, it concentrated on the effects of NBKOs in the form of NBKOs and the severe contractionary impact of huge CA reversal, but it didn't discuss the problems that are created by the NBKIs in causing price bubbles or their investment in toxic assets and its effects on the country's price competitiveness indirectly. Also, its role in breeding a CC episode through its effects on domestic interest rates and returns on assets sold or bought in domestic imperfect capital markets or in appreciating and in pushing-up the general price indices that might be absorbed by the fixed nominal ER causing a real ER overvaluation that in turn hurts exports and import, by making weak and strong, competitiveness, respectively, that presses badly on NIR which leads to a CC.



## 2.5. The 2008 GFC in the 21<sup>st</sup> Century: -

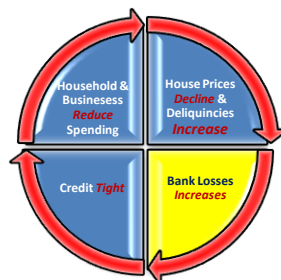
Of course, as stated by Blanchard, it is: -

*“... much too early to give a definitive assessment of the crisis ... because it is far from over. It is not too early, however, to look for the basic mechanisms that have taken the world economy to where it is today and to think about the policies needed to implement now and later.”<sup>255</sup>*

The current financial crisis, occurring during a period of strong world macroeconomic growth and low interest rates, high downward pressures on wages, with persistent high unemployment rates, mainly in Europe, appears to have *surprised*<sup>256</sup> economists, financiers and regulators alike. The Sep. 2008 GFC already ranked as one of the most complex financial and economic outbreaks in modern history that is not yet over. Its impact is considered to be much deeper and broader than previous crises. Beside, the sharp decline in inter-bank lending and to the real sector in the advanced crisis-inflicted countries, it is expected that official and private NBKIs will continue their declination to under-developing countries, in the coming few years,<sup>257</sup> aside from exceptional cases. This indicates, mainly for the cases of under-developing economies, a sharp contraction in domestic aggregate demand, mainly within large external-deficit countries, aggravated by their reduced export revenues, hence complicating the possibilities of fixing ERs, even within bands, hence resulting in expected sharp ER devaluations, i.e. currency calamity, worsening national income distribution, hence multiplying the initial contraction effect, exacerbating the unemployment crisis, hence poverty stance, hence defeating the economic development end-goal.

Despite this fact, the fall of 2008 was a real moment of truth, as spelled-out by the credit calamity that had surfaced a little more than a year before. The Federal Reserve Bank of San Francisco depicted the financial crisis in “vicious circle” form as in figure 2.4 below: -

Figure 2.4: The USA’s 2008 Financial Crisis Vicious Circle



Source: <http://www.frbsf.org/econanswers/crisis.htm>

This implied that, if the Banking sector is not rescued, the economy is going to melt-down. Of course, this wasn't Keynes' decision in overcoming the Great depression of the 1930s.

According to the April, 2009 IMF Economic Outlook Report, the situation deteriorated rapidly after the dramatic global meltdown of the financial crisis in September 2008, following the default by a large U.S. investment bank (Lehman Brothers), the rescue of the largest U.S. insurance company (American International Group, AIG), and intervention in a range of other systemic institutions in the United States and Europe. Hundreds of billions in mortgage-related investments evaporated, mammoth investment banks that once ruled high finance have collapsed or reinvented themselves as humdrum commercial banks. The nation's largest insurance company and largest savings and loan institutions both were seized by the government. The crisis has been quickly transmitted to all sectors and countries of the global economy, mainly through credit tightened channels, the arteries of the global and domestic financial system.

Its causes and results differed from past post-WWII financial and CCs, as it is expected to be followed by long-term recession, and which is still sliding now towards depression, as the Great Depression (1929 - 1933), as it is now been transformed into an economic crisis. It became globally contagious as it broke-out from the leading world economies, which are characterized by their: 1. Dominance on the World GDP by more than 60%; 2. Dominance on the World trade by more than 80%; 3. Dominance of the dollar as the main international reserve currency, despite its instability; 4. They form the World's Financial Centers, mainly in New York and London; 5. They are the countries that are enjoying political and economic stability, domestically and externally; 6. Also, they are main financial supporters of the rest of world economy.

In the year following the outbreak of the U.S. subprime crisis in August 2007, the global economy bent but did not collapse. Activity slowed in the face of tightening credit conditions, with advanced economies falling into mild recessions by the middle quarters of 2008. This triggered crisis revealed the negative impacts of the long-run vulnerabilities, which were pointed-out by many economists warning signs, due to increasing world macroeconomic

imbalances,<sup>258</sup> proving the existence of crisis-breeding environment, which were aggravated by the financial liberalization processes around the world. The impact on economic activities was felt quickly and broadly. This GFC, as stated by April 2nd, 2009 G20 London Meeting<sup>259</sup> and the April, 2009 IMF's WEO, is attributed to a combination of related, but distinct, tendencies.<sup>260</sup> -

1. "The crisis of 2008, however, really was an object lesson in the wrong headedness of conservative economic philosophy of 'Government is not the solution to our problem; government is the problem.'"<sup>261</sup>
2. Of course and certainly, there are many varieties of government failure. The continued illusive belief, among the liberal economists and policy-makers, that financial crises became unexpected to be repeated, because, as they believed that governments of today's advanced countries understand much better how to manage their economies, is to be considered among them.<sup>262</sup> This led to unquestioned confidence in the USA domestic financial system and the national economy.<sup>263</sup>
3. Increasing expansionary U.S. fiscal policy;<sup>264</sup>
4. declining rates in U.S. private and public savings that were leading to persistent deterioration of the dollar's purchasing power parity, allowing U.S. external deficit to gradually move to sustainable level;
5. strong productivity growth in emerging Asia and lagging productivity growth in Japan and the euro area;
6. The new crisis hit an advanced, not developing, country adopting a flexible, not fixed, ERR, which couldn't absorb the crisis shock in advance;
7. Mal-distribution of national income, as a result of freezing nominal wage-rates for more than 30-years<sup>265</sup> due to lagging increased wage rates behind increased productivity in the USA, under the ruling management philosophy, destroying both private consumption and saving growth rates, resulting in pushing the poor and small income earners to resort to mortgage borrowing;

8. Since early 1990s, it became clear that there exists main factors that contributed to the financial crisis represented by inconsistencies between severe booming macroeconomic policies that led to increased the toughness of the severity of the economic boom which pressed hard on the weakest balance sheets of the economy's and society's segments who defaulted on their debts, besides, the insufficiency in structural adjustments for the macro-imbalance in economy in relation to the adopted floating ERR which resulted in long-run weaknesses in sustaining the macroeconomic fundamentals of the economy, especially the rocketed increase in servicing the external and domestic debts for the advanced economies;
9. There was private sector investment boom, partially financed from domestic savings and partially from increasing (cheap) NBKIs, implying (at least for inward) free capital mobility, that fed the domestic aggregate demand beyond USA's domestic productive capacity. This is of a similar phenomenon during the pre-liberalization era, i.e. before 1978, which have witnessed development in domestic lending boom that fed the domestic aggregate demand beyond the domestic productive capacity;
10. increased foreign demand for U.S. assets, particularly from Asia;
11. There appears to be widespread agreement that periods of rapid credit growth tended to be accompanied by loosening lending standards.
12. Falling US interest rates, in the second half of the 2000s encouraged investors to seek more profitable and risky investment opportunities domestically and abroad and that the present episode may well represent an additional case of financial shocks in the center affecting the periphery;
13. Sharp falls in equity markets as well as continuing deflation of housing bubbles have led to a massive loss of household wealth;
14. The scale of the blows has been greatly magnified by the collapse of business and consumer confidence in the face of rising doubts about economic prospects and continuing uncertainty about policy responses. According to the WB Research Group: -  
*"... the turbulence was triggered by a sudden and widespread loss of confidence in securitization and financial engineering and by the failure of respected statistical models for assessing and pricing credit risk."*<sup>266</sup>

15. The validated precautionary actions taken by developing and under-developing countries against the financial crisis in the USA, which they were expecting, by restructuring their NIR portfolios against the dollar in favor of the Euro, which exacerbated the already deterioration in the dollar, causing the severe disturbances and panics/runs in different markets in the world, including the increased oil price to more the 145 dollars/barrel.
16. Gaining export competitiveness in emerging Asia.
17. Weak international monetary system that adopt the advanced countries decided paradigms that never helped, but actually aggravated, the existing crises in many countries, including the advanced countries themselves, by believing in this destructive liberal paradigm.
18. Ineffectiveness, and hence failure, of the international monetary system with the lead of BWIs which transformed their activities in subjecting under-developing and developing countries to the financial needs of the advanced rich countries by forcing them to transfer more capital, indirectly by servicing ED, via the adoption of the IMF and WB Paradigms;  
The result of such demoralizing environment was flight to quality that depressed yields on the most liquid government securities and an evaporation of wholesale funding that prompted a disorderly deleveraging that cascaded across the rest of the global financial system. Liquid assets were sold at fire-sale prices, and credit lines to hedge funds and other leveraged financial intermediaries in the so-called shadow banking system were slashed. High-grade as well as high-yield corporate bond spreads widened sharply, the flow of trade finance and working capital was heavily disrupted, banks tightened lending standards further, and equity prices fell steeply. One side effect of the financial crisis has been a flight to safety and rising home bias. Gross global capital flows contracted sharply in the fourth quarter of 2008. In net terms, flows have favored countries with the most liquid and safe government securities markets, and net private flows to emerging and developing economies have collapsed. These shifts have affected the world's major currencies. Since September 2008, the euro, U.S. dollar, and yen have appreciated notably. The Chinese Renminbi and other currencies pegged to the dollar (including those in the Middle East) have also appreciated in real effective terms. Most other emerging economy currencies have weakened sharply, despite the use of NIR.

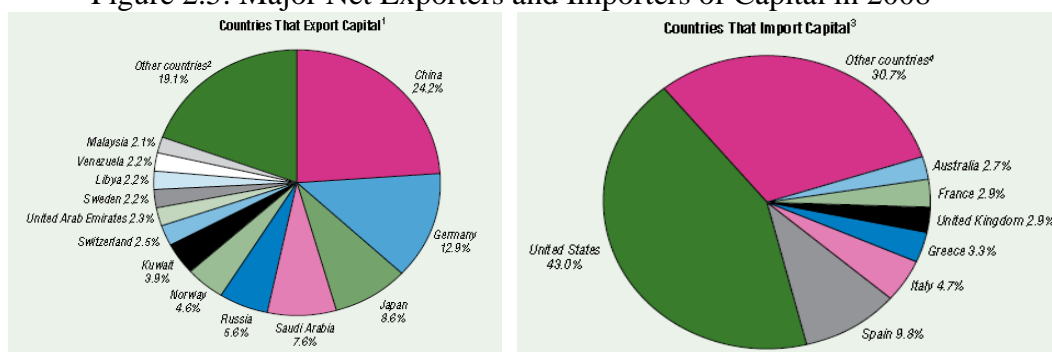
According to the Nov. 15<sup>th</sup>, 2008 G20 Washington Meeting, the global economy witnessed:-

1. During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence. At the same time, weak underwriting (i.e. guarantee) standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system. Policy-makers, regulators and supervisors, in some advanced countries, did not adequately appreciate and address the risks building up in financial markets, keep pace with financial innovation, or take into account the systemic ramifications of domestic regulatory actions.
2. Major underlying factors to the current situation were, among others, inconsistent and insufficiently coordinated macroeconomic policies, inadequate structural reforms, which led to unsustainable global macroeconomic outcomes. These developments, together, contributed to excesses and ultimately resulted in severe market disruption.

The crisis was then caused by two factors amid long-standing structural weaknesses: first, the simultaneous and large deleveraging of three major segments of the global economy—the housing sector, the financial sector, and consumer demand in the United States; and, second, the inability of both markets and policies to quickly accommodate such intense of deleveraging at both the national and the international levels.

It is clear then, that this crisis is different from those assumed by the rich speculators in the models. This crisis was actually suffering from sustained NBKIs, not NBKOs, as figure 2.5 below shows:

Figure 2.5: Major Net Exporters and Importers of Capital in 2008



Source: Global Financial Stability Report: Apr: 2009, p. 168.

What made this crisis different from older crises is that the poor people of the USA and other advanced countries triggered it. The GFC became massive in scale and far-reaching in scope. The financial crisis spread beyond USA domestic financial institutions to other financial institutions in other countries. It also affected households and non-financial businesses in the non-financial (“real”) economy in and outside the USA, through contagion.

At the WB, the “Development Research Group” mentioned that: -

*“The process of globalization and financial development has been prone to crises ... along the way; even relatively mature financial systems are vulnerable to systemic banking crises, cycles of booms and busts, and financial volatility. This appears to be partly intrinsic and partly due to policy mistakes. It arises as banks expand and capital markets generate new financial products. This entails new, unfamiliar, risks for financial intermediaries and regulators. Furthermore, as countries become more open to capital flows, crises are more easily transmitted across borders. The positive long-run relationship between financial development and growth coexists with a negative short-run relationship through financial fragility.”<sup>267</sup>*

Recently, five facts have dominated the global macroeconomics discussions: -

**1. On sewing macroeconomic environment: -**

Fact 1: The United States, as well as other Advanced European countries, has run a persistent expansionary CAD since the early 1990s, feeding on past expansionary policies, which has accelerated dramatically since the late 1990s. By 2004, it exceeded US\$600 billion a year. The counterpart of these deficits has been driven by the surpluses in Japan and Continental Europe throughout the period and, starting at the end of the 1990s, by the large surpluses in Asia minus Japan, commodity producers, and the turnaround of the CADs in most non-European emerging market economies.

Fact 2: The long-run real interest rate has been steadily declining over the last decade, despite recent efforts from central banks to raise interest rates.

Fact 3: The importance of US assets in global portfolios has increased throughout the period, and by 2004 it amounted to over 17 percent of the rest of the world’s

financial wealth, which is equivalent to 43 percent of the annual output of the rest of the world.

Fact 4: Increasing budget deficit that increased the dis-saving processes of the private sector and helped in depreciating the domestic currency at a pressure rate that added to the dollar inflows into the USA.

Fact 5: the advanced needs for NBKIs didn't help them to invest them outside their countries, which increased the devaluation prospects of the dollar.

## **2. On the triggering side: -**

Fact 1: The increased pressures on low stagnant wage rates for more than 30 years reached its maxim, besides greediness on the side of the poor as well as financial rich institutions corruptive destructive behavior under the name of liberalization.

Despite extensive debates on the factors behind, and the sustainability of, this environment, there are very few formal structures to analyze these joint phenomena. The conventional view, and its recent formalizations, attempts mostly to explain (the first half of) fact 1, largely ignore fact 2, and take fact 3 as an exogenous anomaly. The analysis about the future then consists of telling the story that follows once this “anomaly” goes away. However, capital flows are primarily an asset market phenomenon, and hence the paths of interest rates and portfolios must be an integral part of the analysis if conjecture on what got the world into the current situation is needed and how it is likely to get out of it.<sup>268</sup> But generally, the financial crisis in the USA happened as a result of formal liberalized financial sector, and informal totally liberal parallel or shadow unsupervised banking system, under free capital mobility, which affected domestic interest rates negatively, and floating ERR, which affects domestic prices, and having a lender of last resort for solving their liquidity problem, which encourages risky booming policies. In the end, bank-run took place in the USA and other European countries, and provoked CCs causing major real-sector crisis, that ended a long-term booming period. Thus, nervousness that bank-run is in the rancid builds pressure on investors to withdraw their bank deposits *to avoid the risk of devaluation,*<sup>269</sup> *by fleeing to strong*



*currencies of higher qualities, hence validating a CC.* In this case, with destroyed financial and external sectors, the only tool for resisting this crisis is the fiscal sector.<sup>270</sup>

## 2.6. Are CCs exclusive to Fixed ER. –

It is well known, from a pure mechanical perspective, that ER is a monetary rule. It is, in other patois, strongly related to real interest rates, i.e. returns, than the DMS. It is a relationship between two currencies priced to, and exchanged for, each other in the foreign exchange market. Under fixed ERR, NIR are depleted to maintain the committed ER. Under flexible ERR, NIR clearly are never depleted, but emergence of financial difficulties and bailout, by central bank, or national budget, as a 'lender of last-resort,' can lead to large devaluations, i.e. CC, that, in turn, can give rise to another financial difficulty, causing another bailout, devaluation, and so on.<sup>271</sup> Therefore, besides the financial sector's troubles, shortage, or lower growth rate, in the foreign currency supply relative to higher growth rate in the demand for it results in increased expectations for its devaluation/depreciation of the domestic currency, mainly under fixed ERRs. But, unfortunately, it is not an independent pure supply of, and demand for, foreign currencies that determines the price of foreign currencies for determining the CAD of the BoPs, by normal dynamic economic transactions.

Generally, it is very hard to find examples in which governments' exhibit a "clean" floating ERR, from which both economists and policymakers has drifted away.<sup>272</sup> This is probably because their monetary authorities are aware that ER flexibility could, beyond certain bounds, generate financial disruption. In practice, therefore, both regimes can be found, fixed rates and "dirty" float. Even in exchange-band systems, one observes intra-band intervention or open market operations.<sup>273</sup>

ER theories showed that, as they are being used as a policy tool, it is *real*, not *nominal*, ER *that matters in leading to CC*. A relatively increased domestic consumption and investment goods and services prices will, essentially, overvalue a fixed, and even floating, nominal ER in real terms, hence increasing the CADs that will be met by, at least, an equivalent NBKIs, which creates an ED problems, mainly for countries with weak export demand growth. The same result can happen when liberalization of the current, as well capital, account of the

BoPs, increases the degree of the economy's openness at a pace larger than the economy's sector for export growth causing higher pressures on the domestic committed ER for large devaluation, i.e. CC. Under such circumstance, an ultimate overvaluation, for fixed or floating, ER cause asset market participants to anticipate devaluation or depreciation and shift to foreign currencies and assets, if these are freely allowed, or they will speed-up imports of under-priced goods and hold back exports that will be sold for sky-high domestic prices, in a heated economy by booming policies. These shifts in quasi-foreign currencies mean: 1. a loss of some foreign exchange to the country; 2. a subsidy to importers; and 3. a windfall gain to exporters. Generally, it can be concluded, that behind every big movement in the real ER are booming policies that overheat the domestic economy, that result in higher domestic, relative to foreign, general price indices, is an external balance crisis, as stated by Dornbusch,<sup>274</sup> hence CC followed by hard landing which imposes government's Cold Turkey Policies to cool-down the economy rapidly to soften the that landing, triggering long-term contraction of ADD for goods and services that enforces ('maybe' temporarily) recessions and depressions, hence increased unemployment and poverty. In such complicated macroeconomic environment, adjusting misaligned fixed or floating ERs, of course, is only one desirable potential way for adjusting external payments imbalances.

As above CC theories have shown, governments' different booming macroeconomic, development, and bailing-out policies plays a great role in pushing for additional demand for foreign currencies for hedging or profiting. Despite the relatively (lower) rate by which the quantity of foreign currencies are supplied from different sources during such booming periods, which normally create an expanding CAD, equivalent to NBKIs inflows, leads to an increasing trend in EDs that carry with it the implications of an increasing future taxes for their servicing. This, of course, feeds negatively; mainly in countries with low savings and NIR, in building expectations about future devaluation that destabilize the macroeconomic regime. such a situation must validate the built-up of strong expectations by investors and speculators, who lost confidence in domestic policies and currency value till the CC episode is triggered, mainly at time when money is in need for them.

In this connection, it is worthy to mention the dream of USA libertarians about the success of the USA consecutive governments in solving the central problem, i.e. the return of the depression, i.e. the great enemy expansion and stabilization for the capitalist the economy, as wars, by taming of the business cycle, i.e. for example,<sup>275</sup> in 2003, Robert Lucas, 1995 Nobel Prize Winner, mentioned that the “central problem of depression-prevention has been solved, for all practical purposes.” In 2002, Ben Bernanke, at Milton Friedman’s 90<sup>th</sup> conference, apologized by saying: -

*“Let me end my talk by abusing slightly my status as an official representative of the Federal Reserve. I would like to say to Milton and Anna: Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again.”*

In 1997, Paul Krugman advised that: -

*“If you want a simple model for predicting the unemployment rate in the United States over the next few years, here it is: It will be what Greenspan wants it to be, plus or minus a random error reflecting the fact that he is not quite God.”*

Although the USA succeeded in minimizing the boom-bust periods to negligible levels, but, as mentioned above the USA, with a flexible ER, is now inflicted by the worst financial crisis in the 21<sup>st</sup> century.

What all these are about is the following: no one ERR, however appropriate, is immune from crisis unless boom-bust cycle is totally controlled at the most minimum levels.

## 2.7. Summary and Conclusion. -

For whatever reasons, rapid economic expansionary policies always contradicts with the macroeconomic stability and leads, if sustained, to anyone type of financial crisis that ends with a CC. Of course, before the existence of paper money and considering the dominating global “rules of the game,” to which countries remained committed, precious metal money provided a remarkably efficient, well-disciplined, mechanism for mutual adjustment of monetary and credit policies that were essential for long-term ER stability between national currencies. The reason for that success of that system before WWI was the broader forces influencing the overall liberalization policies and the pace of monetary expansion on which individual countries were forced to align themselves. The reason for the breakdown of that

system after WWI was the twig of each country to maintaining its rigidities by transferring capital from surplus to deficit countries causing maintenance of unlimited expansion of DMS that was influenced by the overall liberalization policies, which encourage undertaking of more risks with government guarantee for bail-out, in all countries and ERs instabilities and/or exchange and trade restrictions.

After the dominance of paper-money, CC, i.e. the nearly wiping-out of government war-chests protectors, by a large number of speculation leading to an imminent politically undesirable ER devaluation in favor of the rich, around the world, with the poor management of international and regional financial institutions of world economy along history, showed an important reason for their existence to the needs of different displacements. Despite the developments in the international "rules of the game," developed, developing, and under-developing countries, continued to fall into crisis, before-which international funds were available to cause a boom, and after-which these needed international funds for smoothening the crisis undesired impacts and avoid the hard-landing of the economy and its currency dried-up. As shown by the figure in footnote (62), the main reasons leading to these crises, mainly in developing and under-developing, countries were the contradictions between: 1. liberalization of the financial sector; 2. unregulated CAD with free capital mobility; 3. loose or booming monetary and fiscal policies, under dynamic world economy; 4. Fixed ERRs, or dirty flexible ER with free movements of short-term speculative capital (hot money); 5. Low (foreign and domestic) savings and mal-distribution of national income; 6. exportation of inelastically fluctuating demand for fluctuating supplied raw-materials; 7. deterioration of terms of trade in the long-run.

All of which intermingle and react to each other in expansionary trend to the point after which they cause, mechanically, a mismatching between macroeconomic fundamentals' growth rates and weaken the effectiveness and efficiency of the available policy tools and instruments used. From the "Trilemma of History"<sup>276</sup> perspective, these contradictions can be seen very clear, as it is related to the impossibility of pursuing expansionary monetary policies while adopting fixed or managed flexible regimes and increasing NBKIs into the economy.

As it can be concluded from the above literature, CCs, i.e. government enforced to sharply devalue its fixed or flexible ER, does not necessarily or crucially depend on the country's net national income but unquestionably on its management of its domestic absorptive capacities. This was certainly proved in the cases of the 1996 - 1997 Asian countries with their fixed ERRs relative to the USA's 2008 financial crisis with its floating ERR, or the 2010 Greece debt crisis. That meant that any government's commitment towards the sustainability of its ERR depends crucially on its prudential management of its booming macroeconomic policies to expand its domestic absorptive capacity, and without such kind of management, absorptive domestic capacity will be increasing stubbornly and rigidly to levels that are almost always lead to the accumulating EDs and arrears with always large short-term liabilities, EDS, relative to the country's annual backing international financial positions, taking into consideration the financial impacts of dynamic domestic and international political relationships, the nature and elasticity of the existing structure of the economy, and the kind and level of investments adopted for its transformation towards advanced and elastic shock-absorber structure of economy within the adopted fiscal, monetary, international trade and financial policy framework.

Despite, the advanced and developed Asian countries cases, *under-developing countries remains, to a great extent, falling in the first-generation prototype model as mentioned-above, of course with a rather more complications. They remain suffering from the fluctuations of their international export commodity prices as the mother of all their CCs.* This implied that the governments of under-developing countries seeking to achieve *export-oriented or import-substituting economic development, which can be public or private driven, by expansionary policies that are supported by (increasing need for insufficient) NBKIs (+/-) the use of their NIR and the use of printing press,* with massive unemployment and poverty stance, must violate its own commitment towards ERR, by overvaluing the real ER, causing it to pull, or speculators to push, the economy for hard-landing. As can be seen from the above standard CC literature, mainly those related with periods of liberalization policies, or unregulated domestic financial, external, and undisciplined budget, sectors, stressed that direct and

indirect seriousness of the NBKIs have explicitly confirmed by the Asian and USA crises, were explicitly at the heart of the accounts. This has been stressed by: -

*“... several recent empirical studies have shown that a number of balance of payments crises have been preceded by crises in the financial sector. Moreover, the latter have themselves been preceded by financial liberalization or, at the very least, large expansion of the financial sector. The connection between financial liberalization/expansion and crises ... considerations ... point in that direction. ... In sum, bank liberalization/expansion seems to make large currency devaluation—and consequently large financial disruption—possible.”<sup>277</sup>*

The latter, in turn, may lead to deep cuts in international lending that, as previously argued, result in large output and employment losses.

In reality, the variety of promising policies is, to a great extent, wider. Serious governments, with the help of specialized competent national expertise, are able to, and actually do, strive to stipulate fiscal and monetary policies on the BoPs conditions, at the least possible economic and social costs. In this respect, it is believed that, beside strong supervisory and regulatory rules for the financial sector, serious consideration should be given to imposing limits on the budget's deficit, and its liquidation, specifically, by foreign financing<sup>278</sup> and the printing press under the name of the (mythical) smoothening of consumption and the implementation of development plans and socio-economic programs, besides the bailing-out policies. This should be considered even in the context of central bank independence.<sup>279</sup> Self-confident government, under different degrees of liberalization policies, and specifically in the financial sector, proved legendary by the 1997 Asian Crisis and the 2008 USA and GFC. Most importantly, is the consideration of matching fundamentals growth to avoid future crisis. This has been stressed by Keynes by stating that “Any fluctuation in investment not offset by a corresponding change in the propensity to consume will, of course, result in a fluctuation in employment,” without which the excess-aggregate supply- side economy must be vulnerable to crisis. Another example, is maintaining a more NIR relative to the DMS in the economy to defend the existing ERR, in order to overcome any displacement that might have caused any degree of boom. Therefore, delinking the expansionary NBKIs dependent economic development strategies, such as the big-push, from its macroeconomic stabilizing management umbrella, is definitely, as experience proved, is an unforgivable mistake as it

ends into intolerable and unacceptable crisis. In other words, contradiction between rapidity and macroeconomic stability cause CC.

But the main question is now related to the "one-size-fits-all"<sup>280</sup> IMF Monetary Policy Package. Is it a crisis solution or creator? It is well-known that the IMF is the "the lender of last resort" for governments in troubles, mainly those suffering from a damaging run on its currency and at jeopardy for another, travel for foreign currency and to fabricate publications for maintaining, or restoring, investors' and markets' confidence. Actually, it is a crisis-creator. This is simply because CCs are by their nature are enforced sharp devaluation that lead to severe recessions, and government reaction with austerity programs, mainly in small economies, who suffer from exclusion international financial markets, are the preordained result of a build-up of vulnerabilities. According to experience with the IMF policy package actually calls for large, or rarely small, devaluations,<sup>281</sup> i.e. CC and at the same time calling for high interest-rate, that leads to investment contraction in the real sector, and recessing and slumping of the national economy, mainly that with a liberalized financial sector, that tends to increase the ratios of monetary aggregates to NIR, which increases the chances of a future CC,<sup>282</sup> mainly with open capital accounts, i.e. free capital mobility, which encourages speculative investment that affects the domestic general price indices that overvalues the real ER and hurt export competitiveness, which is targeted to increase at a rate greater than import rates. Actually, all countries in Africa led to increasing accumulated EDs and arrears.

In the end if this chapter, and considering the existence of all kinds of rigidities, it can be stated, with a strong belief, that any country has the full-right to decide on its own in-line macroeconomic model, including its own exchange-rate regime and its related consistent non-booming, i.e. non-crisis breeding,<sup>283</sup> for sustained economic and social development that is best match its own circumstances and people's expectations and ambitions that push their stage of development to higher and better levels for all its citizens. Accordingly, considering the reduced upper limit for the scope of national stabilization, under liberalized domestic, trade, financial, regimes, of the domestic economy, it can be concluded that it is the macroeconomic stability and competitiveness of sustainable, i.e. long-run financeable

capacities of, consistent macroeconomic fundamentals that determines the rapidity for non-inflationary, full-employment, path for sustainable economic development, i.e. long-run investment, for socio-economic structural transformation, plans, under the umbrella of a dynamic and an unstable world economy, with its “rules of the game,” which is full of different expected and surprising shocks plus domestic expected and surprising shocks to the national economy, including contagion from countries with even negligible economic relationships. To resist these shocks and surprises, and maintain investors’ confidence, the economy must be immunized by strong non-crisis breeding environment, i.e. taming any boom period, i.e. adoption of counter-macroeconomic policies that help in reducing and controlling the domestic saving-investment gap, i.e. controlling domestic aggregate demand boom that is caused by increased NBKIs, mainly by the government spending, supported by a strong war-chest of NIR, relative to domestic base money, and effective monetary and fiscal policies, to maintain investors’ confidence and avoid future destructive hard-landing which is followed by short-term or long-term tough “Cold Turkey” contractionary policies, i.e. when the NBKIs stops and NBKOs are increased, at this time of need, in order to by-pass easily those exogenous shocks, or to pay for the wrong (untamed) booming policies adopted, to maintain a prudent sustainable economic development processes. This can be proved easily by the non-linear trends of the fundamentals that explicitly and implicitly implied by the CC literature.



**Chapter 3**  
**The Global Return to Fixed ERRs in History:**  
**A Background**

### 3.1. Introduction: -

The negative widespread impact of the 2008's advanced countries' GFC enforced them to seek the establishment of a deadly-needed concrete and trustworthy understanding and analysis of financial crises.<sup>284</sup> This seriousness was not too much higher than the level of seriousness for other non-advanced crisis-countries that had fallen in financial and CCs before them, at least since 1980s. The GFC was a real test for the pre-GFC "*Neo-Liberal/Classical Supply-Side Doctrine*"<sup>285</sup> ruling school against the "Traditional Keynesians" School that was stopped to be used, since late 1970s, in explaining the recital of the pre-crisis period that led to their recent, as to their past different types of, financial crisis.

The core reason remains that all types of post-financial crises were distinguished by increases in unemployment above their natural rates, internal and external disequilibria, mounting-up debts, tormenting ERs, recessions, if not depression, income-distribution inequality, increased poverty, and political instability. For fixing such bad eco-political equilibrium, it can be found that each crisis ignited a *mêlée* of one school of thoughts against other schools' one for proving the aptness of their ideological theories in explaining the crisis's causes, severity, aftermath recessionary impact, and the resolutely policies to overcome them and for their prevention. Otherwise, the crisis-country might face the melt-away of any of its aftermath development stages, rather than seeking to dissolve the financial crisis itself, in the shortest time, to avoid the erosion of the economy's size and production capacity in the long run under the ruling ideology.

After four years since the start of latest GFC, the *mêlée* was finalized after the discovery of a bogus analysis and calculation of historical data on debt/GDP ratio of the austerity supporter for an already depressed and indebted economy.<sup>286</sup> In the face of ineffective monetary policy, i.e. zero-lower bound interest rate, and mounting public debts, the above bogus theory backed the advanced countries' Neo-Liberal/Conservative politicians, who cited that analysis,<sup>287</sup> to justify for the adoption of fiscal austerity policies amid a post-crisis depressed advanced economies, i.e. low IR and ineffective depreciated ER.<sup>288</sup>

In this context, it is important to mention that the formal ruling “Neo-Liberal/Supply-Side Ideology” models failed to predict, in advance, the GFC and in overcoming its aftermath negative consequences in a short period.<sup>289</sup> Despite the immovability of the recession in both side of the Atlantic, as politics remained at the root of the recession crisis,<sup>290</sup> the game was over in favor of the “Traditional Keynesian” by April 2013.<sup>291</sup> It can therefore be said that the “Traditional Keynesian Paradigm” proved to be the fitting tool for the analysis of the causes, resolving, and avoiding, of crisis and its aftermath driven-depressions for a rapid balancing and stabilization of the economy.<sup>292</sup>

Such thinking shift about the alternative approaches to understanding, and dissolving of, financial crises must enforce all world countries to revise their own adopted economic policy paradigms.<sup>293</sup> This is much crucially, and naturally very vital, for under-developing, developing, and transitional/emerging economies who severely suffered from their ED crises that, very often, led to sharp CCs episodes, mainly during the past three decades.<sup>294</sup>

In the case of Sudan, accumulation of EDs and arrears crisis, for example, forced its ruling governments to sustain devaluations of its pound that ended with changing it three times, since 1983 to date. That was the result of the need to service that mounting ED and the related persistent high domestic inflation rates,<sup>295</sup> which destroyed Sudan’s smallest unit’s purchasing–power, relative to foreign currencies’, i.e. deterioration of the ER. *Although, ER devaluation remains beneficial, unfortunately, it continued, during more than 35-years, without resolving the sustained bunion of the original EDs and/or its arrears crises that devaluation was, in the first place, targeting.*<sup>296</sup> Devaluation, in the case of the Sudan, proved to be a self-defeating policy.<sup>297</sup>

It is very clear, therefore, why CCs subject became an explicit independent, although an integral, part of any current policy debates in Sudan. The main reasons can be referred to the lingering painful impacts that are still felt strongly by the citizens in post-CCs years. It is therefore natural that a thorough investigation of the causes of, and responses to, the CCs must be carried-out from now and on. Accordingly, due to the scant and scattered professional analysis in this area, this research will be based on the new thinking and analysis of CCs that

was born after by the 2008 GFC. As will be seen below, the policy responses to the CCs did aggravate, rather than solve, the Sudan's economy's problems to the extent that part of its land was separated in July 9<sup>th</sup>, 2011, despite other reasons. Historically, CCs equally hit almost all countries, but they were neither that brutal nor long as in the case of Sudan.

### 3.2. A Brief Historical Backdrop: Post-WWII CCs: -

As it is well-known, the *Supply of financial capital* [ $S_g + S_p + (M - X)$ ] = *Demand for financial capital* [ $I_g + I_p + (G - T)$ ]. Based on this identity, it can be seen that financial crises occur when a financial resource stops financing, as a bridge in time, the real economic and financial activities, whose incomes became insufficient, in nominal and real values. In general, a financial crash, and its impact on related asset, including foreign currencies', price adjustments, almost always precedes depression when money circulate, dominantly, in the financial, more than the productive, sector. In a famous lingo, when too much money starts chasing and hunting relatively too few supply of goods, services, and foreign assets.

According to the most common understanding, *CCs are always and everywhere a monetary problem, mainly in the short term*. At least partially, that is because the central bank's buying and selling of foreign currencies objectively determine the *foreign exchange value of its own supplied money*. Under fixed rates, for example, *interest rates, as a policy tool*, is assumed to rise sufficient enough to achieve the current account change through import compression. Under floating rates, the adjustment takes place through depreciation and export growth. As it can be observed, under both regimes, the monetary base is assumed to be very flexible. Consequently, a shock that is contractionary, by raising interest rate, under fixed rates is actually expansionary, by lowering interest rates, under floating rates. In both cases, the aim remains the quashing of the opened CAD that is equivalent to the reduction in, if not the purging of, the amount of NBKIs needed to fill it. *Minimization, if not the purging, of servicing external liabilities becomes a positive result for maintaining business confidence*. This implies that accumulation of *ED arrears* signify the undermining of business confidence in government macro-policies and its international financial relationships, as lenders of last resort, to meet their own financial obligations and investment plans.

Therefore, and based on a formal theoretical model and ample empirical evidence, CCs, i.e. government being forced by markets to devalue sharply its currency, proved to be almost always and everywhere a persistent external imbalances crisis, which affected negatively the DMS of the economies they hit. They are usually preceded by domestic booms in investment, output, and consumption followed by a creeping domestic recession to slow net foreign assets depletion. In heavily import-dependent economy, during such boom, marketing of goods and services become very energetic. As a result, they always mask the fact that the economy remains geared towards consumption and imports, rather than production and exports, an unsustainable growth path. Since part of the added spending falls on imports, output and saving rise less than investment, pushing the current account into more deficits. During recession period it becomes a fact that NIR remain too low as to effectively buffer against exogenous shocks and for defending the adopted ERR. The latter makes the case for coverage of months of prospective imports decrease more relative to boom periods. In short, overall net foreign assets deteriorate as less NBKIs into the economy due to the recession.

Traditional arguments for flexible ERRs, as advanced by Friedman<sup>298</sup> or Mundell<sup>299</sup> and Fleming,<sup>300</sup> emphasize the expenditure switching effect. When a country faces an adverse real shock, a nominal depreciation, i.e. domestic contraction for import demand, mainly in the short-run, can stabilize output by boosting net exports, i.e. when the external sector become expansionary. But since then the theoretical literature has cast doubt on the effectiveness of flexible ERs to stabilize output when there is high foreign currency debt or limited ER depreciation pass-through.<sup>301</sup>

Aside from the gold-standard's fixed ERRs, with gold as its principal reserve currency, managed floating ERRs are favored nowadays over the historically attacked fixed ERRs, as an architect for generating CCs. Despite such attacks, there remain economists and policy-makers who are resisting such favored regime based on historical experiences, mainly in the advanced countries. Although controlled domestically, within different bands, today's floating convertible and inconvertible paper currencies didn't actually help much in preventing any

economy from being hit by different kinds of financial crises, in general, and CCs, in particular, during their history-length.<sup>302</sup>

Resistance rationales to floating ERRs can be seen by comparing different crises in different countries that adopted floating ERs at the same time. It is reasonable to find the justification for the dissatisfaction with such regime by re-reading the event of the competitive devaluation of the 1930s, in the advanced countries, that was ended by the 1936 “Tripartite Monetary Agreement.”<sup>303</sup>

The sustained dissatisfaction with the floating, even relative to semi-rigid-fixed,<sup>304</sup> ERRs can also be seen from the establishment of then 1944 agreements of the Bretton Woods’ institutions.<sup>305</sup> The economic structure that emerged after World War II – GATT and the BWIs – was designed to reduce, if not to eliminate in advance, the likelihood of a repetition of the Great Depression and the 1930s currency devaluation war. The war itself was of course fresh in the minds of their leaders. As was widely recognized at the time was the beggar thy neighbor policies that the countries pursued, mainly in the 1930s.<sup>306</sup> What this means is that: the devaluing country is switching spending towards its goods and services and away from its trade-partners’. It, thereby, is withdrawing jobs, and related incomes, away from them that reduce its trade-partners’ national savings, mainly their NIR. Without contracting DMS in the trade partners’ economy, the devaluing country will enforce them to devalue too as the buffer for defending their ERR go depleted. It doesn’t matter whether it’s doing this spitefully or with the best of intentions, it’s doing it all the same.

This was achieved after the famous destructive post-WWII for the stability of the world economy, by avoiding, competitive devaluations, inflation, and unemployment to accelerate socio-economic development of the world economy. The Bretton Woods’ system was thus an updated gold exchange standard, with the dollar indirectly became the international monetary system’s principal reserve currency. Their main objective was, specifically, to maintain the historical “fixed, *but adjustable*, ER” regime, which could be adjusted in extraordinary circumstances, against the unvarying U.S. dollar price of \$35 per ounce of gold, to enhance

the expansion of the world trade. This implies that the degree of the ER stability reflects the most important determinants of all world countries' relative degree of economic health.

The Bretton Woods' system was targeting the establishment of a regime that was capable to limit different governments' capacity to resort to devaluation policy as a means for "*beggar thy neighbor*." That is, the eradication of the 1930s "*dirty devaluation war*." in other words, the war for exporting domestic crises and recessions *from the devaluing country to its trade-partners* and on the account of their available jobs, incomes, and national savings, in its favor, at least, for short-term self gains.

Under the BWI's pre-1973 rules of the game, member states, including Sudan, held NIR largely in the form of gold and/or dollar assets and had the right to sell dollars to the Federal Reserve for gold at the above declared official price. During those hey-days regime, the world economy witnessed sustained non-inflationary growth with the least unemployment rates, debt stocks, and the absence of any significant defaults on EDs. But alas, the regime that ruled the world economy during the post-WWII era lasted in 1973. Also, during this period, CCs were comparatively rare in the postwar period through to the early 1970s, a period of widespread financial repression.<sup>307</sup>

The rare, but, realized CCs actually became increasingly frequent and violent mainly in the very active and dynamic advanced countries, before 1973.<sup>308</sup> The origins for those CCs remained a source of much controversy. In due times, those controversies concluded that the origins of major CCs were found different. That was reflected in different generations of CCs theories, as the literature preview of the past chapter showed.<sup>309</sup>

With the exception of the "*Suez Crisis*" in July 1956, due to the nationalization of the Suez Canal that was followed by a military war by Britain, France, and Israel against Egypt,<sup>310</sup> the result was the resort to the IMF for financial bail-out without devaluations. Despite this event, and the Korean War before it, there were no significant CCs in the 1950s. But since mid-1960s, under-developing countries started to suffer from the pressures of CCs that started to hit the advanced countries.<sup>311</sup> Most importantly among them: -

- Although the British experienced a convertibility crisis in 1947 and a devaluation crisis in 1949,<sup>312</sup> the British trade balance deficit in early 1964 indicated to a period of erratic speculation against the sterling pound.<sup>313</sup> Speculators' pressures continued to complicate the British policy-making until the sterling was finally devalued in November 1967.<sup>314</sup>
- France devalued its franc and Germany revalued its mark in 1969 after similar speculative attacks, in which France faced speculative financial outflows and Germany faced speculative financial inflows.
- The US policy-makers imposed a temporary 10% surcharge on income taxes due to worrying about rising inflation that forced them to adopt fiscal austerity to resist the speculative attack on USA gold stock.<sup>315</sup>

By early 1970s, these crises became so massive and violent in the advanced countries that ended the Bretton Woods' Post-WWII arrangement of "fixed, but *adjustable*, ER" regime. This was achieved by Nixon's declaration about delinking gold from its dollar currency in 1971. The main target was to scale-back the other advanced countries' massive gold withdrawals for the dollars they accumulated in the 1960s. After a perplexing hiatus during which policy makers strived ineffectively to establish a new fixed ERR, by 1973, most economically advanced countries had had been eventually forced to move to [managed] floating ERR.<sup>316</sup> Managed or dirty floating ERR implies that countries actually do not believe much in pure floating ERs. As will be clarified below, ER movements have to do with the accumulation or de-accumulation of EDs, hence balancing capital in and NBKOs.

After 1973, developing, relative to the advanced, countries was the new field of different kinds of financial crises. They are now importers of the crises and recessions of the advanced countries who actually devalued their floated ERRs. As table 1 in the appendix, at the end of the research, shows, currency, rather than banking and debt default, crises, mainly in the developing (emerging) countries, were the most obvious field.

M. Ayhan Kose and Ezgi O. Ozturk made another updated financial crises recurrences around the world during 1970 – 2013. This period includes the first US dollar devaluation in 1971 and the shift of the advanced economies towards floating ERRs. According to them: -



*“Financial crises have interrupted economic growth around the world. Roughly 400 of them took place between 1970 and 2013. Advanced economies experienced only 35 crises, half of them after 2007. Emerging market economies had 218 financial crises, most of them in the 1980s and 1990s, especially during the 1997 Asian financial crisis. Currency crises were the most prevalent, accounting for half of all crisis episodes. Banking and debt crises accounted for the rest. It is still impossible to predict the location and time of the next financial crisis.”*<sup>317</sup> [Emphasis Added]

Till 1982,<sup>318</sup> the consequence was the advanced countries suffering from severe stagflation.<sup>319</sup> The eventual stagflation problem was aggravated by the 1973 and 1979 oil price hikes and the regional wars, mainly in the Middle East, as the core region for oil production and exportation in the world. As a result, an unofficial consensus was developed to direct the international public opinion to believe that financial crises were mainly emerging–market problems.<sup>320</sup> Despite such sarcasm, it can be found that by September 1976, Britain's Labor government announced that it would seek a rescue loan from the IMF. Italy, Portugal, and Spain also had stand-by arrangements with the IMF around that time, and even the United States, facing a weakening dollar, drew down its reserves at the IMF and exchanged Special Drawing Rights for foreign currencies.<sup>321</sup>

These oil price, and Arabs wars,<sup>322</sup> events continued its rigorous pressures also on almost all the small oil-importing economies of the world. As a result, this world status complicated the policy-making in these countries, such as Sudan, which maintained the old fixed ERRs, after its devaluation in 1972.<sup>323</sup> Due to the global inflationary-recession, these countries' current accounts deficits started to widen. CADs imply that they must have a matching NBKIs to finance the excess of domestic spending above its income

The impacts of these events, therefore, were reflected in the explosion of the EDs. As these countries found their NIR dwindling, and their ERRs were shaking, they were forced to default on their ED, mainly after 1976, and fell into the famous “debt crisis,” as arrears continued to accumulate and debt overhanging their GDP growth rates and employment opportunities.

To save the international financial system, these countries were forced by their creditors to adopt the “Supply-Side Neo-Liberal Policy Regimes” for ED-rescheduling since late 1970s,

early 1980s, and onward.<sup>324</sup> That “Neo-Liberal Supply-Side Approach” was actually designed by the American Central Bank and the IMF but supervised Bretton-Woods Institutions, particularly as a delegate representing the “Paris club” creditors. The explicit goal was restructuring the indebted countries’ economies to return to the sustainable EDS path.

The enforced policy–package, during the 1980s, included, among others, a sustained currency devaluation-policy to achieve current account surpluses to sustain full EDS in due time. This was meant to be achieved via tough depression of domestic aggregate demand. The ultimate goal was, practically, the crowding-out of the private sector from the foreign exchange market in the domestic economies to sustain the public sector’s deleveraging, a process in which the debtors try, or are forced, to pay down fully their debts in due time. In the face of regional crises shocks and the global recessions, i.e. limited international markets, and domestic underdeveloped macro-economic structures, the oil-importing and raw-material exporting indebted 3<sup>rd</sup>WCs’ must end-up with failure in meeting the policy’s objectives, as reflected in debt–forgiveness initiatives during the 1990s, such as the famous “*Heavily Indebted Poor Countries*” (HIPC). With this failure, ED defaults and arrears accumulation intensified as a result and many of them intensified their requests for more (human) rescheduling programs or debt relieves.

In the mid-1980s, when exchange-rate volatility gave rise to calls for protectionist trade measures, the US and Japan suggested a solution that involved the stabilization of the ER.<sup>325</sup> But solution didn’t last long. By the start of the 1990s, CCs started by Europe’s Exchange Rate Mechanism (ERM) failure to resist currency speculators. Since then, CCs extended to countries in Latin America during the first half of the decade and South East Asia in the latter half. By the end of the decade, Brazil, Russia and post Soviet Union’s countries witnessed the same destinies. By Early 2000s, Argentina opened the doors for CCs in almost all African countries. Again, the turbulence in the world economy, both advanced and developing, ended again with the 2008 GFC in the same advanced countries,<sup>326</sup> and its aftermath world economy recession. In a very recent development, The BRICS, in response to the G20 unconventional QE monetary policy, agreed to commit \$100 billion to a currency reserve pool that could help

defend against a potential BoPs crisis, although the mechanism will take time to set up.<sup>327</sup> Such pool reserves also target the purpose, not only to defend the stability of their adopted ERRs but also, to avoid resorting to the IMF's financial support and its related programs.<sup>328</sup>

More recently, fixing ER became a rule according to experiences of emerging countries during the "2008 GFC." According to important background papers presented at the research conference that was organized by the IMF, the monetary policy will never be as they were before the crisis in favor of more stabilized ER, starting with dirty management of the ER.<sup>329</sup> In their 2010 IMF policy paper, Blanchard, Dell'Ariccia and Mauro<sup>330</sup> observed that central banks of smaller economies were well advised to manage their ERs, as well as to contain inflation. They admitted that many countries did in fact pursue both IR and ER objectives.

As it can be observed, the major source of most crises in the under-developing countries, despite their wrongheaded macro-policies, remained the advanced countries.<sup>331</sup> It can also be concluded that the main source of such crises can be found in the expansion of the overall DMS, whether within a fully employed economy<sup>332</sup> or from the rest of the world. It makes no difference if that finance were passed through the banking and/or the fiscal sector, despite their justifications. The result remains in inflating domestic real aggregate demand beyond the economy's own potential productive capacity. *Such circumstance opens the doors for (insufficient) NBKIs through widening CADs at rates that depletes the exchange regime buffer, relative to DMS, as it simultaneously pushes domestic, relative to foreign, price levels up.* In other words, CADs imply increasing liabilities to the rest of the world and weaken the international trade competitive powers.

Other core indicators can found in higher inflationary gaps and high returns on investment. In this context, policies need to focus on mitigation of the risks of gross external financing needs for sustainable economic stability. Since the central bank has the full power for issuing the domestic currency, it therefore controls its nominal DMS directly. Based on this unlimited power, foreign ER interventions policy, to stabilize the adopted ER, cannot substitute for the right monetary stance, including capital control policy. This will allow the use of the sales of NIR only to address excessive volatility episodes.

But when it changes the nominal DMS, the price level and expected inflation/deflation may also change. This implies that it affects the price of DMS, by its control, relative to supply of foreign monies, i.e. the ER, via the impact of such action by the use of different domestic opportunity costs. This is crucial in the face of the callous external dynamic environment, mainly in the advanced countries, as these risks might present a foremost challenge for an economy in case of a weakening or a reversal of NBKIs.

### 3.3. Experiences with Minimizing Destructive of CC Frequencies: -

The world economy has evolved through a variety of international monetary systems since the 19<sup>th</sup> century. The simple insight from those experiences proved very helpful in understanding the key differences between these systems, as well as the economic, political, and social factors that lead countries to adopt one system rather than another. The most insightful fact that remained is the experience of open economies facing the inescapable trilemma in choosing the national monetary arrangements that best enable them to attain control over their internal and external balance goals. It therefore reflects the choice of a policy mix that supports the avoidance of any untenable financing capacity downturn to maintain any official commitments, such as the fixed ERR.

The emblematic gold standard was developed in the industrializing Britain. Its successful functioning encouraged others to manage their monetary affairs on its terms. Consequently, it is found that ERs were fixed across economies and NBKIs without any regulatory hindrance. *Although the free flow of NBKIs left currencies vulnerable*, the system survived for decades as a result of governments' iron commitment to gold. That is, fixed ERs were the norm for decades till before World War I, under the gold standard, and between the mid-1920s and 1931, when Britain, for example, attempted the return to gold standard, and again between 1945 and 1973, under the pre-1973 BWIs' ERR.<sup>333</sup> Thirty years before BWIs, a war ruined the world's first attempt, i.e. the gold standard, and the attempt to rebuild it in the 1920s led to depression and another war.<sup>334</sup> The Bretton Woods's world economy's rapid growth, high employment rates, and relatively ERs stability, during 1945 and 1973, was of similar characteristics.

In the issue of July 5<sup>th</sup>, *The Economist* ran a piece giving a (brief) history of the global monetary system, that shows the return of countries to the fixed ERR by noting that: -

*“In 1967 Britain was forced to devalue, shaking confidence in the system. And in 1971 President Richard Nixon opted to drop the gold peg and devalue rather than make swinging cuts to balance budgets and control inflation. Most big countries dropped out of the system and floated their currencies. ... **The repeated collapse of fixed exchange-rate regimes did little to shake faith in the idea. In Europe, leaders introduced the European Monetary System in 1979—the ancestor of today’s euro zone. ... Developing countries also found pegs hard to resist. Fixed exchange rates can encourage monetary discipline and tame inflation—a common emerging-world problem—while reducing borrowing costs. ...Despite this history, floating exchange rates remain unpopular. **Emerging economies have instead shifted toward managed rates maintained through market intervention.**”***<sup>335</sup> ... “... **floating is much more rare than people commonly imagine.**”<sup>336</sup> [Emphasis added]

So, despite the unpopular experience with floating ERRs history, they practically remain to be ostracized. Countries actually tried to find ways and means to fix their exchange regime.

Devaluation, whether as a deliberate policy or due to a financial crisis, with its adverse consequences, has historically rarely been a preferred strategy or intended goal. This can be seen from the following consequences:<sup>337</sup> -

1. **Domestically**, a substantial devaluation is one of the most “*harrowing*” policies a government can adopt, or lead to, as it almost always resulted in cries of outrage and calls for the government to be replaced. This is because, mainly in countries lacking an effectively competitive import-substitution sector, devaluation can lead to a reduction in citizens' standard of living as their purchasing power, in foreign currencies, is reduced and causing the domestic poverty base to expand, via sustained inflationary pressure. Devaluation can make EDS, as imported goods and services, more expensive in local currency, and it can discourage foreign investors for the production of local markets. At least until the 21<sup>st</sup> century, a strong currency was commonly seen as a mark of prestige while devaluation was associated with bad governments.
2. **Internationally**, devaluation is seen, not only as a tool for flooding foreign markets with exported goods and services that destroys foreign competing productive capacities but also, as a means for exporting domestic recession, and its related unemployment crisis.

Effectively, nations, from a historical point of view, were competing to export their domestic recession and unemployment, via devaluation as a policy, which has frequently been described as "*beggar thy neighbor*". However, because of the negative effects of devaluation on the trade-partners, they would soon be counteracted by a corresponding devaluation from their side too to avoid importing that or this trade-partner's recession and unemployment crises.

3. Even **in relation to the floating ERR**, economists and policy-makers, are today dissatisfied with it and remain aghast from the pure clean floating<sup>338</sup> and devaluation. They always propose new agreements for international monetary systems, mainly after major global crises, which would restore and maintain a form of alternative fixed-rate shock-absorber regime.<sup>339</sup> The fluctuations in ERs were, not only as a means to export domestic crises and recessions but also, often harmful for international traders, and cause global trade to decline sharply or grow slowly in all open economies. It also discourages private investment mainly in the much needy areas for development, mainly by the foreign investors.
4. **In relation to the last two consequences in point (3) above**, the problem becomes very clear in the advanced, relative to under-developing, countries. While the first can use policies that can stimulate their domestic industrialized productive capacities to expand domestic supply of goods and services, the latter cannot. In the case of under-developing economies, i.e. lacking crucially significant productive capacities for import-alternatives, mainly physical capital, such as Sudan today, domestic supply of non-industrialized goods and services cannot be expanded without the availability of foreign currencies. In this latter case, increasing DMS, without increasing the supply of (relatively cheap) foreign currencies will not be transformed into increased supply of goods and services. It will be transformed into increased price levels.

The overall look, therefore, devaluations harm all related partners that are reflexed back to the devaluing country. This fact was reflected in different policies by almost all governments to avoid the fall in a CC, i.e. forced devaluation. Since mid-1960s, as the post-WWII cases

show, advanced countries started to suffer from the hard speculative pressures on their currencies. That was due to the self-ruling/autonomous *capital flows* that became a *significant infuriation/headache* to the major industrialized countries.<sup>340</sup>

Suffice to mention that the IMF, as a “*Lender of Last Resort*,” was created, perceivably, as a “*Crisis-Avoider*.” It is supposed to achieve function via monitoring and evaluating countries performance. It is also supposed to act as an “*Aftermath–Crisis Eliminator*”<sup>341</sup> in different crisis-countries, to avoid global, regional, and, mainly, country level stagnation. Unfortunately, The IMF became “*Crisis Manager*,” to make countries to cope with crises rather than as crisis-avoider or crisis-eliminator.<sup>342</sup> But at the same time, the macroeconomic lessons, domestically, are never learned quickly since this needs an earlier understanding of the nature of disasters generations, which might allow policymakers to change course more quickly and prevent a lot of human suffering.<sup>343</sup>

#### 3.4. Nature and Relations of NBKIs to ERs: -

Understanding the relationship between NBKIs, as a factor of production, and ERs, as a policy tool for changing income incentives, needs a clear understanding of the causes of the current account balances. It is a crucial key step to start researching, mainly, in such unsettled issue. It is important to note that neither capital flows, from a macroeconomic perspective, or the supply and demand for foreign currencies, from a microeconomic perspective, can be understood with the macroeconomic contexts that rule the working of each of them.

Many economists find that a persistently large current-account deficit to be a serious public policy concern. A CAD is a reflection of excessive spending over income that directly feeds into ADD that outdo domestic APC and its supply. When the current account is in deficit, which is reflects dearth national saving covering domestic investment glut, the country has to borrow from abroad to cover national savings shortfall. Financing a CAD by borrowing NBKIs is saying that the country has no sufficient income to, at least, balance its current account.<sup>344</sup> All financial agents know this. NBKIs, as a form of domestic credit expansion from abroad leads to increased domestic aggregate demand at a speed higher than the aggregate supply capacity can meet. Of course, such an imbalance creates an inflationary

environment. NBKIs also lead automatically to the accumulation of ED. Accumulation of EDs implies that the demand for foreign currency increases to sustain services for foreign claims. The speed to service such claims on that debt might go beyond the capacity of the tradable sector to meet. In such a situation the risk of defaults increases with anemic volatile low net export revenues. So, qualms of the international financial markets increases that causes the slow-down of the same NBKIs. Sustaining debt servicing from low net export revenues increases the probability of CC, despite its timing.

If the NBKIs are not, voluntarily or involuntarily, stopped or productive capacities increased, NBKIs maintain a higher aggregate demand beyond the economy's potential productive capacity. In other words, it maintains a negative external imbalance due to a negative domestic divergence between aggregate supply and aggregate demand. This borrowing transfers available wealth abroad, to meet generated obligations, and reduces future living standards in the deficit country. Unless the NBKIs that accompany these deficits are used to finance investment in factories or other income-generating productive assets,<sup>345</sup> the overall imbalance cannot be eradicated in the long-run.

The macroeconomic cause for CADs, on which the research concentrates, occurs when the value of imports (of goods, services, and investment incomes) is greater than the value of exports. But there are also other various factors which could cause a CAD. Among the most watched, and globally considered, are the following: -

**1. Appreciation of the nominal or real ER: -**

Economic Research reckons that foreign capital flows into any country drive down domestic, relative to foreign, interest rates, and as a result appreciate nominal ER that compensate to the decline in the domestic interest rate to maintain the purchasing power parity. It is also reckoned to be a cause for much of the increase in domestic, relative to foreign, prices. In the case of fixed ER, this implies that domestic, relative to foreign, real ER is has overshoot. In either case, a CAD is maintained;



## **2. Durability of the adopted ER:**

If the currency is overvalued, imports will be cheaper and therefore there will be a higher demand of imports. Even if the ER does not change in nominal terms, it can change in real terms if domestic prices change relative to foreign prices. In addition, faster increases in domestic prices than in prices abroad, even if nominal ERs do not change, will appreciate the domestic currency in real terms and vice versa. In either case, exports will become uncompetitive causing the demand for exports to fall.

## **3. Economic Growth:**

The rise in domestic GDP will tend to increase the demand for imports. The increase in imports will cause the current account to deteriorate. If there is an increase in national income, and people's incomes increase with it, by assumption, will tend to have more disposable income to consume goods and with imports. The increase in the demand for imports will increase the need to convert domestic to foreign currency. As a result, the ER of the domestic currency will depreciate if not offset by an increased export revenues or a depletion of net foreign assets, among which is the NIR and NBKIs.

If domestic producers cannot meet the domestic demand, consumers will have to import goods from abroad. The same is realized when there is a high Marginal propensity to imports due to low short-term comparative advantage in the production of the export product. Therefore if there is fast economic growth there tends to be a significant increase in the quantity of imports.

## **4. Decline in Competitiveness:**

NBKIs, during any mania periods, always leave or support a country's domestic prices overvalued. They negatively misalign the country's price competitiveness. In other words, it causes a decline in the competitiveness of the international prices of the country's tradable goods and services. NBKIs, therefore, encourage politicians to delay necessary economic adjustments that needed badly to adjust misaligned price competitiveness. The result was a decline in the main exporting sector due to unsuccessful international price-competition with competitors in the rest of the world.

This leads to a persistent structural deficit in the balance of trade. In countries with currencies that are internationally unredeemable as domestically, it forces the need of “internal devaluation,” maybe via the reduction of wages and prices in foreign currencies, when a sudden stop is realized,. The same can be achieved via ER devaluation. Foreign-finance dependent economic development processes are, therefore, a self-defeating strategy in the long-run when the economy’s international competitiveness becomes negatively misaligned to meet international obligations. For the purpose of maintaining international competitiveness, therefore, internal and external devaluation in the foreign-finance dependent economic development processes defeats the long-term objective/goal of raising the people’s standard of living in countries with internationally unredeemable currency, as Sudan, and low productivities.<sup>346</sup>

**5. Higher inflation:**

Inflation, in general, that force the demand for money to increase, is the product of increased DMS, in the economy relative to the real GDP growth rate. It feeds negatively in the real ER. Unless the ER is depreciated/devalued, higher inflation, therefore, makes exports less competitive and imports more competitive.

**6. Recession in other countries:**

If the country’s main trading partners experience negative economic growth then they will buy less of the country’s exports, hence worsening the current account.

**7. Borrowing money:**

If all the factors were taking the negative signs, the country will be enforced to borrow money from the rest of the world, even if the country is at its advanced stage of development. If countries are borrowing money to invest, as third world countries for development process, imports growth increases, more than export growth, rates. This implies that net foreign assets are deteriorating, as will be seen in the next chapter. CCs economists also argue that a persistently large CAD increases risks of large changes in interest and ER changes that could destabilize the domestic heavy-import-dependent economy and increase the risk of domestic recession and poverty in the deficit country.<sup>347</sup>

Economists demarcate an economy with a CAD as living beyond its means by spending more than it produces.

NBKIs, i.e. equivalent to an existing CAD, indicate to an excess of aggregate expenditure over income. It is a reflection to the negative signs above that enforced an opening or widening of a CAD. It is therefore a reflection of the adoption of inappropriate domestic macroeconomic policies. That is why that it is only by borrowing from abroad that a country can have a CAD and to use more output than its employed potential productive capacity.

Economists, generally, refer that excess aggregate investment over savings, due to the wrong calculations of the related policy tools. Among the most important policy tools that resulted to the difference between savings and aggregate investments of any deficit-economies is the adopted ERR. By the language of the saving-investment identity, if government dis-saving is not, and at least, offset fully by the private savings over and above aggregate investments, by the manipulation of the related external, fiscal, and monetary policy tools, an opened CAD must have to be filled by NBKIs, i.e. increasing EDs.

As it is well-known, all of these three variables are components of the aggregate demand function of the national economy. As a result, it can be seen why ER changes, although determined at the micro level, they have a macro impact on, as they are affected by, all national macroeconomic fundamentals, mainly their pecuniary variables.

Accordingly, it can be seen that NBKIs, although beneficial, create problems for the under-developing countries,<sup>348</sup> despite the adopted kind of ERRs. As it is well-known, NBKIs generate substantial fluctuations in the nominal variables that are more synchronized across countries<sup>349</sup> than cyclical fluctuations in real activity. For example, it appreciates domestic floating ER that hurt tradables' competitiveness, hence external balances that adds to the country's external obligations. In addition to the risks of increasing dependence on NBKIs, as might be decided or enforced, tend to increase EDs and its debt burden, as a result.

The adoption of such chosen-policy regime of borrowing NBKIs put the economy at the plunging risk that complicates its future policy-prescription. Countries with fixed ERs that have accumulated a large amount of debt denominated in foreign currency are more likely to

be exposed to CC caused by sudden stops or reversals. This implies that servicing that large debt stock means increasing demand for foreign currencies at a rate that might outpace the anemic growth of export revenues, as in the case of most UDCs. In other words, countries with internationally inconvertible currencies ends-up with contractionary policies to service that large amount of EDs as there are no substitute to save foreign currencies, by import-substitutions.

In the case of third world countries, such as Sudan, the public sector, which guarantees most EDs, will be enforced, in one way or another, to crowd-out the private sector. Lowering the majority's domestic living standards therefore, must be the end result that might be imposed by inevitable CC, i.e. forced sharp devaluations.<sup>350</sup> From this perspective, heavily foreign finance-dependent development processes, for a heavily import-dependent economy, becomes self-defeating.

In *an actual open economy*, at whatever degree, *savings* is equal to *national savings plus NBKIs* at any given time. A country that receives NBKIs must have run a matching CAD causing domestic economic expansion and vice-versa. This states, in other words, that either the private or the public or both sector become responsible in opening or widening a CAD by borrowing NBKIs from, and increase obligations in favor of, the rest of the world.<sup>351</sup> To run such surpluses without a fall in investment and consumption, NBKIs should be used to increase future output that sustain, at the same time, debt servicing in due time in the face of different kinds and sizes of shocks.

For whatsoever, this states, at least theoretically, that the financial account of the BoPs reflects the foreign capital mobility and the current account of the BoPs reflects goods and services movement, in a way that ensures a zero-sum balance of payments. Any surpluses or deficits above or below that zero-sum balance feeds or erode the NIR which are reflected in the overall net foreign assets of the national economy. The main challenge facing governments is how to sustain EDS sustainability that, then, depends on whether these can be met in the future without defaulting, i.e., normally through trade account surpluses.

But it is important to note that an increase in or out NBKIs, for whatever reason, cannot be magically translated into a CAD or surpluses. The belief that NBKIs create a CAD without the movement nominal fluctuations of related fundamentals is imaginary and is called “the doctrine of immaculate transfer.” Actually this situation is impossible. In effect, as will be seen below, NBKIs produce a trade deficit, mainly, by causing the ER to appreciate, the price level to inflate, opportunity cost to decrease, increase the levels of consumption and investment.

ERs, in turn, play a crucial role in settling-down all the accounts of the balance of payments. Supply of, and demand for, the ER depends on the adopted national trade regime and related macroeconomic policy regime. But ER is a two-word noun that talks about two currencies, maybe of different or equal purchasing powers. Despite the purchasing power dimension, the two words say that a quantity of a given domestic currency is exchanged for a unit of foreign currency for the purpose of foreign transactions and vice versa. The given quantity of domestic currency in exchange for a foreign currency reflects the price of foreign currency. From a macro-perspective, ER, then, expresses the price of an internationally redeemable currency made in return of a quantity of either redeemable or unredeemable domestic currency.

It is important to remind that the domestic currency is issued, and its supply is controlled, by the domestic monetary authorities while the former is issued, and its supply is controlled, by foreign monetary authorities. And, as it is well-known from history, money’s function, among others, remained, as it will remain, just to determine nominal domestic prices, including ERs, for domestic or foreign transactions’ exchange to be completed. This implies that controlling the ER can only be realized by diverting mass supply of money to be poured in the foreign currencies markets to avoid a CC.

In addition, as history confirmed, ERs remained the main price mechanism that links the domestic economy to the rest of the world. It therefore remained critical to all world economies in dealing with all international kinds of markets. What this fact states is that, ERs

are determined by the ruling government through its manipulation of the DMS, whether it is adopting a floating or fixed ERR, for whatever justifications.

ER is a price that is unlike other prices of other goods and services in the economy. It is a unique price because it is the price DMS/banknote in terms of foreign money/banknote that do have *the same functions* having *the same legal tender* that different people use for *the same purpose*, i.e. *buying*.<sup>352</sup> The buying process can be completed *directly, via the domestic currency, in the domestic market or indirectly, via the foreign currency, in foreign markets*. From this perspective, therefore, DMS can be found to be the price of any other foreign total money supply that different countries have control over their issuance and the quantity supplied. From this sense, the ER is an *inimitable and fundamental/root price/unit of account* in economics as in different economies and markets.

In other words, ER is price of foreign money supply in terms of DMS, on which domestic government has control. This implies that governments have much more power to influence ER, whether under fixed or floating ERR by controlling DMS. Governments, therefore, determine the nominal ER between the two types of monies by determining the quantity of its DMS.

This can be seen from the fact that any quantity of money, on which any government has unlimited power to issue. The quantity of DMS is a major determinant of the general domestic price level, relative to the government's influence in determining prices of other goods and services, including the ER, at the micro-level. In this sense, the ER, which is determined micro-economically, is the most important prime variable that give poise to offsetting the above two accounts of the BoPs to each other,<sup>353</sup> and the country's international financial position. It, therefore, affects the overall domestic prices, by expanding or contracting the domestic real monetary base via export and/or NBKIs, on the one hand, and by imported goods and services prices, on the other hand. Changes in the DMS, as an asset, is affected by this same overall domestic price level at the micro-level.

This illuminates one of the ER major characteristics that link the ER to the general price-index in two-way road destinations relationship. Such relationship is evident, mainly, in

countries with inconvertible currency internationally and that are heavily dependent on imports, such as Sudan; as they are still in their early stages of development processes. Its movement has a very strong impact on the general price index on the end of the road, and vice-versa.

The BoPs is denominated in foreign currencies. A CAD reflects an excess of domestic spending over national income. The opened CAD must be financed by running down external assets or by adding to ED. NBKIs, including NIR, quantities and kinds are governments' policy choice. There are three chief ways of financing a CAD by: 1. Running down NIR; 2. Borrowing from banks, foreign governments, or international organizations such as the WB or the IMF; and 3. NBKIs in the form of direct or portfolio investment.

The stock of NFA is equal to all claims by residents on the rest of the world less all claims by foreigners on domestic residents. Then the BoPs on the CAB, which is equivalent to KAB, is equal to  $\Delta NFA$ : -

$$\Delta NFA \equiv CAB \equiv KAB \equiv (S - I) \equiv NFF$$

The identity in the equation above simply states that bills must be paid. An excess of income over spending means that, in one form or another, claims on the rest of the world are made. Such claims may mean foreign currency balances in foreign banks, or real estates in foreign countries, or foreign bonds and securities of foreign governments. A deficit (CAD) means that the source for the economy's disequilibrium is the domestic aggregate investment (I) being larger than national savings (S) can allow. It also means that the demand for foreign currency is larger than its supply domestically. A deficit, therefore, means that residents are borrowing (net foreign finance  $\equiv NFF \equiv KAS$  = capital account surplus) or selling off assets ( $\Delta NFA$ ); foreigners may acquire a domestic firm, the central bank may run down NIR, or an international bank may make a loan to finance the deficit. For whatever reasons, changes in net foreign assets imply government's deliberate determination of the level ADD more than aggregate foreign demand.

It is clear from the equation above that it is not sound in the long run to show deficits. The net foreign assets, i.e. savings in foreign currencies, will vanish or will become negative, and

there will be a lingering question as to how to pay the bills in the end. As part of its functions, deteriorations in net foreign assets means that any government's capacity to defend its long-term ERR is also deteriorating. Deterioration of net foreign assets implies that there is a contradiction between the adopted macroeconomic policy regime and development strategy that leads to the depletion, rather than the accumulation, of foreign assets. As it is known, foreign assets, despite their roles during war or similar times, remained partly playing its role in stabilizing the committed ERR. Capacity for defending the ER is, thus, one of major sources stressed by the literature for businesses loss of confidence.

ER, as mentioned above, is the price of DMS relative to foreign money supplies. In that sense, the ER, hence the CAD, which is equivalent to NBKIs, is not only managed by the use of foreign currencies in the foreign currency market but also by controlling the DMS simultaneously, by raising or decreasing the domestic interest rate. NIR are, therefore, not the only policy tool for managing the exchange parity. So, ER, via the manipulation of domestic monetary base, is a strong determinant of the CAD. It has, via its indirect impact on the CADs, a very strong relationship to the NBKIs, which is equivalent to CAD.

From the national GDP identity, CADs, which are equivalent to NBKIs, are equal to changes in net foreign assets. The identity simply states that bills must be paid. A deficit means that residents are borrowing or selling off assets; foreigners may acquire a domestic firm, the central bank may run down NIR, or an international bank may make a loan to finance the deficit. It is clear that it is not sound in the long run to show deficits. The net assets will vanish or will become negative, and there will be a lingering question as to how to pay the bills in the end.

Net foreign assets are part of the DMS besides net domestic credit. Changes in net foreign assets are equal to money supply minus net domestic credit. Therefore, reduction of net domestic credit, via increased opportunity costs domestically, will support increasing net foreign assets, hence a reduction in the CAD, and vice versa.

As mentioned above, under fixed ERRs, interest rates or the monetary base becomes the government policy tool when net foreign assets, mainly the NIR become depleted. It must



levitate, i.e. money supply must sprawl, enough to reduce the CAD, mainly through immediate import compression rather than export expansion in the short to medium terms. Hence, increasing interest rate for current account compression is contractionary. When *interest rate becomes at its lower zero bound*, the only toll available is *direct control of DMS*.

Under floating rates, the adjustment takes place through depreciation and export growth through lowering interest rate. Hence, reducing interest rate for current account compression is expansionary. As a result, a shock that is contractionary under fixed rates is actually expansionary under floating rates. Also, as the NBKIs, in such kinds of countries, witness an upward movement it opens, or widens of an existing, CAD and vice versa, at least in nominal, if not in real, terms.

**Globally**, international differences in the supply of foreign capital reflect differences in savings in, internationally redeemable, currencies across countries. The demand for foreign capital funds implies not just an opening, or widening of an existing, CAD but also shortages of national savings for financing national investment spending, for whatever reason, in the receiving countries during any period of time. In that sense, it can be said, the NBKIs have more impact on macroeconomic fundamentals than on just financing investment spending. Besides its power in destabilizing the macroeconomic fundamentals, it also opens, or widens an existing, a CAD and the drowning in the related short, medium, and long-term debts, and maybe in their arrears due to sustained defaults.

The problem becomes much more aggravated when the NBKIs are sustained for a long period of time to finance investment spending in the non-tradable projects. In such cases, foreign debts are made largely difficult through time to be serviced, mainly in countries with internationally unredeemable currencies and which are heavily dependent on imports for durable, if not flimsy, goods. This is because it implies that NIR, in specific, needs to grow over time at rates that might exceed the export capacities to achieve them in the long-run.<sup>354</sup> This implies a strong discredited supervision of domestic credit as the only policy tool in the economy and related, maybe unplanned, recession. Of course, in such cases, by itself, cause a long-run investors and lenders “confidence problem” if such a condition didn’t dominate. The

confidence problem might be aggravated as the purchasing power of the DMS starts to deteriorate relative to other countries' monies. As a result, the committed ER becomes at crisis risk.

So, such long-run dependence on the NBKIs, therefore, reflects the adoption of weak policies to raise its own domestic and foreign savings that shake investors' confidence and raise speculators' hunger for profiting from expected CC. This implies that increasing foreign NBKIs increase through time, for whatever reason, hurts not only export competitiveness but also, shake the stability of the committed ERR, whether through its appreciation or devaluation when it in-flows or suddenly stops.

As history made it obvious ERs, as the main channel that link domestic economy to the rest of the world, since their existence, remained, therefore, critical to all world economies dealing with all international kinds of markets. From the above structural reform perspective, ERs remained, therefore, performing a decisive role in every nation's level of trade and finance balances and the economy's national income.

Since balanced accounts of the BoPs on the current accounts are naturally lopsided,<sup>355</sup> capital flows, as the last resort source,<sup>356</sup> despite its nuisance, remained performing a *political* significant role in supporting, not only the BoPs accounts but also, the tenacious equilibrium of the economy's macroeconomic fundamentals.

At the same time, ERs were, as they remained, one of the most important determinants of a country's relative level of the economy's economic health. On that basis, both, capital flows and ERs, under any ruling ideology, continued to perform greater roles, with or without structural reforms, in determining the overall equilibrium or disequilibrium of the domestic economy in its relationship with the rest of the world. For this reason, it is not a bizarre to find-out that ERs are among the most watched, analyzed, and governmentally manipulated economic policy variable to avoid accumulation of EDs that were generated by the NBKIs. It is also important to note that the NBKIs, as dominant export-commodity revenue, put the economy in a weak position as it is making a sign that excess demand is not sustained country's own resources. During the financial crisis many countries face a sudden stop -

which is defined as a situation where *international financial markets* are *not willing anymore to fund the CAD* of a country. If the NBKIs stop it means that the country cannot afford to run a CAD. When foreign capital stops coming in, it simply cause an aggregate fall in spending that will affect domestic demand and production. Everything else remains normal; a sudden stop must push the economy to a sudden collapse as manifested in increased unemployment rate and sustained recession.

### 3.5. Capital Flows as “Predictors” of CC:<sup>357</sup> –

The NBKIs remain, beside domestic credit, primarily for imports, through its impact on the buffering NIR, a key source for an upward pressure on the ER.<sup>358</sup> In other lexis, NBKIs, during times of domestic credit boom, pave together the road towards financial crises, mainly the CCs. In general, but mainly in heavy-import-dependent economies, such as Sudan, (+/-) NBKIs remained the main source for defeating any government’s committed ERR via affecting the country’s NIR/DMS ratio. As in the Sudanese case, the latter remained to be very strongly associated to the dominant export commodity’s international prices. (+/-) net capital flows detriments, whether in the short or the medium run, must also defeat the stability of the macro-economy’s fundamentals. These consequences are very peculiar to countries that do not issue or enjoy an international convertible currency. Such detriments can be seen as reflected in the import-dependent fiscal sector.

The fiscal sector remained always the nations’ *bane, not its boon*, mainly in the case of the UUEs, such a Sudan’s one. It is well-known that government expenditure, in general, from a flexible fiscal policy’s point of view, constitutes, in part, the bottom line for full-employment economies, mainly in the short-run. The budget deficit reflects the excess expenditure over revenues that the government can afford, i.e. the debt limit or ceiling, to avoid debt-defaults and accumulation of arrears to maintain, partially, market confidence and the maximum employment of the economy. To avoid fiscal expansion to become contractionary, i.e. by crowding out the private sector, by driving-up interest rates, government borrowing is therefore limited when the economy is booming. Of course, budget deficits need not lead to high interest rates on borrowing when the economy is depressed. Accordingly, the nature of

manipulating budget deficits commitments in relation to the ratio of debt/GDP reflects the usual measure of any country's health of its fiscal and overall debt position.<sup>359</sup>

History classified countries that, politically, sustained inferior overall economic policies, which do not raise public and private, i.e. national, mainly foreign, savings, in the face of an ever lopsided external sector in relation to an ever expanding unstable world economy. They both imposed a sustained trauma on the domestic currencies' relative to their values and caused them to suffer from inexorable instabilities.

As mentioned above, the NBKIs produce a CAD by causing the domestic credit to increase, domestic price level to inflate, real ER to appreciate, and real, if not nominal, opportunity costs to decrease. All of which increase the overall domestic aggregate demand which increase the demand for foreign currencies for increased imports. In addition, they increase EDS and income transfers, from investments of the NBKIs, in foreign currencies. This latter implies that the demand for foreign currencies will also increase. The overall intertwined effects of these affected variables ends-up with an overall increase in the levels of public and private consumption and investment spending that opens, if not worsening an existing, macroeconomic imbalances in the economy.

In pre-currency-crisis period, in response to these changes, governments naturally react by controlling such generated external-debt or containing inflations resulted by the increasing expansionary effects of the NBKIs and net domestic credit in the short to the long runs to contain increasing macroeconomic imbalances. As a result, CCs were almost always found to be preceded by political instability, budget and CADs, NIR losses, and fast growth of money and prices.<sup>360</sup> As a result, governments practice relative austere policies, after such strong boom period, to reduce the domestic inflation pressures.

Austerity, after boom period, is reflected mainly in the reduction of overall consumption and investment, which press negatively on the foreign exchange-rate market.<sup>361</sup> The reduction in the absorption capacities of the economy results from declining wage and increasing unemployment rates,<sup>362</sup> before governments are being forced by the markets to devalue sharply the country's currency. That is before the CC event or devaluation decision.

Unfortunately, there is little evidence of slowing rates of money and credit growth. Such actions might harm the GDP per-capita growth rates and reductions in the standards of living. As real ER appreciates,<sup>363</sup> liquidity, in foreign currencies, deteriorates and NIR dry-up, the adopted ERR falls into crisis.

The causation could run by exerting a pull on foreign capital, keeping the domestic currency overvalued, and producing persistent deficits. CCs episodes showed that they were preceded by expansionary deficits that were being achieved, overvaluation was kept growing, while adopting countercyclical policies. History also showed the case of governments that don't do a lot by foreign exchange intervention or with its money supply policies.

The achievements of these fundamentals imply that the ruling government delayed the necessary structural reforms that minimize the detriments of the NBKIs to maintain investors' confidence in the long-run. *That is because NBKIs opens the doors for widening CADs as it simultaneously pushes up domestic, relative to foreign, price levels.* Without such necessary structural reforms, in due time, growth would be below, or poverty and unemployment would be above, the historical trend that helps in avoiding the deterioration in imbalances and their accompanying bouts of instability.

The necessary structural reforms include among others, the improvement in the financial, the public finances, sectors and in other related variables in the real economy that affects trade flows.<sup>364</sup> The in-advance structural reforms, during such boom times, aim, therefore, at preventing drowning into dangerous debt quagmires and related future CC, in the face of callous international environment. This is can be seen very clearly from the definition of ER as the price of DMS relative to the foreign monies supply.

Due to these delays, capital flows plays crucial roles, not only in postponing coming problems but also, in equilibrating the current accounts, and to compensate, in deficit cases, for the domestic contracted macroeconomic variables. But it is important to note that the most important problem that the NBKIs create always the ED burden that must be repaid in the future. But it also raises a much important point about its additional risks. That is, any NIR, to

defend the ERR, are indirectly supported by those NBKIs are much weaker in defending their committed ERRs relative to those which finance them from their current accounts surpluses.

Recent literature, in support to what is mentioned above, documented that in all cases, except in few cases, such as Greece in 2009, the seeds for all CCs were planted by a run of the expansionary NBKIs into a country's economy. It also showed that they ended by a sudden stop that generated the powers for the committed ERR destruction.<sup>365</sup> In other words, people, investors, and speculators are rightly worried that too rapid flows of capital out of these countries may cause excessively fast and large devaluations, resulting in CCs, as happened in eastern Asia back in 1997.<sup>366</sup>

Others<sup>367</sup> suggest that the two most robust indicators of future financial crisis, for emerging and industrial countries alike, are domestic credit expansion and real appreciation of the currency. For emerging markets, a key variable seems to be the level of NIR, with higher NIR implying a lower probability of a future crisis. The policy implications of this last finding, which obviously would be quite relevant for countries such as S. Korea that have purposefully accumulated substantial precautionary NIR, are ambiguous. It may be that holding more NIR lowers a country's vulnerability, but reverse causation might also be at work. Countries that become less vulnerable for other reasons may experience financial inflows and, depending on exchange-rate intervention policies, an increase in NIR.

One key element raising the vulnerability to global crisis and contagion has been the explosive growth of financial transactions with a cross-border or cross-currency component – a process that was only getting under way at the time of the Herstatt-Franklin National collapses. An important indicator of the rapid progress of financial globalization is found in countries' gross external assets and liabilities, measured relative to GDP. Figure 2.3 above shows how the numbers have increased over time for the world's high-income and emerging economies, with divergence and accelerating growth for the group of high-income economies starting in the mid-1990s. In tandem with its general graduation to high-income status, Korea has substantial (and quite volatile) ratios of external assets and liabilities, which contribute to a volatile net foreign asset position. In principle, higher levels of gross foreign assets and

liabilities may result from a stabilizing process of international diversification, in which countries efficiently share risks, for example, risks attached to domestic equity markets. In practice, however, many if not most external liabilities take the form of debt, including short-term bank debt, with attendant dangers of destabilizing runs and defaults.

Whatever, considering its ratio to the open economy's size, for emerging and industrial countries alike, capital flows, equivalent to CADs, in relation to their impacts on the most robust indicators of real appreciation of the currency, domestic credit expansion,<sup>368</sup> and net ED,<sup>369</sup> remained the best predictors of almost all, past and future, financial crisis, in general, and ER crises, in specific.<sup>370</sup> The symptoms of the latter can go from benign to large asset price bubbles and excess credit creation, which are among the best predictors of financial, mainly currency, crises.

That was very clear since the abandonment of the BWIs' system that increased the importance of the international capital flows, mainly to the 3<sup>rd</sup> WCs, not only for development purposes but also because they suffer from relatively weak international financial position and assets. It is, therefore, very clear that international capital flows certainly explain the growing frequencies and magnitudes of CCs, mainly, since 1973, which requires massive amounts of NIR, mainly in the under-developing, emerging and underdeveloped, countries.<sup>371</sup>

Despite that inflation began its long march upwards in the mid-1960s, it raged in double digits across the rich world for much of the 1970s. Not until the early 1980s did governments begin wringing inflation out of the system through monetary tightening. From the inflation of the 1970s economists learned that inflation is a monetary phenomenon which can be controlled through the proper application of monetary policy.<sup>372</sup> It was partly due to the international credit boom of the petro-dollars. As a result it can be seen that almost all nation states and regions suffered from the severity of the several of the aftermath-currency-crises' recessions, slumps, debts, enforced deleveraging, and political regime changes, with their other related painful socio-economic costs.

These serious unbearable costs of such kind of financial crises lie in the slow-down of the rapidity, if not sustained weakening, of the economy's growth and/or the majority's

prosperity, without government intervention. As a result, it can be seen that ERs are the most monitored and managed policy variable, despite with the difference of high degrees, by all governments around the world till now.



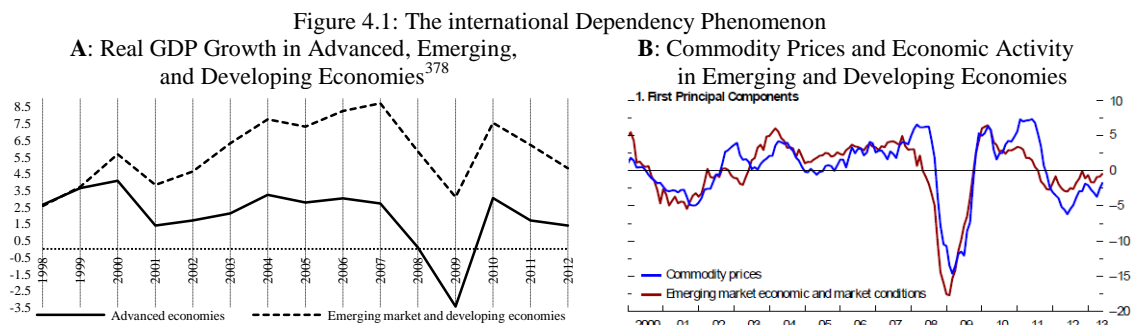
## Chapter 4

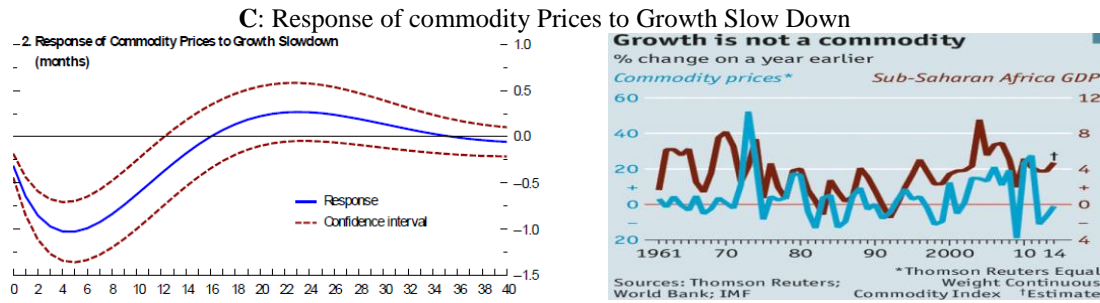
### Expansionary NBKIs and CCs<sup>373</sup> in Sudan<sup>374</sup>

#### 4.1. Introduction: –

The interconnectedness and interdependence of the world economy remains to be the major rule of the 20<sup>th</sup> and the 21<sup>st</sup> centuries as they were in the 19<sup>th</sup> century.<sup>375</sup> The advanced industrialized economies remained to be the driving engine for the less advanced industrialized and the unindustrialized world economies.<sup>376</sup> As table 1 in the appendix shows, emerging, developing, and undiversified unindustrialized countries remained as crises and recessions importers from the advanced countries. The contagion of the latter continued to be through their export revenues and NBKIs over the past decade and a half. Consequently, they remained the most obvious field for currency, more than banking and debt default, crises, mainly after 1973. Accordingly, world interconnectedness and interdependence, therefore, meant, as it will continue to mean, that Sudan’s domestic economic policies, as in others, remained, as it will remain, to be shaped and affected, at least in part, by the events in the wider global economy, as they can be generated domestically within Sudan borders.

Figure 4.1A below shows how instabilities or volatilities in the advanced economies’ real GDP growth have boosted, abetted, recessed, or impaired, the emerging and developing markets’ GDP growth rates. That means that former countries’ GDP growth *remained, as will remain, suppressing the speed* with which the latter countries’ GDP growth within the existing framework of the world economy’s division of labor and specialization structure. As a result, it is inherently found that the emerging and developing economies’ real GDP growth rates remained mechanically and positively varying with the advanced industrialized economies’ real ones’.<sup>377</sup> In financial crisis lingo, figure 4.1B below demonstrates that the former economies, therefore, remained to suffer, ceaselessly, from the former economies contagious recession, as recovery.





Source: The IMF, April 2014, p.: 114 and the IMF, October 2013, p.: 2 and The Economist at:  
<http://www.economist.com/node/21638141/print>

The world economy remained growing and recessing while standing on moving sands. So, when the advanced countries' real GDP growth slows down or recovers rapidly, the emerging, developing, and unindustrialized ones follow suit. Accordingly, it is found that there is a very strong correlation between changes in the international commodity prices and the growth in the domestic macroeconomic activity in emerging markets as figure 4.1B and 4.1D above show. The emerging, developing, and unindustrialized countries' *export commodity's international prices are very influential*. Their influential strength is shown, in figure 4.1D above, by "The Economist" for the African Economies case as follows: -

***"FOR decades commodity prices have shaped Africa's economic growth. The continent is home to a third of the planet's mineral reserves, a tenth of the oil and it produces two-thirds of the diamonds. Little wonder then that, as a rule, when prices for natural resources and export crops have been high, growth has been good; when they have dipped, so has the continent's economy."***<sup>379</sup> [Emphasis added]

The above-quote implies that the under-developing countries, Sudan included, were suffering from a non-stop instability in foreign demand that remained suffering from insufficient upward growth at a steady trend in the face of their rapid development plans. The after-tumble commodity price always remain below the pre-tumbled prices for months and actually for years in the undeveloped countries, as figure 4.1C above demonstrates. This fact was documented in the IMF's 2013 Commodity Market Review Report:<sup>380</sup> -

*"The correlation between growth in commodity prices and growth in macroeconomic activity in emerging markets is very high; the correlation between the first principal components of the two is 0.8. Moreover, declines in economic growth lead to substantial declines in commodity price growth for several months ...."* [Emphasis added]

This means that the export prices of commodities, goods, and services, and other related domestic real economic activities in the non-advanced economies' are unstable and are

influenced by the advanced economies' functioning scale. The major channel remained the formers' export prices, hence the overall export revenues. Unfortunately, this implies that the strength and speed of the formers' export-dependent GDP growth rates is actually fragile and slower than otherwise. More specific, the macroeconomic structure smooth functioning in the former economies is influenced by advanced-economies' normal functioning.

As mentioned-above, the export-oriented UUEs, among which is Sudan, remained heavily dependent on the composition of their agricultural, and non-agricultural, export basket. *The export basket composition continued to be dominated by one major commodity, i.e. remained so contingent on one commodity, as an important source of foreign income for their economies' assumed structural change plans.*<sup>381</sup> This implies three serious results. First, export revenues, therefore, remained to be the *economy's main influential income for financing imports for domestic consumption and investments objectives*. Second, *other sectors' incomes became endogenous, not exogenous, due to the absence of a diversified productivity-increasing heavy-import-capital-substitution sector*. Third, they also remained to be relied-upon, as a result, to *improve the country's national and international financial position, to stabilize its committed ERR, to generate and maintain universal, mainly foreign, investors' confidence.*<sup>382</sup>

Crises generally result in higher unemployment, lower incomes, and greater uncertainty, which cause a deep recession.<sup>383</sup> Contagious recessions, among others, as a result, cause sharp current-account deficits in the unindustrialized, but mainly the undiversified, economies. In normal times, the peer of a CAD is borrowed NBKIs, which *reduce nominal and real interest rates, hence the depreciation of the committed ER*. Sharp CADs<sup>384</sup> and incoherent domestic macroeconomic policies remained always the major reasons for almost all CC events. A CC occurs when one county's DMS becomes rapidly devalued relative to its counterparts in the international financial system. That is, when the changes in the net foreign assets deteriorate rapidly. Despite contagious-recessions, it remained always the result of other diverse unfavorable exogenous shocks that hit the real sector negatively that has been transmitted to the monetary sector, on which this chapter will accentuate. Among the most ones are the

influential international prices of the export quantities from the non-advanced countries. Their fluctuations, +/- NBKIs, are strongly linked to their NIR, as the lender of last resort for financing the supply shortage in the foreign currency markets. Their plummet are, therefore, the mother of all the CCs, as will be seen in the case of Sudan below.

A currency, as other types of financial, crisis is actually an event that unveils the factual depletion of an economy's, as an individual's, resources and management skills in the face of intense run on the domestic currency. CC ends in recessing almost all major macroeconomic sectors of the economy in creating an economic equilibrium of hardships and pains. Unless compensatory financial powers allowed a rapid and sustained recovery during such hard times, overall austerity, increasing debts, depleted NIR, and CC will be the only providence. Austerity policies, unfortunately, were always used by the neo-classical/neo-liberals to fight recessions based on the *belief*, more than *evidence*, that there was no recession after the financial crisis event to fight.<sup>385</sup>

This chapter will concentrate on the impact of the world economy's contagious disturbance in generating major CCs in Sudan during the 1930s, 1957 – 1959, and 2007 – 2012.<sup>386</sup>

#### 4.2. Brief Post-Independent Sudan's Development History: -

In Jan 1<sup>st</sup>, 1956, Sudan, as its akin countries, inherited a modern economy. Its governments continued to respect the prevailing international division of labor and specialization, which its core principal was the null and void “*static*,” relative to the genuine dynamic, comparative advantage canon.<sup>387</sup> This was while they were determined to *change* the *structure* of the inherited Sudanese economy at rapid speeds using optimistic and ambitious plans. The modern sector remained, till now, to be characterized as a commodity-export-oriented and foreign capital import-dependent UUE edifice.<sup>388</sup> In direct slang, the British administration wanted the Sudanese “***to produce what they do not consume and consume what they do not produce.***” As documented by Mohamed Hassan Fadlalla: -

“Historically, during the colonial period, Britain had discouraged industrialization, preferring to keep Sudan as a source of raw-materials and a market for goods manufactured in Britain.”<sup>389</sup>

Sudan, of course, cannot attain its true potential economic capacity by simply import everything that the limited export revenues and NBKIs won't, practically, allow. Awfully, its macroeconomic structure's performance remained strongly tied to its trade sector. The main fastening mechanism was its heavy dependence on one main strategic export commodity, specifically raw-cotton, to increase the domestic supply of foreign money, if so decided. As differently put by Abdel Rahim Mirghani: -

*“The Sudan’s economy depends to a large extent on foreign markets and hence on fluctuations of foreign demand for its goods and of prices realised for the country’s exports;”*<sup>390</sup>

The above quote implies that high risks of remaining heavily dependence on the influential international price of Sudan's dominant export cotton since 1925, as substituted by the dominant oil export since 1999, for financing more than 40% - 60% of the government revenue and for more than 70% - 90% of exports proceeds. This is because when it tumbles, anyone would be worried about Sudan's currency, the pound, in such circumstance, to become at high risks of somersaulting and the central bank would be razing its shedding NIR in its salvaging.<sup>391</sup> The exhaustion of foreign ER would in turn increase the country's risks to default on its EDs.<sup>392</sup>

Practically, as table 1 shows that, the dominance of the cotton, as oil, share in the export sector caused the foreign trade sector to acquire gargantuan influence on the national economy. In other words, the *Sudanese foreign trade sector* remained to be the *influencing sector* on the roaring and expansion of the inherited colonial's modern economy's other sectors. The foreign trade sector's *gargantuan influence* was mainly due to the absence of an *effective indigenous competitive capital import-substitution sector*<sup>393</sup> for the production of the *different kinds of consumption and capital goods and services*<sup>394</sup> to counterbalance the *gargantuan influence of foreign currency, in general, and NBKIs, in specific, for their importation.*<sup>395</sup> That is, the inherited Sudanese economic structure was totally as incomplete as immature whether before, at, or after independence.

In addition, the gargantuan influence of the dominant export raw-materials' revenues remained to be extended to the other macroeconomic sectors that remained also heavily dependent on those revenues for their roaring and growth. In other lingo, the domestic

economy's functioning level remained to be endogenous to the exogenous foreign trade sector. *That is, history proved that when the influential dominant raw-materials' price collapsed Sudan's budget deficit remained deepening and leading officials to halt new spending on some capital import-dependent investment projects and considered its draining almost more than half of the state's, hence national, savings.* Table 2, in the appendix, summarizes a long historical story about the deteriorated macroeconomic structure of the Sudanese economy that remained heavily dependent on its influential foreign trade sector.

The results shown in table 2 are very normal since the ruling post-independent governments' mentalities sustained the colonial development paradigm for the roaring, growth, and stabilization of the inherited economy at independence. That is, the successive national governments, since independence, sustained the colonial paradigm of gargantuan dependency on the raw-cotton exports for generating foreign currencies till 1999 and oil afterwards.

Consequently, as table 2 confirms, the expanded inherited undiversified unindustrialized Sudanese economy caused the macroeconomic structure of the Sudanese economy to deteriorate rather than improve. That was due to its more, not less, dependence on the *gargantuan* influence of export revenues from oil, relative to the ex-cotton export, commodity, by 2011. Furthermore, the *table 2 confirms that Sudan's exports were relatively more diversified under the dominance of cotton, than with oil, commodity.* Changing export revenues source from one raw material to another didn't mean achievements of significant structural change in the inherited economy. It only means that foreign trade acquired more, not less, gargantuan influence on the macroeconomic structure of the Sudanese economy, mainly its modern sector. As a result, it actually became more, not less, fragile and can easily be trembled strongly in the face of different unfavorable exogenous shocks of different sizes.

That means that any sudden domestic shortage in the supply of, relative to the demand for, foreign currency must create a stronger domestic liquidity crisis and its aftermath tougher recession. The liquidity crisis, if strong enough, must force any Sudanese government to resort to NBKIs, if it was made available. Otherwise it must be forced to default on its debts and to devalue its committed ER. In other words, CC, thus, must become self-fulfilling, even

in the absence of speculators. Financial markets know this and will test to what extent the Sudanese government can control its budget deficit deterioration due to the sharp decline in the dominant foreign currency revenues. That means, in the case of the Sudanese UUE, the international and/or domestic financial markets must acquire a fabulous gargantuan power that forces such a kind of country on its knees.<sup>396</sup>

Alternatively, the liquidity crisis will be forcing the concerned government to institute an intensive austerity program. In both cases, the major reason lies in its national currency being internationally inconvertible. The absence of the latter function from the domestic currency adds to the above weakness.<sup>397</sup> Domestic currency can only be expanded internally and as a result it could only generate domestic price inflation that more complicates, rather than solve, the generated crisis.<sup>398</sup> In other language, it activates “Gresham’s Law” domestically,<sup>399</sup> which puts the domestic currency’s international ER on the crisis-path.

The 2009 WB’s Country Memorandum about Sudan confirmed this.<sup>400</sup> It reiterated the seriousness of the old risks that were generated by the heavy dependence on cotton export revenues and NBKIs. They formed a drag on the growth of the economy under the adopted (annulled) comparative advantage canon and the ERRs. But it added that: -

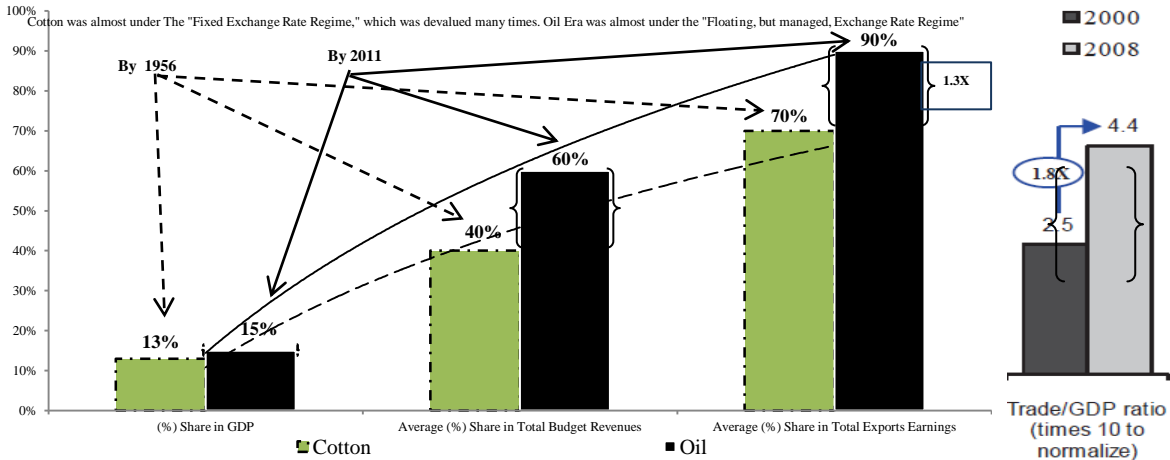
*“The economic threats come from **Sudan’s over-reliance on a single commodity** as its main source of growth, the neglect of growth in non-oil sectors and the increasingly dominant role of the public sector.”*  
... *“The Sudanese economy has also become more integrated with the rest of the world—its trade to GDP ratio has increased from 25 percent in 2000 to 44 percent in 2008, and the country has emerged as one of the highest recipients of foreign direct investment (FDI) in Africa ....”* ... *“The immediate challenge to sustaining rapid growth comes from **Sudan’s overdependence on oil revenue, which is intrinsically temporary and fundamentally unreliable.**”* ... *“By most accounts, the best days of Sudan’s oil windfall are likely in the past.”* ... *“**Sudan needs a new, more balanced growth vision that is less reliant on oil, while using the oil wealth to create an economic foundation for a diversified, inclusive and sustainable growth path.**”* [Emphasis Added]

In graphic language, figure 4.2 below shows the key features of the inherited macroeconomic structure of the inherited colonial economic edifice at independence in 1956. Figure 4.2 below demonstrates that Sudan remained to be reflected in the increasing influence of the main commodity prices, as Sudan’s main export, the government’s main source of



foreign currencies, and NIR feeder under the justification of the static, not the dynamic, comparative advantage canon. During its post-independence era, those key features of the undeveloped<sup>401</sup> Sudanese UUE *became much worse than it was at independence*. That is, the Sudanese economy became more, not less, suffering from the increasing, not the decreasing, trend in their shares. Whatever considered as an achieved socio-economic development process of the 1956 inherited colonial economic edifice, during 1956 – 2011, led to weakening, not to strengthening, of the macroeconomic structure of the Sudanese economy.

Figure 4.2: (%) Share of Raw Materials Earning in Sudan’s Vital Macroeconomic Sectors in 1956 and in 2011



Sources: WB different Country memorandums

Under the fixed and managed floating ERRs, figure 4.2 above proves that Sudan actually weakened the macroeconomic structure of the expanded economic structure that was based on the colonial development paradigm. That means that Sudan remained increasingly dependent on influential main commodity prices, as its main export, the government’s main source of foreign currencies, and NIR feeder under the belief in the static comparative advantage canon. That also means that Sudan became much more, not less, fragile and vulnerable to more, not less, severe sufferings from any kind and size of financial crises. Accordingly, it can be said, that whatever assumed development that was assumed to be achieved in the inherited UUE, the adopted processes actually weakened, not strengthened, its macroeconomic structure, mainly in the face of negative shocks. As a result, the perceived development caused the international and the domestic financial markets, as currency-speculators, to acquire more, not

less, fabulous gargantuan power as the economy's macroeconomic structure becomes much more dependent on its very influential foreign trade sector than at independence.

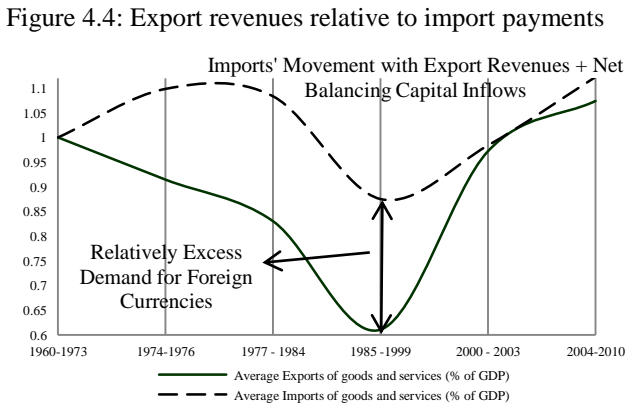
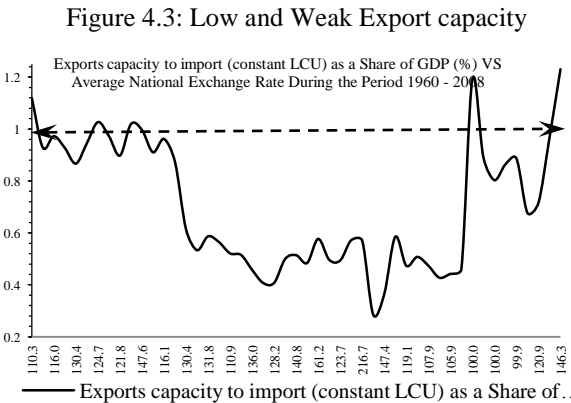
As during the colonial era, and heavy capital-inflows-dependent-investment, Sudan became more deeply integrated in the world trade system. The heavier dependence on oil revenues since 1999, relative to the cotton's era, caused the GDP, the fiscal, and the ERRs to become much more heavily influenced by the revenues from the oil sector. As a result, the economy became more, not less, vulnerable to sudden CCs than it was during the cotton-dominancy era.

As figure 4.2 above implies, the achieved investment during 1956 – 2011, caused the economy to become more, not less, influenced by the revenues from the exported quantities of the influential raw-materials, as determined by their influential international prices. It also means that the international financial markets' gargantuan power increased relative to its strength before 1999. That implies that they now can subject Sudan more easily to their very costly stipulations than before, of course, if they accepted to finance or reschedule debts. As it is very clearly implied in figure 4.2 above, the Sudanese pound must always become vulnerable to CCs whenever the Sudanese economy faces any unfavorable exogenous shocks.

#### **4.3. The Influential Dominant Raw-Material's Export Earnings' Insufficiency: -**

Export revenues continue to depend on the produced value-added of the structure of the produced export quantities and their international prices. As mentioned above, due to its relatively scanty and hysterically sharp volatilities in export earnings, NBKIs established itself as an integral constituent of the inherited colonial macroeconomic structure of the Sudanese economy to roar and expand. Since 1971, specifically, and with very low control over the international terms of trade, as figure 4.6 below shows, Sudan's capacity to productively use its relatively scanty export earnings has been systematically below one<sup>402</sup> as figure 4.3 below shows. As figures 4.3 and 4.4 below imply, the export value to import value ratio proved to be less than 1 with even a wishy-washy capacity ratio to catch-up with import growth rate, in almost all the years under study.

Of course, the below 1 ratio export to import value years remained the hidden force for post-independent governments to resort to NBKIs at the prevailing ER as figure 4.4 shows. Figure 4.4 below shows the need for increased demand of foreign currency to maintain the same level, or meet the excess, of import at their prevailing international prices. As figures 4.4 and 4.6 below show, the gap between exports and imports remained widening during 1960 – 1999, i.e. during cotton commodity dominance and the Sudanese macro-economy’s performance. Although the gap kept narrowing since 1999 and nearly closed by 2003, it re-opened and resumed its widening after signing “2005 Nevasha/Kenya Agreement” with the Southern Sudan and with the ER continued its deterioration since then.



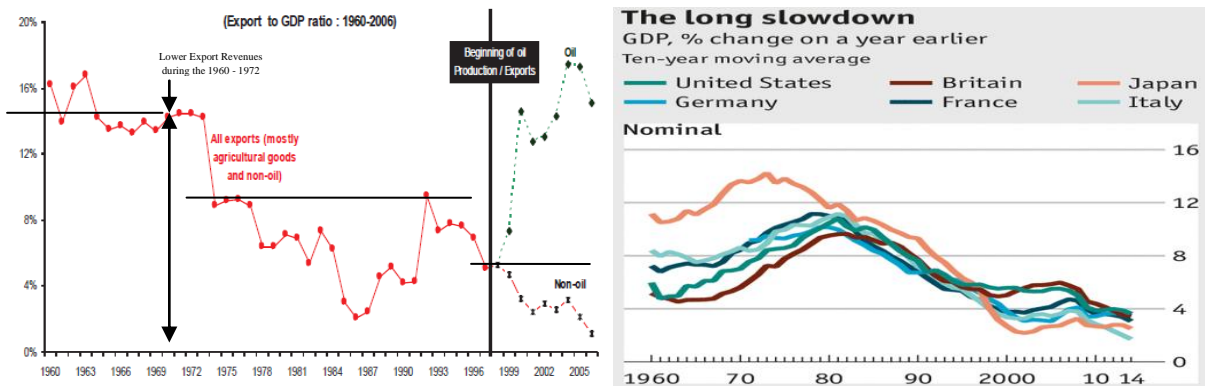
Source: WB Database.

The sustained below 1 of the *influential* export earnings/import ratio imply that the value-added of the structure of the exported quantities produced was actually controlled by the *thorny gargantuan influence of the* international prices. As mentioned-above, the latter was the hidden force for sustained reliance on NBKIs that become an established integral fundamental variable.

Figure 4.5 below shows how the influential non-oil exports sector’s uncontrolled revenues remained declining with the advanced countries slowdown GDP growth trend during the period under study. During the past 46 years, the export sector of the rich natural resources Sudanese economy, relative to its size, remained performing badly and sustained its deterioration in the face of diverse unfavorable exogenous shocks. This implies that the export-oriented strategy was not the appropriate one for supporting all the governments’ perceived socio-economic development and welfare schemes since 1960. The value of access

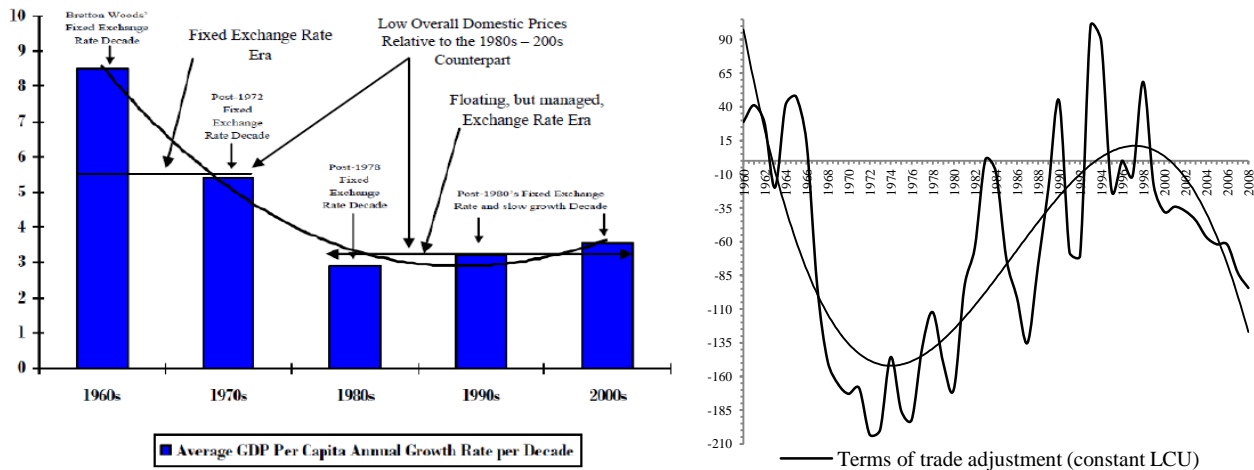
to international capital markets was therefore aiming more at smoothing consumption in the face of declining volatile output and/or fluctuating investment opportunities. In other words, the very heavy dependency on one major raw-material export commodity for generating foreign currencies to maintain the UUE's stability for its roaring and expansion proved to be an unreliable and/or impracticable long-term strategy.<sup>403</sup>

Figure 4.5: Non-Oil Export to GDP Per-Capita Ratio (1960 – 2006) Relative to Advanced Countries' Secular Stagnation: The Declining Trend Phenomenon: Prebisch-Singer Prediction



Source: WB Country Memorandum (2009, p.: 20) and The Economist<sup>404</sup>

Figure 4.6: Influential World Economies' GDP Growth Slowdown and Sudan's GDP/Capita Growth<sup>405</sup> and Constant Terms of Trade



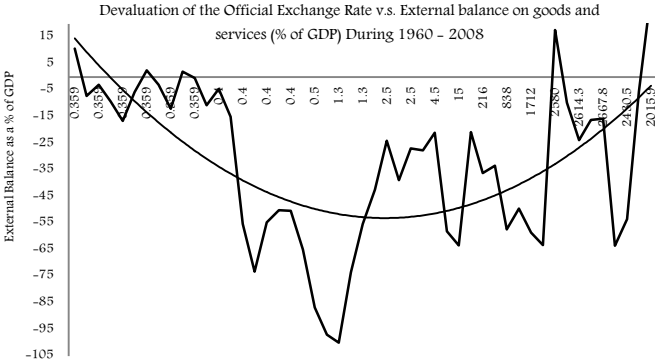
Source: WB Database and WB Country Memorandum, 2009, p.: 20.

It is observed that most of the Sudanese government remained targeting the economy's long-run growth potential, whether directly or indirectly, in their different investments programs and plans. But in *the absence of indigenous and internationally competitive physical capital-producing import-substitution industries*, successive governments were forced actually to sustain their increasing dependence on NBKIs to import the needed investment

goods, as export capacity to import remained below 1. That is, to fill the unsolved domestic gap between the national savings and investment spending, i.e. equivalent to NBKIs.

As figures 4.4 above and 4.7 below imply, and as it can be concluded, that Sudan’s massive investment spending remained chasing the relatively dearth national savings in the face of diverse unfavorable exogenous shocks. That meant that the successive governments had relied heavily in filling the influencing external gap by borrowing NBKIs, (+/-) the NIR, to import the needed physical capital goods over its own export revenues. The underlying reason was the adoption of inconsistent macroeconomic policies for the efficient allocation of the available meager domestic resources of the modern and rural economies.

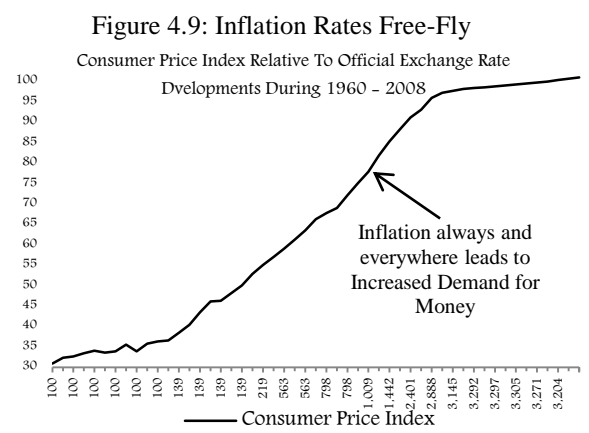
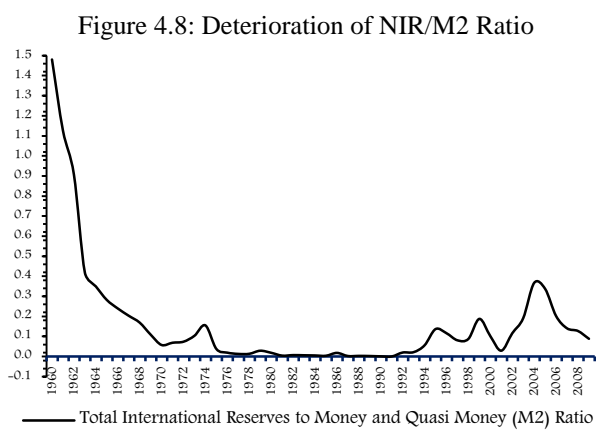
Figure 4.7: The Development of Sudan’s CAD



Source: WB Database.

Despite the diverse unfavorable exogenous shocks, DMS, relative to the NIR of the country, was extensively used to compensate for any shortage in the export revenues and/or NBKIs as figure 4.7 above and 4.8 below confirms. IT IS IMPORTANT to note here that the adoption of expansionary DMS policy is considered, historically, as a currency war or “*beggar thy neighbor*” policy<sup>406</sup> that forces the trade-partners of the country to avoid the importation of deflation *via a practical devalued ER*. This implies that this undeveloped economy’s CADs and NIR financing remained, for an outrageous long period of time, dependent on the accessibility of NBKIs. The negative impact of expanding DMS/NIR ratio was the generation of mounting inflationary pressures causing “Gresham’s Law” to activate since mid-1960s as figure 4.9, in comparison to figure 4.12, below. The resultant consequence of the extensive use of the influential DMS tool, relative to the NIR, was inflating and/or dis-inflating the

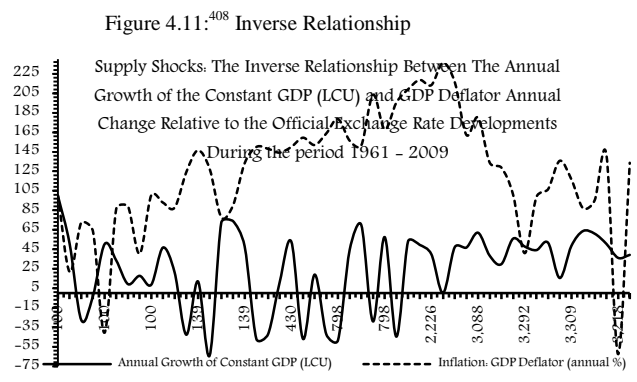
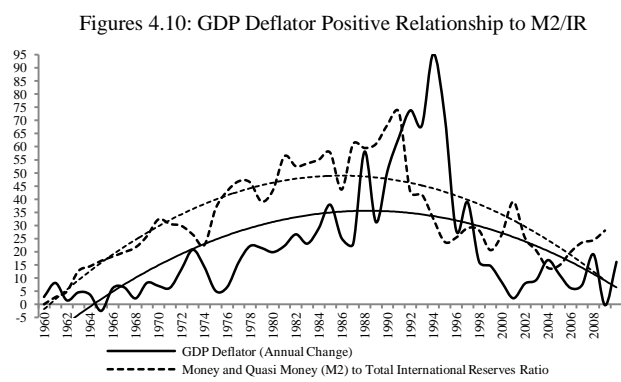
overall price level as figure 4.10 below shows. As expected, those inflationary pressures contributed in widening the opened CAD, actually since 1957, as showed in figure 4.7 above.



Source: WB Database

As figure 4.10 below shows, the GDP deflator increased, as it decreased with the increase, and the decrease, of the DMS/NIR ratio. That means that the domestic inflation of the overall price level was following suit. But the decline of the GDP deflator, since 1990, didn't mean that the overall price level, as figure 4.9 shows, stopped from its sustained rising. Since 1990, its sustained rise was just stabilized.

Despite their pressures in opening, and sustaining the widening of the CADs, inflation rates sustained its negative shocking to the Sudanese economy's supply side. As its distinctive feature, *supply shocks cause the aggregate price level and the aggregate output to move in opposite directions.*<sup>407</sup> This is because a negative supply shock raises the domestic production costs and *reduces the quantity producers are willing to supply* at any given aggregate price level in the short-run, and vice-versa, as figure 4.11 below demonstrates.



Sources: WB Data Base and Sudan's Central Bureau of Statistics

What figures 4.10 and 11 above imply is the following: the Sudanese economy was sustainably affected by supply, more than demand, shocks. As clear from the rising CPI, in

figure 4.9 above, looser monetary policy boosted domestic aggregate demand. But it also weakened the domestic, relative to foreign, currency's purchasing power and, as result, was already prompting savers, to put high pressures on NIR/DMS ratio, as will be seen below, to budge their money offshore. The resultant persistent gap between the official value of the pound and its price in the black market suggests that investors expect the government to allow the currency to fall even further. The problem, then, is of the expectation of depreciation risks that caused, in several episodes, to become a self-fulfilling loss of confidence.

Figure 4.11 above confirm the suffering the Sudanese economy from different kinds of supply shocks, more than bottlenecks. The failure to overcome, or at least resist, the negative impact of the supply shocks made GDP growth to go negative. That implied that Sudanese policy-makers were not capable of solving the puzzle of: *whether the central bank should fight the slump by pumping cash or fight inflation by pulling cash out of the economy.*

Looking at figure 4.10 above, it can be seen that the sustained dependence on the expansionary NBKIs, which must be transformed into local currency, it can be seen that they continued to add, partially, to the prevailing quantity of the DMS relative to the NIR size. As it can be observed from all related figures, domestic monetary policy remained to influence Sudan's international trade balance, ER, and domestic inflation. As a result, it was sustaining the increase in the prevailing inflation of the domestic overall price level. In normal times, the counterpart of a trade deficit is capital inflows, which reduce interest rates, hence increase DMS and the committed ER. As thus, volatile and insufficient *supply of NBKIs* therefore remained pressing in slowing down the annual real GDP growth rates. Consequently, devaluation for the overvalued ER, due to the hiking inflation, rate in the Sudanese heavy-import dependent export-oriented UUE, must never be unexpected.

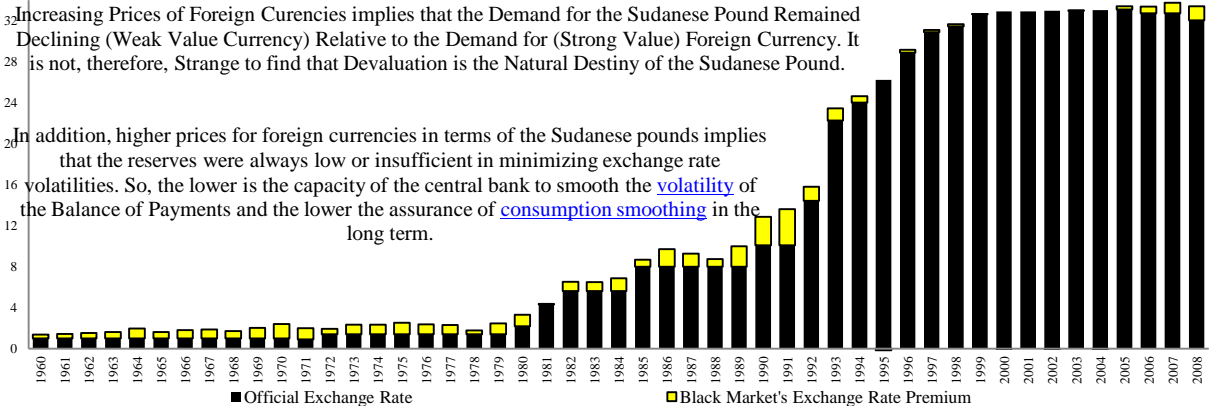
So, like banks, indebted governments of the heavy-capital-import-dependent and export-oriented UUEs will always be vulnerable to self-fulfilling financial, but mainly currency, crises, as mentioned above. Currency devaluation does appear to send bad warning signals to different segments of investors, lenders, and creditors in the different sectors of the national economy. Creditors would stop extending credit and demand repayment at the first sign of

trouble,<sup>409</sup> in such economies as the Sudan's. Devaluation, in a heavy-capital-import-dependent economy, actually makes things more complicated. Since devaluation is a government decision, the government practically declares its insolvency and admits wanton policy measures, mainly when the country's NIR/DMS ratio is below the shielding limits. Insolvency crisis also reflects itself in the *fire-sale* the country's GDP via devaluation. As a result it leads to the loss of domestic and foreign investors', lenders', and creditors' confidence in the government's macroeconomic policies.

It is also a sign of the government admission in adopting a past wanton policy measures. The BWIs were created to avoid the recurrence of, among others, the 1930s' competitive currency devaluation war experience. According to the latter case, experimented devaluation proved to be a self-defeating policy. This is because it led to the embezzlement of each country's market shares in each others' in the open economic environment. Devaluation, therefore led to the confidence-loss of the each country's trade-partners' trade-partners.

Sudan suffered enormously from several nominal devaluation crises, mainly, since early 1970s due to the influence of the brittle undeveloped UUE that heavily relied on unaccommodating export sector and inapt macroeconomic policies. Despite the sustained devaluations during the period under study, the black market was having its sustained toll in adding its ER premium, as figure 4.12 below shows.

Figure 4.12: ER Devaluation and Black Market Extra Premium (%)



Source: WB Database.

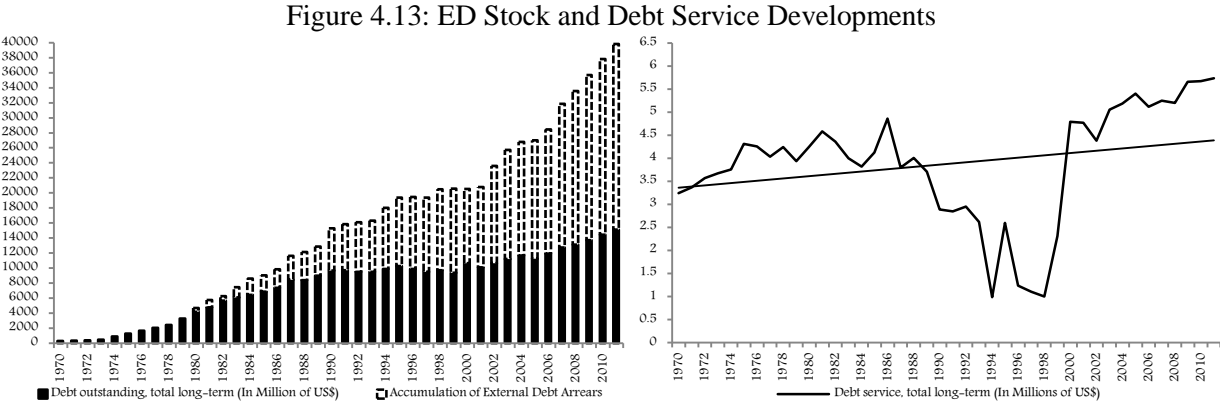
So, the nominal, not the real, devaluation, was the government supply shock policy that affected positively the domestic aggregate price level in the national economy, had led, among others, to the relative wane, not wax, in the influencing Export/GDP ratio as figure 4.5



above shows. The dream for improving its international financial positions, therefore, remained just as it is, a dream. In comparison to the influencing Export/GDP ratio declining trend as in figure 4.5 above, it can be seen that Sudan remained suffering from sustained depreciations and devaluation since early 1960s as shown in figure 4.12 above. That was due to the adoption of unsupportive and unviable export-oriented strategy of the expanded undeveloped colonial economic edifice.

In a fragile undeveloped UAE, it can be found easily that its national budget revenues remained heavily dependent on unstable export revenues for long periods of time as table 2 above shows.<sup>410</sup> ER devaluation was actually increasing the budget’s export revenues in local currency. But those local currency increases, due to the volatility of the budget’s export revenues, were not proportionally and steadily increasing with the increases in the public expenditure. As result, the budget deficit remained its opening and widening along most of the period’s study. As a result, it can easily be discovered that devaluation was causing, among other policy tools, the country to drown in mounting public, but mainly external, debts quagmire, and its mounting arrears.

Furthermore, due to the inefficient resource utilization, at least since 1970s, the path of the increasing share of the tradable goods and services in the Sudanese GDP trend, as in figure 4.2 above, was in parallel increasing trend path of the long-term ED outstanding as figure 4.13 below shows.<sup>411</sup> As it is implied, the influencing and unaccommodating external sector, under the social pressures for meeting the annual development goals, must put high pressure on the adopted ERR during the period under study.



Source: WB Database.

Economic history is actually an excellent guide for understanding the main mechanisms of the present reality that economic theories are talking about. History, therefore, is a good place to look for experiences, knowledge, and tested theories and policies that dealt with diverse events. It will remain a good guide for experienced events of today and in the future too. Sudan is a fertile country with tested CCs history.<sup>412</sup> It is one of the countries, since the establishment of the Gezira scheme in 1925 and its independence in 1956, that suffered enormously from real CCs, but seriously since early 1970. This chapter will show some of the history of the dynamics for generating financial, but mainly currency, crisis events in Sudan during the periods 1930/33, 1957/59 and 2008/12.

#### 4.4. Sudan's Financial Crises Archetype:<sup>413</sup> -

The macroeconomic equilibrium of the inherited and expanded Sudanese economic edifice, since its post-independent era, proved to be highly fragile and vulnerable, as highly sensitive, to diverse unfavorable exogenous shocks. According to the international rules of the game, the management of the economic trilemma, in the case Sudan, as in similar countries, to which the monetary regime remains subjected, becomes too much complicated in the face of those shocks. As mentioned above, the effects of a negative supply shock, in the short run, lower aggregate output growth due to higher aggregate price level.

It is well-experienced, in such cases, that there are no easy policy solutions that shift the economy's short-run aggregate supply, relative to its aggregate demand. That is, there is no government policy that can easily affect producers' profitability to compensate for shifts the economy's short-run aggregate supply-side. So the policy response to a negative supply shock cannot aim to simply push the supply-side back to its original pre-shock equilibrium.<sup>414</sup> The enforced trilemma, in such situations, impose the need to sacrifice either the independency of the monetary policy or the fixed or managed floating ERR or the international free mobility of the NBKIs. Depending on the domestic social and political context, and the available policy-tools, it really enforce a serious bemuse since it becomes difficult to choose which of the above three policy tools to be sacrificed, mainly in case of Sudan.

The negative movements of the trilemma's policy tools affect negatively the supply-side of the Sudanese economy. The above trilemma bemuse was always resolved when the Sudanese monetary authorities was forced to sacrifice, by devaluation or by allowing open-market-depreciation, its committed ER causing the DMS to expand relative to its dwindling NIR, which reflect the insufficiency of NBKIs. That was always due to the delay in implementing, in advance, the proper macroeconomic structural reforms, and the necessary structural changes, in the national economy when ample resources are available.

The trilemma management difficulty, in the case of Sudan, can be made clearer by contrasting it with structurally diversified export-oriented economies of the world. In other words, enforced ER devaluation, below or above crisis threshold, is more effective in countries, with advanced relative to undeveloped economic structures. That was clearly stated by the 1985 WB Development Report: -

*“An economy's capacity to adjust is ... affected by its structure. ... a high dependence on the foreign exchange earned from a few key commodity exports reduces flexibility in adapting to a sudden decline of prices. In contrast, an economy producing a high proportion of diversified and internationally tradable goods and services, while also vulnerable to terms of trade shocks, can more easily avoid debt-servicing difficulties. This is because expenditure-switching adjustment policies, such as a devaluation, have a larger base on which to operate.”*<sup>415</sup> [Emphasis Added]

What the above quote pay attention to the following: *unlike the UUEs*, such as the USA, *devaluation can become an effective policy tool* when that economy has a structurally a *“larger diversified export, and smaller undiversified import, base.”*

Despite the above domestic dimension of the trilemma puzzle, it is observed, along the World's history of financial crises episodes, that when the influential international prices of the dominant export commodity and/or NBKIs suddenly collapsed, for whatever reason, the whole economy of the troubled country collapsed with it.<sup>416</sup> Sudan was a “*no exception*” country to this rule as figures 4.1A and 4.1B above showed. Its history with financial crises proved to have put Sudan on the accumulation of debt, arrears, and CCs path when the dominant export commodity's international prices and/or NBKIs collapsed. The diverse unfavorable exogenous shocks forced the Sudanese economy, in such cases, to be gripped by

the strong set of laws that was engendered by the financial crises events. For example, it is very easy to find that the real GDP per-capita growth rates and the ER to collapse sharply in the case of Sudan when the international prices of its dominant export commodity and/or NBKIs collapsed as a result of, direct or indirect, impact of Sudan's trade-partners recession or financial sanctions on its economy.

The following cases show how the Sudanese version of the undeveloped export-oriented UUE can fall promptly into CCs and in accumulation of EDs when triggered by a sudden, i.e. unexpected, unfavorable exogenous shock, that cause its NIR to fall sharply. The chapter will start with the financial crises of the 1930s and then the 1957/58, i.e. after independence, and end with the 2009/2012 CCs. These three events are outside this research's study-case period. It is to be noted in advance that these crisis episodes were always preceded by export commodities' revenues booms that suddenly busted and led to financial and CCs.

#### 4.5. Facing the Flaw Facts of the Colonial Economic Edifice: -

##### 4.5.1. The 1930s Great Depression Test

The Sudanese colonial economic edifice was established by the heavy reliance on NBKIs,<sup>417</sup> amid subsistence rural economy, as far back as the 1900s. During this period the Egyptian pound was the currency in circulation. It was perceived, by some of the Sudanese as a paranormal achievement. Unfortunately, it was not at all because it was not impervious to any type of financial crises, mainly from CCs. As erstwhile colonized countries around the world, its economic performance and expansion remained heavily dependent on the international price of the *one influential* raw cotton exports for the needed foreign currency for the needed imports.

As a result, the established foreign-currency dependent modern economy's roaring and development for its growth remained tightly linked to its trade-partners' unstable economic growth performance. The availability of the foreign currency remained to have the lasting gargantuan influence on the roaring and the growth level of the newly established export-oriented economy. Relative to otherwise, this gargantuan firm relationship was actually the major source for the very slow, as it was its utter horrendous limitation to the rapid growth of Sudanese economy and the population's welfare.

The very scant documentations about the impact of the Great Depression during the 1929 – 1933 evidently showed how fragile was the established colonial economic structure. In specific, the established colonial economic structure was suffering from its gargantuan dependence on volatile revenue from the exportation of the low value-added raw material for the *uncertain and risky world market*. That continued to be a drawback on the stabilization of the national economy without the support of NBKIs, which is equivalent to the CADs. NBKIs are an original complementary constituent for the national economy stability for its ERR.

During the 1926 – 1929 advanced countries booms, due the stability of the core European countries’, mainly the Great Britain’s, ERs, the famous “AlGezira large-scale Scheme” was established. The investment boom was a strong displacement of the colonial economy that always preceded economic crashes. As expected, by 1929 – 1930, Sudan fell in a financial crisis, and its aftermath Great depression, that hit Europe’s and the world economy. Sudan’s foreign trade was depressed, and with it the rest of the colonial economy. As a result, the domestic financial position of the country deteriorated to the extent that: -

"أصبحت النقود نادرة والأسواق كاسدة، ... " "وهددت الإقتصاد السوداني بالإفلاس الوشيك لولا القروض التي تحصلت عليها القروض من أسواق لندن بضمان وزارة الخزانة البريطانية لتمويل الأعمال الرأسمالية بمشروع الجزيرة."<sup>418</sup>

Due to this advanced countries’ depression crisis, the ruling British government practically devalued the circulating currency internally rather than its nominal ER internationally. In other lexis, it forced the *government labor* to be the *shock-absorber* of *its own financial, but actually its fiscal, crisis*. As documented in Dr. Sidgi Awad Mohanmd Ali Kaballo’s Phd. thesis:<sup>419</sup> -

*“The Great Depression of 1929 – 33 was disastrous to the newly established mono-crop export economy. The average price of cotton in International Markets decreased from 18.4 in 1928/29 to 7.9 pence/LB in 1929/30 and to 6.4 pence/LB in 1930/31 .... The direct result was the collapse of export earnings from £13.5 million to less than £6 million in 1932. The Government revenue decreased from £6.8 million in 1928 to £3.8 million in 1932 ... forced to ask for Egyptian financial aid. Austerity measures were introduced including cutting the salaries of government employees and the reduction of their number and the reduction of government expenditure on public utilities. Salaries of all government employees were cut by 5 to 10%, and the starting salary of the newly appointed graduate ... was reduced from £8 to £5.5 per month, leading to the Gordon College Student's strike of 1931. The total number of government*

*employees decreased from 5888 in 1930 to 4773 in 1932 and 4753 in 1933. Those who lost their jobs included 20% of the 1000 British. Some 800 Sudanese and Egyptians had their employment terminated. Some departments suffered more than others. For example, in the Department of Sudan Railways, 31% of British, 33% of the Egyptian and almost all the Greeks personnel lost their jobs.”*

The financial crisis now activated the trilemma puzzle. The arrival of the British net balancing loans, therefore, saved Sudan from declaring its bankruptcy, although it added to its EDs obligations. This very strong financial crisis shock that hit Sudan was reflected in the colonial British government response. Among the most important: -

*“... a large number of Sudanese employees in various government departments were either laid off work or had their wages reduced as a result of the economic depression of 1931 ...”<sup>420</sup>*

So, the British responded to the contraction impact of the world financial crisis. The contagion caused a domestic self-fulfilling financial crisis. In other words, it adopted the historical classical macroeconomic approach for resolving the above trilemma because generated by the financial crisis. There was no Sudanese currency. The circulating currency was the Egyptian pound on which the colonial government had no authority to devalue it or not. In normal times, the peer to CAD is NBKIs, which reduce domestic, relative to foreign, interest rates, hence increase in DMS. So, the first alternative solution for the financially and currency constrained authorities, as the quotes above clarify, was the resort to the NBKIs, given the fixed ER to cover the widening CAD.

But it seems that the NBKIs were insufficient amid an uncertain length of the depression. Instead of devaluing of the Egyptian pound's ER nominally, the financially and own-currency constrained colonial government adopted a harsh austerity program as an alternative measure to achieve what is known as the “*internal devaluation,*” i.e. *downward adjustment of prices and wages relative to trading partners as alternative to ER devaluation which becomes unnecessary in the aftermath of unsustainable capital inflows,* as the quote above clarified. That policy measure must have reduced the economic growth of the economy as the unemployment rate increased. It must also had had helped in protecting the available NIR after enforcing a harsh domestic recession.

From a trilemma perspective, the latter measure was a natural strategy, i.e. increasing unemployment and cutting wages, as a partial internal devaluation, to achieve the same results for balancing the external sector as via the currency devaluation. The severe shortage/scarcity of the circulating foreign currency in the domestic and foreign currency markets, states clearly that Sudan had actually fallen in a real, not nominal, CC/devaluation event. On that basis, it can be said that the export-oriented *paranormal* UUE colonial edifice was not of the kind that is a financial crises water-proof.

Although with different means and circumstance, it seems that the post-independent governments continued to be adopt the same colonial methodology as it will be seen below.

#### 4.5.2. The 1957 Financial Crisis. –

The uniqueness of the inherited colonial UUE structure was described in the first post-independent 1956/57 Budget speech as follows: -

أولاً: يسود إقتصادنا الطابع الزراعي وسنعمد في تصريف محاصيلنا الأولية على أسواق عالمية لا يمكننا التحكم فيها. وعليه فلا بد أن تكون أسعار محاصيلنا والرغبة في الحصول عليها عرضة لتقلبات واسعة. ثانياً: لا تزال الصناعة متخلفة وأسباب التوسع في الميدان الصناعي كتوفير المال محلياً وجذب رؤوس الأموال وتدريب العمال وإستجلاب الفنيين وإنشاء طبقة من مديري الأعمال لا تزال رهن البحث والعلاج. ... خامساً: أن رؤوس الأموال الخصوصية لا تتوفر بالدرجة الكبيرة التي تتطلبها التنمية الإقتصادية. سادساً: أن الإذخار الشعبي يكاد يكون منعدماً وحتى الآن لم يوجد بعد النظام الذي يوجه الإذخارات الصغيرة وجهة التنمية الإقتصادية.<sup>421</sup> [التسميك مضاف]

Taking the above Sudan's economy's macroeconomic features, it can be seen that falling in a financial crisis was a very natural consequence since cotton was dominating an average of 70% of all export commodities. That was the result of the very influential structural economic trade-growth relationship of the inherited colonial economy, with its prime cotton export commodity, with its advanced industrial ex-colonial centers. The influential earnings from that dominant export commodity established a firm intertwined dynamic and structural relationship with the domestic macroeconomic fundamentals. In outspoken lingo, the influential international price of the exported quantities of the dominant cotton and its derivatives were the major source of the economy's income *on which the Foreign Trade Balance, Central Budget Balance, NIR Balance Sheet, and Income Per-capita were heavily depended.*<sup>422</sup> It was also the major source, among others, for the domestic volatility of the economy's GDP growth volatility and CCs.

Despite this unaccommodating role, the fall of cotton's influential international prices, as oil after 1999, remained to play a crucial role in triggering CCs events, mainly via the fiscal sector, in Sudan during the period under study.<sup>423</sup> Table 1 shows how the 1957 – 1959 Europe's recession affected negatively these macroeconomic sectors. As table 3, in the appendix, highlighted, all Sudan's macroeconomic sectors' variables deteriorated during 1957 – 1958, despite the austerity programs that were adopted by the first ruling democratic government of the time.

Table 3 shows how Sudan's macroeconomic fundamentals were strongly tied to the achieved total export revenues. The enforced annulled international absolute/comparative advantage canon didn't avert Sudan from suffering severely from a financial crisis event. The external sector, via the international prices of its dominant cotton export, remained to be the influencing gargantuan force on the development processes for the growth, and the currency stability of, the nationalized colonial modern sector. As table 3 highlights, the NBKIs for financing the CAD wasn't sufficient enough to stop the NIR from dwindling in the face of the European unfavorable recessionary shock. That was a form of discomfiture for the ruling government in defending its newly committed "fixed, but adjustable, ERR" according to Bretton Woods' international *rules of the game*. Table 3, therefore, shows clearly that the sudden deterioration in the current-account deficit, which is equivalent to NBKIs, due to the fall of the influential international price of the dominant cotton, was at the heart of the crisis.

The story behind this event was as follows: -

Actually, the colonial borrowing has been the answer to counter almost all Sudan's development<sup>424</sup> and macroeconomic<sup>425</sup> torments in the past 57 years. By March 1957,<sup>426</sup> i.e. after 57 years of a colonial NBKIs-dependent development processes era, the Sudanese economy, witnessed its first "*Coyote Moment*."<sup>427</sup> During March 1957 – March 59, the Sudanese economy was adversely hit hard and affected negatively by its top European trade-partners' recession during these two years. So, the democratic government responded to the contraction impact of the European recession. The contagion caused a self-fulfilling domestic financial crisis.



At this time, the trilemma brainteaser is activated and the ruling government must decide if the committed ERR has to be sacrificed in the face of lost foreign currencies to free the monetary authorities to expand the (inflationary) DMS to compensate for the losses.

As table 3 demonstrates, the impact of the European recession was reflected in the sharp drop in the world prices of the influencing dominant long staple cotton. It started to plummet in March 1957 and sustained its waning till it halved down by 50.1% by March 1959 relative to the average reached during 1956 – 57.<sup>428</sup> The shape of the influencing cotton price drop during 1957 – 1959 took the V-shape as figure 4.15 below shows. The V-shape of the influencing international cotton price signaled the depression, as the recovery, impact on the fundamentals of the Sudanese economy.

There was, of course, an ineffective optimistic political calculation for the management of the economy that was shocked by the supply of foreign currencies in such hard times, as the economic trilemma dynamic formula stress. Before the financial crisis, that was reflected in the full repayment, by early 1957, of the colonial debts rather than rescheduling them.<sup>429</sup> Now, when the Sudanese economy was hit, in the same year, by the European recession, debt itself has become the problem. That is, the first post-independent democratic government's hurrying in getting rid of the colonial debts didn't allow the ruling politicians to minimize the severance of the generated crisis on the economy and/or the population that the repaid colonial debts would have had allowed.<sup>430</sup> It also didn't help them to prevent and/or minimize the amount of supportive accumulation of EDs that started to accumulate since 1957.<sup>431</sup> That was on the account of the lost buffering NIR due to the influential cotton's international price plummeting as figure 4.23 below confirms. As a result, the financial crisis was very severe to the Sudanese economy. The domestic situation was worsened as described by the Minister of Finance and Economy, in his 1958/59 Budget speech, as: -

*"أن الموقف الإقتصادي السيئ الذي نشأ في عام 1957م والذي ازداد سوءاً كنتيجة لقلّة محصول القطن وغيره من المحاصيل عرض البلاد إلى بعض المشاكل الإقتصادية الهامة التي تبرز بوضوح في أمور ثلاثة أولاً: تقديم الميزانية بعجز لأول مرة منذ سنة 1932م وثانياً: هبوط إحتياطينا من العملات الصعبة إلى حد غير مرض وثالثاً: قلّة المحاصيل على دخل جزء كبير من المواطنين"*<sup>432</sup>

Prof. Mohd. Omer Beshir added the generated domestic macroeconomic and the political environment dimension that was generated by the 1957/59 financial crisis as follows: -

'كانت هناك أزمة بالنسبة للعملة الأجنبية، ولذلك جرى حظر واسع على الإستيراد، وأصبحت البضائع الإستهلاكية نادرة الوجود في الأسواق، وحدث في ذلك الوقت أن ساد سخط وتذمر عام في طول البلاد وعرضها، وقامت عدة مظاهرات منددة بالسياسة الداخلية للحكومة وبالسياسة الخارجية. كما حدثت عدة إضرابات ...'<sup>433</sup>

In the heavily import and export dependent Sudanese economy, it is clear that the ruling government responded to the contractionary impact of imported crisis. The domestic financial crisis was therefore a reflection of the imported crisis, and as a result was a self-fulfilling domestic financial crisis. Despite the enforced austerity program, which complicated more the domestic economic recession, and the government's adherence to its rigid desire to maintain the (after-repaid colonial debts) NIR, during that period, it can be seen that the foreign debt re-started to be re-accumulated since 1957 onwards.<sup>434</sup> The objective was the mythical belief of the first post-independence democratic government to overcome the crisis-after-math deepening recession, which aggravated the Sudanese people's anger. As a result, the government couldn't overcome the political pressure except by borrowing externally to finance its widening trade balance, and the related shocking of the foreign currency supply-shortage, crisis,<sup>435</sup> as the quote above implies.

Also, despite the fall of the influencing export revenue by more than 50%, the government borrowing in 1957 was *especially for* meeting the high government imports for its annual programmed "*development projects.*" That development optimism was actually reflecting the very favorable cotton export earnings in the pre-crisis year, i.e. 1956. But the post-1957 recession must have had made the government's optimism, in 1956, meaningless and unwise. Imports actually fell only slightly in 1958.<sup>436</sup> But the private sectors' imported consumption goods were heavily restricted as the quote above described.

Figures 4.14 and 4.15 below shows how the (Liverpool) price of the major (Sakel) cotton fell from its peak of US cents 69.3 per pound in 1956/57 to US cents 34.6 per pound in 1957/58 then recovered below the pre-crisis price to only US cents 41.63 per pound in March 1959.<sup>437</sup> That is, the drop and recover of the influencing international cotton price took the V-shape which implies a rapid and huge price fall, although with less pick-up, as figures 4.14 and 4.15 below shows. That, in turn, was reflected in a V-shape of the country's influencing

overall export revenues that fell sharply by about (-35.9%) in 1958 relative to its peak in early 1956 as figures 4.16 and 4.17 below.<sup>438</sup>

Figure 4.14: Price fall of the Sudanese Cotton

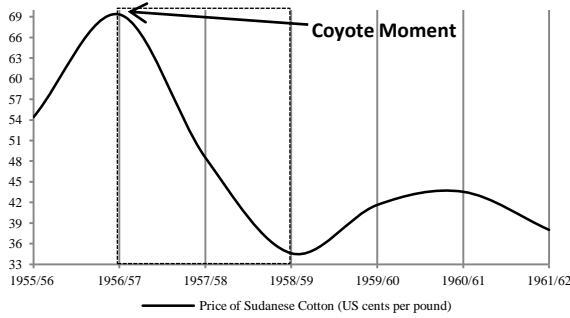


Figure 4.15: Annual Changes in the Price of the Sudanese Cotton

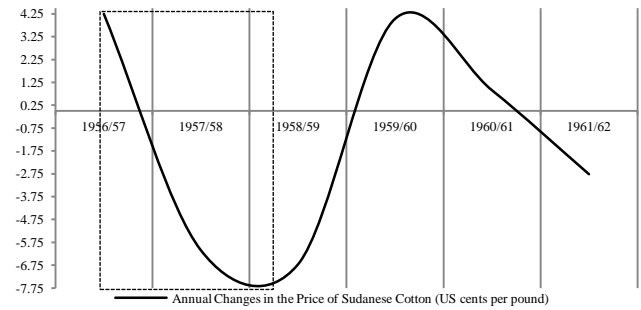


Figure 16: Real Export Per-Capita

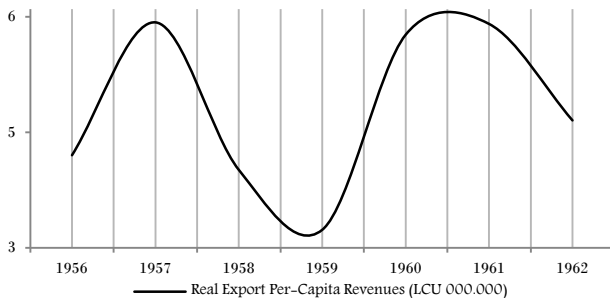
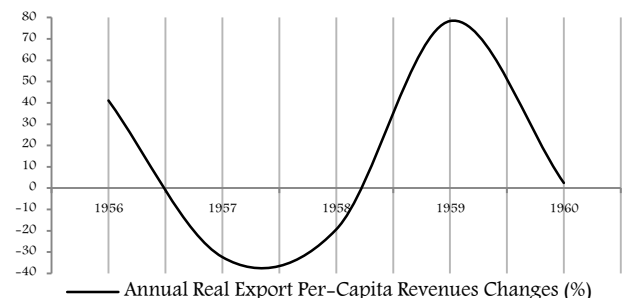


Figure 17: Real Export Per-capita Annual Changes



Source: IBRD, 1963, Table: 15 (In US Cents per Pound) and Table: 1 Above.

The influencing export sector remained to have heavy dingdong on the Sudanese (modern) economy as long as the latter remained heavily dependent on imports for the stability of its roaring and expansion.<sup>439</sup> As a result of the influencing Sudan's international cotton price V-shape, its foreign trade deficit took the same V-shape too. That is, a huge and rapid deficit was opened in 1957 and widened in 1958 to recover wishy-washy in 1959 as figure 4.16 shows. Also, the huge drop in the influencing export proceeds, which formed, on average, 40% of the national budget's total revenues, reduced the government capacity, as figures 4.19 and 4.20 show, to finance the different sectors of the economy.

Figure 18: The Trade Balance and NIR

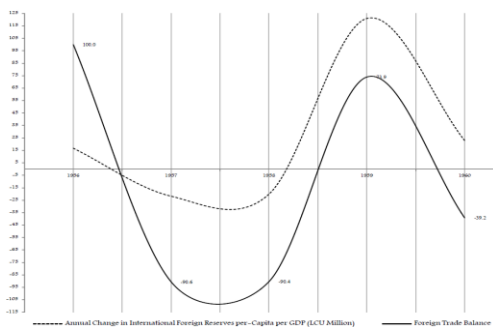


Figure 19: Freefall after 1957

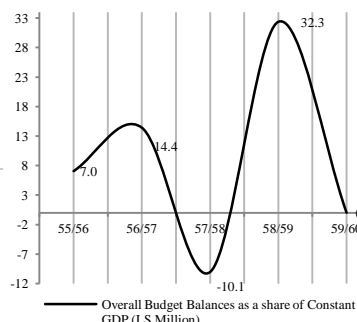
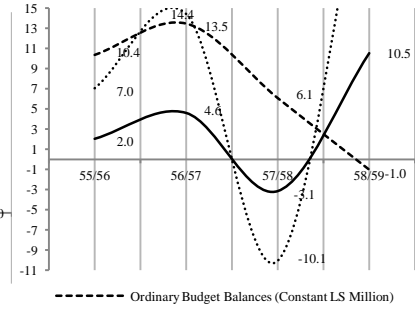


Figure 20: Freefall after 1957



Source: Table 3.

The cotton sector, therefore, remains to influence the macroeconomic performance of the fiscal, monetary, and the ERR of, and therefore the overall expenditure space in, the national economy. As it is well known, when the influencing foreign trade and national budget sectors weaken, the national economy weakens with them too. As a result of the negative foreign currency supply shock from the influencing cotton's international price fall on different sectors of the economy, the real GDP followed suit, mainly of the modern sector.

As figure 4.15 above shows, as the international cotton price took the V-shape, real per-capita income in figure 4.21 below, as the other sectors shown in the figures above, took the similar V-shape with it, i.e. reduced and increased with it. As result, the sustained 1956 aggregate demand level, by the high cotton price of the 1956, i.e. before the 1957 Financial Crisis, suddenly became unsustainable by March 1957. That is, the 1957 financial crisis made Sudan to become suddenly consuming and investing beyond its (depressed) 1957 national income relative to the 1956 national income. *Long-run unlimited or unsustainable rapid ADD developmental or secular transformational processes proved to be very risky and crises, and its aftermath recession, engendering power in the case of the unindustrialized heavy-capital-import-dependent undiversified structure of the Sudanese economy.*

As figure 4.20 above shows, the realized budget surplus in 1956/57 didn't protect the real GDP per-capita from falling by (-4.8%) in 1958 as shown in figures 4.21 and 4.22 below, due the adopted austerity programs.<sup>440</sup> In policy lingo, the budget surplus in early 1957, in comparison to the deficit in 1958, was depleted and didn't support the Sudanese economy during such hard times for helping the national economy to avoid the full collapse due to enhanced tax rates. It only took one year later after the fiscal policy has changed, as figures 4.18 and 4.19 above shows. But the same budget acted as the only main tool for the national economy to adjust rapidly. As mentioned above, the ruling government of the time actually resorted to international savings in 1957 to finance the engendered foreign trade deficit to finance the programmed "development projects," via its national budget.

Figure 4.21: The Recession Caused a Loss of Three Years of Steadily Increasing Real GDP Per-capita

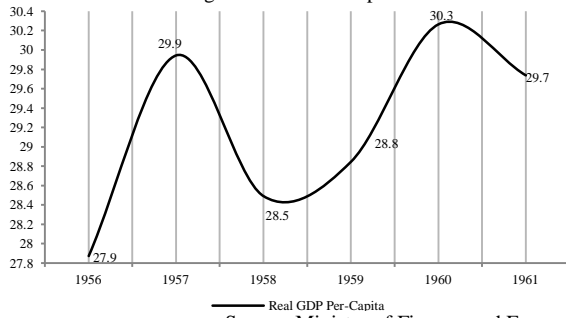
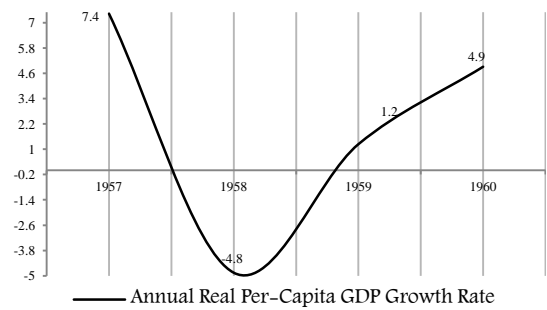


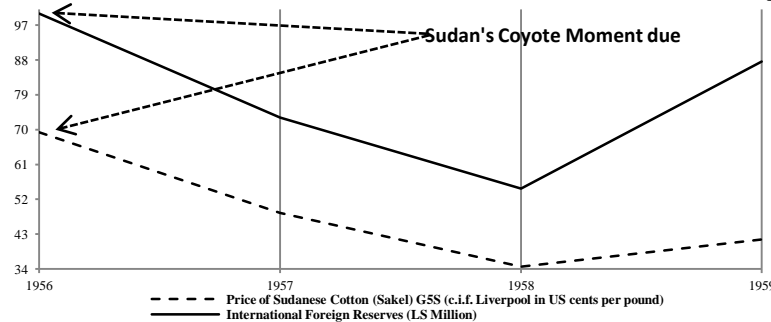
Figure 4.22: Annual Changes in Real GDP Per-capita



Source: Ministry of Finance and Economy: Economic Survey, Late 1950s issues

But the NBKIs was clearly insufficient enough to finance the engendered foreign trade and the national budget deficits during the two-years of deepening recession in Europe and Sudan. As a result, it can be observed that the country's dwindling NIR, the main buffering tool for defending the committed ERR, were used, beside the adopted austerity program, to complement the NBKIs shortage. Consequently, the NIR fell by about 34% between 1956 and 1958. As figure 4.23 below shows, the NIR sustained its dwindling in parallel with sustained decline in the 88% export-cotton's influencing international prices. That is because the latter's decline affected negatively the overall export revenues by affecting negatively the value of the influencing revenues from the exported quantities of cotton. With insufficient NBKIs to match the opened or widened CAD, the NIR dwindled to compensate the NBKIs deficit. With such unfavorable exogenous adverse shock, it is clear that the committed ER was vulnerable to crisis if the deepening recession period in Europe was extended for much longer period.

Figure 4.23: Strong Downward Positive Association between NIR And Cotton International prices (Covariance: 9.9)



Source: Table 3.

Essentially, the ERR was actually saved from falling in crisis due to the severe limitation of the private sector imports, borrowing from the rest of the world, withdrawing from the NIR, and the short European recession period. But that success didn't mean that there weren't any relative price or financial stock corrections in the Sudanese economy. As the engendered

financial crisis imposed a severe natural contraction, due to the foreign currency shortage, the government of time aggravated the situation with more contraction at the time when the Egyptian currency was legally circulating.

The corrections that were made by the ruling government, of the time, as the colonial's in the great depression, started with the adoption of an austerity program, during this period to limit, mainly the private sector's aggregate demand for foreign currencies. But the above action was negated by the new military force that took power in Nov. 1958. It broke the adopted cotton-minimum reserve price policy. It therefore sold the piled-up stocks of the export cotton stock at the influential prevailing international cotton prices to increase the government's financial capacity. In other words, that was, of course, a form of price-correction that implied a relatively fire-sale price level relative to the ex-minimum reserve price. That action was a form of the export cotton-price, rather than currency, devaluation to relax its influence relative to the overall devaluation of the ER of the Sudanese currency.

Accordingly, the adopted official fixed, but adjustable, ERR of US\$ 2.8716 per Sudanese pound was protected from falling in crisis and adjustment. The ER was maintained as agreed upon with the BWIs in Sep. 1957.<sup>441</sup> Also, it can be said that the ability of maintaining the ER actually maintained the confidence of the foreign as the domestic lenders and investors that supported the committed government with realized NBKIs that financed the widening CADs.

In addition, as the above figures show, the rapid return of the Sudanese economy to normality was due to the short-term recession, although at an equilibrium that was lower than the pre-crisis normality. That is, it was due to the rapid recovery of the influential cotton's international prices, although at below the pre-crisis price level, *that helped the Sudanese economy to re-adjust itself more than the government's policies*. Despite the government's resistance policies to the 1957/1958 deepening recession, it was also due to the commitment reputation of the new Sudanese government's in fulfilling its international obligations, as in servicing their ex-borrowed funds, and promises. All these actions and fulfilled promises must have had supported the new government to depress any speculators' expectations about a potential CC.

But that does not mean the inherited Sudanese macroeconomic flaws were insignificant and hence manageable. It was only due to favorable reputation of, and confidence in, the government commitments and rapid, but anemic, recovery of the influential cotton's international price. The 1960, the IBRD Report warned against that success by stating that:

*“The past three years have illustrated Sudan's heavy dependence on cotton earnings, as well as the inherent tendency of its economy to adjust itself with a time lag of about one year to fluctuations in these earnings, provided that sound fiscal policies prevail.”*<sup>442</sup> [Emphasis added]

The above analysis reflected the serious defect of the inherited colonial economic edifice in the form of the heavy dependence on foreign income generated by the Sudanese economy on one major export commodity. The major flaw in the inherited modern economy can be seen from the V-shape that the international cotton price took. As the above figures shows, the entire macroeconomic fundamental variable took the same shape, this implies that the whole economy is fully influenced by the international cotton price in addition to the domestic macroeconomic policies. This was confirmed when the 1957/58 recession was over by March 1959 in Europe and Sudan's recession was over too.<sup>443</sup>

In other words, the inherited Sudanese colonial UUE edifice proved to be very fragile in the face of any unfavorable exogenous shocks. It can easily fall off the high mountain cliff and thus witness a Coyote Moment, once the international price of the dominant export commodity collapse. This was due to the heavy-dependence on the rest of the world to satisfy almost all economy's physical and financial needs by the importation of consumption and investment goods and services. In other words, that was due to the absence of competitive international import-substituting industries for the production of capital and consumption goods and services. In other words, the increased brittleness of the colonial economy was due to its heavy dependence on the overall export revenues had been tested by sharp tumble in the dominant cotton's export price, as during the great depression. As expected, the severe drop in the influential oil international price of the dominant cotton export caused the economy's fundamentals to follow suit as the figures in this section show.

The resultant consequence was the fall in a severe and intolerable financial crisis with increased vulnerability to CC. The futile suffering of the Sudanese economy from the

European two-year recession was at a relatively high socio-economic cost. Among them were the diminished direct and indirect tax revenues base, political instability, loss of NIR, reduction in the export income, and the increase in borrowing, at an interest cost, from the rest of the world.

This is an important lesson that must be considered by any future policy-makers. The meant lesson here is about how to eliminate the influence of the one commodity income on the overall performance of the Sudanese economy to avoid a well-experienced sudden financial collapse, as during the 1930s' Great Depression.<sup>444</sup> That physically powerful influence of *Sudan's dependence on the dominant and influential cotton earnings* remained enforcing its sustained need for (insufficient) NBKIs to meet the growing domestic needs for goods and services from the rest of the world, mainly during international bad times. In turn, the insufficiency of the NBKIs led always to the depletion of the country's NIR buffer that is generally used to protect committed ERRs. So, were, and will be, there wise economic leaders to absorb this well-experienced pre and post-independence lesson?

#### 4.5.3. The 2009 – 2012 CCs: –

Despite its undeveloped macroeconomic economic structure, Sudan's experiences with its CCs remained to be *a no guide experience* for almost all the privileged Sudanese leaders in the post-independence era. Sudan's history, during this sub-period, demonstrated that its central bank conducted a loose monetary policy, loose control over the exchange value of its currency, and a loose international flow of capital, including the ability of Sudanese citizens to move their wealth abroad without the ability to force the domestic opportunity cost to match those set by foreign central banks. International finance trilemma commences from the fact that, in most nations, economic policy makers would like to achieve these three goals. But that would be a (big) zero result. A country must pick only two of these goals with the economics inexorable logic forcing the third to be forgone. It is very clear, therefore, that CC is really a very specialized intricate field of macroeconomic study that is understood only by those who are familiar with the branch financial crisis, and its founding laws, than just general, or other branch-specialized, economists.



The above Sudan's 1957 financial crisis, as the ones that followed it, must have had been highly prioritized among the most top priority objectives in the different post-independence issued development plans and programs. Of course, the core purpose is a must for a drastic weakening, if not elimination, of the work of the recessionary set of laws that remained to be engendered after financial crises events. To guarantee their die-out, the most targeted must be the drastic weakening, if not eradication, of the physically powerful influence of *Sudan's heavy dependence on influencing dominant export prices and earnings* from a major export commodity. This is in order to weaken, if not to eliminate, in the short to medium periods of time, its influence in adjusting almost all the economy's macroeconomic fundamentals.

But the ultimate goal will ever remain in the protection of the ERR's buffering NIR against *the fluctuations in these influential export prices and earnings and NBKIs*, in the face of currency speculators. Accordingly, the target must remain to strengthen investors' confidence in the currency, once it starts to gain the international convertibility function. The following CC case study proves that the lessons from past financial crises were never learnt.

As during the colonial era, post-independent national government remained relying on borrowing NBKIs and compensatory DMS expansion as a response to counter all Sudan's development and macroeconomic torments in the past 57 years, i.e. 1956 – 2012.<sup>445</sup> By late 2008, i.e. after 52-years of independence and growth, the Sudanese economy witnessed another “*Coyote Moments*.” That is, the above Sudan's 1957 financial crisis was somehow repeated but with much more heavier dependence on the influential international prices and export earnings of another kind of a dominant export commodity as figure 4.2 above shows. That alternated influential dominant export commodity was oil. During this period of time, Sudan remained to suffering from the famous IMF policy prescription pressures for the adoption of austerity, tight DMS, ER devaluations, and internal devaluation. Simultaneously, Sudan remained also lacking an international lender of last resort, who remained to be mainly the creditors who remained pressing for EDS. Oil production started in 1998 and its exportation started in 1999 under the 1989 - ? ruling government. As table 1 and figure 4.2 above show, the relative increase of dependency weight on oil's influential international

prices and earnings replaced and surpassed the dependency weight on cotton's influential international prices and earnings.

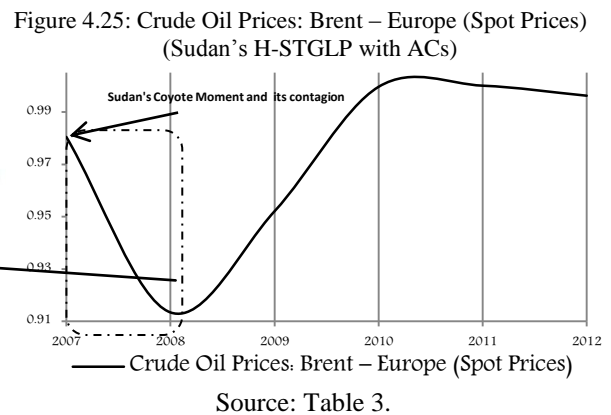
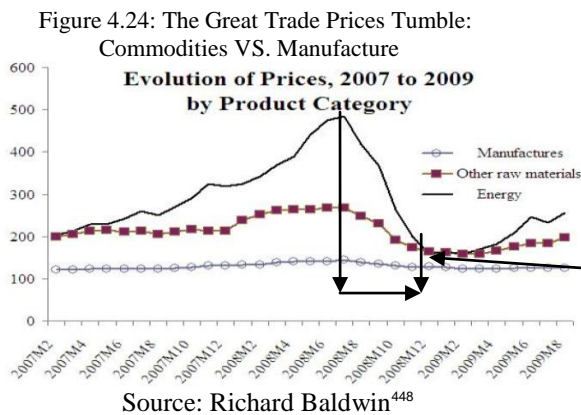
The ruling economic school, therefore, maintained what it is dubbed above as the colonial development paradigm for the growth of the national economy. That school perceived that the replacement of cotton with oil exports as a *transformational development process*. That of course was not a *developmental structural change*. It was rather a *commodity modification or replacement* for the expansion of the inherited colonial edifice. The replacement of cotton by oil didn't make the Sudanese economy immune against currency, and other types of financial, crises. That is because *the resultant resistance powers of the very small UUE heavily indebted economy was much weakened, not strengthened, by the heavier dependency on oil's, relative to ex-heavy dependence on cotton's, influential export prices and earnings in the face of any diverse unfavorable exogenous shocks*. Oil, and its derivatives, were produced and exported while the Sudanese economy, during 2007 – 2012, was suffering from the impacts of the following events: -

1. The sustained civil war with “The Republic of South Sudan;”
2. the adoption of (*discarded*) “Neoliberal Structural Adjustment” programs<sup>446</sup> that *liberalized* Sudan's very small UUE that is heavily indebted and capital-import-dependent poor country;
3. The sustained pressure of the international community's financial sanctions that started in 1984 and intensified since 1997;
4. The 2008 GFC and the sudden bust of the influential oil international prices on which the whole Sudanese economy remained superiorly dependent;
5. The 2010 Election pressure in Sudan;
6. The cessation of “The Republic of South Sudan” in July 9<sup>th</sup>, 2011 that evaporated almost 75% of the productive oil wells.

The Sudanese economy, therefore, became relatively less than before diversified, due to the increased of oil-exports to more than 90% in the overall export commodities.<sup>447</sup> It therefore became much more fragile during the oil leading era than during the cotton leading era. The reason was not only to the increased heavier dependence on the influential oil's international prices but, due to the above unfavorable internal and external exogenous adverse shocks. There was, therefore, a real political and economic miscalculated optimism. As a result,

Sudan suffered from three CCs during the period 2008 – 2009, as it suffered before them. The economic story behind these CCs went as follows: -

As figure 4.24 below shows, almost all major international commodities’ price boom busted since August 2008. The same figure also shows that the most affected commodity was the energy/oil commodity. The impact of 2008 GFC made the international oil prices take the inverse V-shape as figure 4.25 below shows. That is, its price had suddenly fallen rapidly and enormously from roughly a peak of US\$96.94 per barrel in late 2008 to an estimated trough US\$61.74 in 2009, i.e. oil export prices fell by around 57%. This was a thwarting “*Coyote Moment*” for the ruling government from such very high peak. At this time, the trilemma brainteaser is activated and the ruling government must decide if the committed ERR has to be sacrificed in the face of lost foreign currencies to free the monetary authorities to expand the (inflationary) DMS to compensate for the losses.



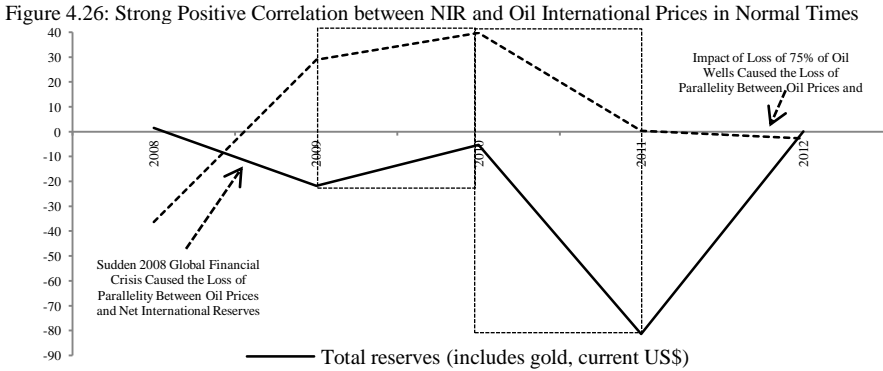
Falling incomes are bad news during debt and global (deflationary) financial crises environment.<sup>449</sup> The impact of the sharp fall in the influential international oil price on the different sectors of the Sudan’s national economy can be seen in table 4 in the appendix. Although the influential international oil price recovered fully since the 2010 election year, as figure 4.25 above shows, Sudan lost, by mid-2011, almost 75% of the oil quantities that were produced and exported. The impact of these diverse unfavorable exogenous shocks is shown in table 4.3 in the appendix.

To ease reading table 4.3, its statistics are visualized in the figures below. So, as figure 4.25 above shows, the oil price bust event, in 2008, resulted in the disappearance of 36.3% of the oil price/barrel relative to its price in 2007. It took the V-shape as cotton’s influential

international price in 1957 as figure 4.23 above shows. As it is expected, *due to the unchanged inbuilt features of the inherited colonial edifice*, when Sudan’s dominant oil exports’ influential international price falls or recovers, everything else linked to it, whether directly or indirectly, must, as a rule, follow suit. The fall in the ICIP implied a foreign demand fall crisis that contributed negatively on the overall growth of the economy’s GDP. It was a supply-side crisis that caused a growth slowdown to look favorably on structural reform and austerity, as the IMF – WB policy prescription for Sudan implied always.

Accordingly, the rapid hefty fall of Sudan’s influential international price of oil caused a considerable waning in the terms of trade.<sup>450</sup> As expected too, NIR fell and rose in parallel with the influential oil’s international price fall and rise with it, after the 2008 GFC and before the 2011 Republic of South Sudan Cessation, as figure 4.26 below shows. This is the same to what happened to Sudan’s NIR with the influential international price of cotton in the 1957/59 financial crisis as figure 4.23 above shows. Its tumble and recovery took the V-shape. The V-shape implied that the spontaneous NIR and oil international price decline and upsurge were very rapid and enormous. That is because the latter’s recession and recovery remained affecting negatively the overall export revenues by affecting negatively the value of the quantities of the extremely dominant oil exports.

Oil’s export revenue, influencing more than 90% of all export revenues, was, therefore, influencing the country’s NIR, as was Cotton during 1956 - 1960. With insufficient NBKIs to match the opened or widened CAD, the NIR dwindled to compensate for its deficit. As a result, it is found that it had dropped below US\$1 billion by end of 2008, covering about 1.2 months of imports and rapidly faded further to US\$300 million by end of March in 2009.<sup>451</sup>



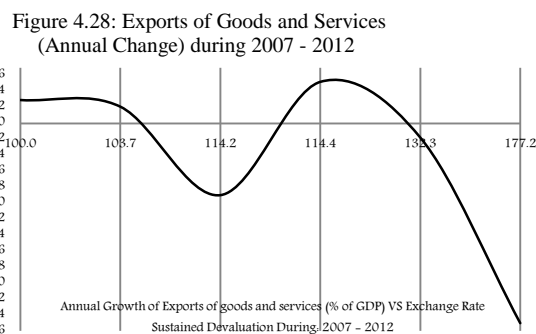
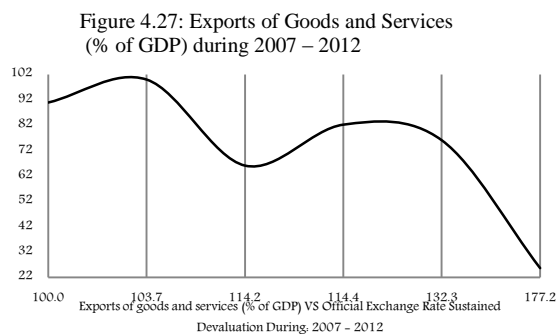
Source: Table 4

Therefore, the ruling (1989 - ?) government had adopted an improved quantitative replica of the inherited colonial economic development paradigm for the economic growth of the Sudanese economy. Thus, and taking into considerations the international and national political and non-political contexts, falling in CC is therefore a natural end due to the much more heavy dependence on the extremely dominant oil exports.<sup>452</sup>

The ruling (1989 - ?) government, therefore, relied heavily on quantitative structural reform, rather than qualitative structural change, of the inherited undeveloped colonial economy for increased foreign currency income. In other lingo, the ruling government, during this period, didn't make a drastic developmental process in favor of the stability for rapid growth of the Sudanese economy. That quantitative structural reform of the externally indebted poor Sudanese economy, as figures 4.2 and 4.13 above show, was made clear by the 2009 Country Memorandum as:

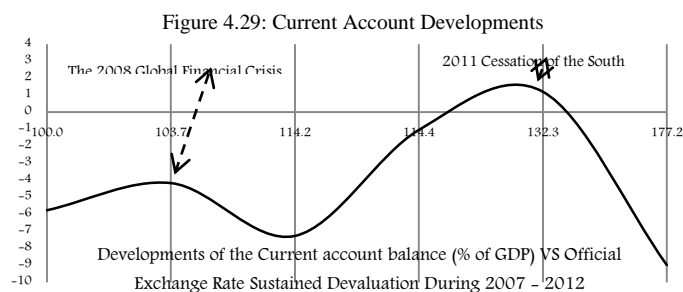
*“More than 95 percent of Sudan’s exports are now coming from the oil sector, while the share of non-oil exports has fallen from nearly 5 percent of GDP in early 2000s to less than 2 percent in 2008. On the other hand, the share of consumption goods in total imports has increased in recent from already high base..... The flip side of increased imports of consumption goods is a decline in the manufacturing sector’s share in total output.”*

In other words, the increased brittleness of the Sudanese economy's due to its increased heavier dependence on the overall export revenues had been tested by sharp tumble in the dominant oil's export price as figures 4.27 and 4.28 below show. As expected, the severe drop in the influential oil international price of the dominant oil export took V-shape causing the economy's fundamentals to follow suit as the figures in this section show. The decline in the export revenues was aggravated after the secession of South Sudan in the same 2011 year, which led to the loss of 75% of the oil producing wells as figure 4.27 below show. That is, this time, the influential export revenue problems shifted from the influential international export prices to the influential supplied quantities for exports.



Source: Table 4

During the 2008 – 2009 turbulence, Sudan’s CAD widened, as figure 4.29 below shows. It improved and achieved a surplus in 2010<sup>453</sup> but it opened again by mid-2011 and sustained its widening there-after the cessation of “The Republic of South Sudan.” The shift of the current account balance between deficit to surplus and deficits again reflect, on the one hand, the impact of the volatility of the oil international price that dominated oil export commodity, by an average 88% - 90%, during the 2000s as figures 4.27 and 4.28 above shows. On the other hand, the engendered CAD by 2008 fall of oil prices and the 2011 fall of its exported quantities, made Sudan to become consuming and investing beyond its own national income relative to the 2010 surplus.

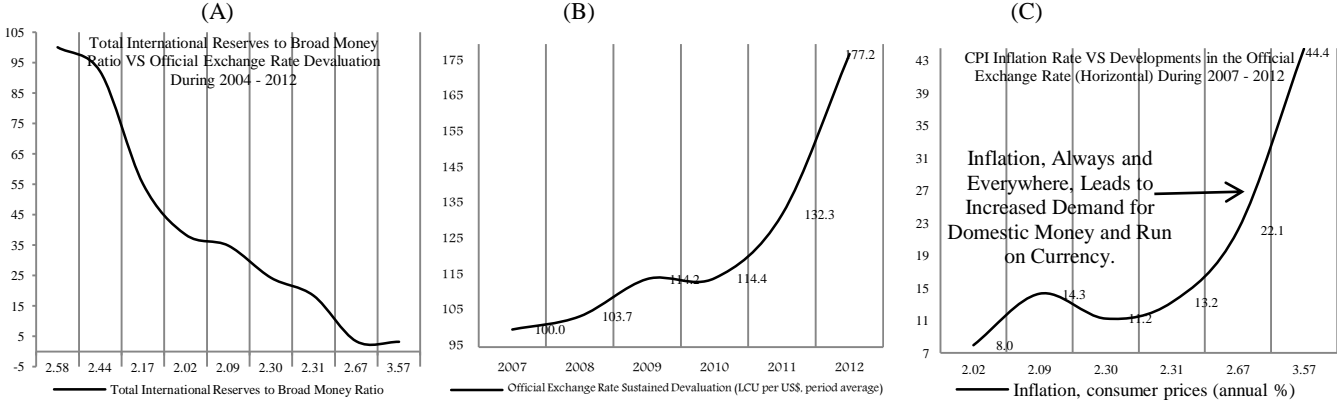


Source: Table 4

That is, Sudan sustained its dependence on the importation of NBKIs at least till 2010. As figure 4.26 above shows, NBKIs was insufficient, despite the improvement in the NIR after 2009. That improvement was achieved by strong inflationary devaluation and massive increases in the DMS due to what today became known as the quantitative easing policy. Consequently, that action resulted in the degeneration of the already existing imbalance between the supply of the NIR and the supply of domestic money, as figure 4.30(A) below shows. That is, the DMS relative to foreign exchange currency supply departed from unity in favor of the former.

As a result, the NIR relative to DMS sustained its stern deterioration as figure 4.30A below shows. In other words, the demand for foreign currencies due to the mammoth size of DMS in the hands of Sudan’s residents led the prevailing ERR to worsen too as figure 4.30(B) below shows. The worsening of Sudan’s ER, it can be seen very clearly, in figure 4.30C below, caused the domestic CPI to inflate/deteriorate in parallel to it.

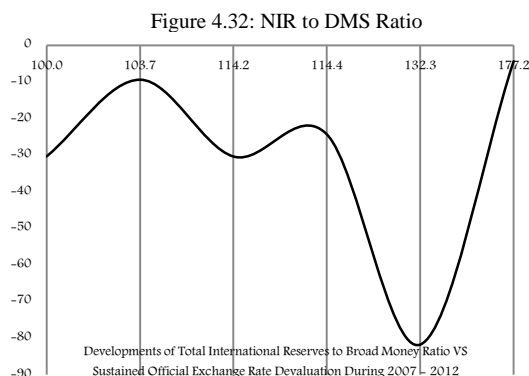
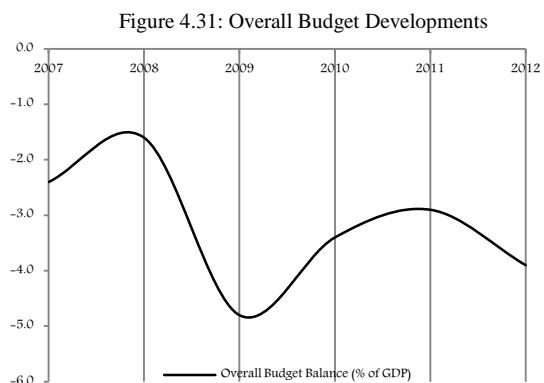
Figure 4.30: Sharp CCs CPI and CPI Inflation Run Episodes



Source: Table 4.

The deterioration of the NIR relative to the DMS can be attributed to the insufficiency of the government revenues from the oil export revenues and to the insufficiency of the NBKIs. As figure 4.30A above shows, the government resorted to the printing press to compensate for the lost revenues to finance its rigid expenditure and the insufficiency of both NBKIs and export revenues. At the same time, as figure 4.31 below shows, the Sudanese government, therefore, continued to maintain an expansionary fiscal policy during 2008 - 2010. But, as can be observed from figure 4.31, the government became much dependent on expanding the DMS, which is the inflation fuel as figure 4.30C above shows.

The expansion of DMS relative to the NIR as figure 4.30A above shows that it was used to finance the unmanageable budget deficit. Fortunately, the NIR/DMS ratio trend since 2011 was reversed as figure 4.31 below shows, despite reservation of the budget deficit. That meant that the government actually protected and increased its NIR and sacrificed its committed “managed floating” ERR as figure 4.34 below shows.



Source: Table 4.3.

But that decision led to the increased scarcity in the supply of foreign currency relative to the DMS as figure 4.30A above shows. Accordingly, it can be said that the NIR weren't used to defend/manage the committed "managed floating" ERR. The ruling government wasn't having any excess of any available stock of any other alternative to export commodities, as was the stock of cotton available during 1957 – 59, to fire-sale it to the trade-partners' recessed economies instead of sharply devalue the ER. The ER was therefore left to its own destiny on the one hand, and sharply devalued, due to the BoPs crisis, i.e. the alternative name to severe external imbalance and for CC. In the heavily import and export dependent Sudanese economy, it is clear that the ruling government responded to the contractionary impact of imported crisis. The domestic financial crisis was therefore a reflection of the GFC, and as a result it was a self-fulfilling domestic financial crisis.

As can be observed from figure 4.33 below, there is a positive relationship between the current account developments and CPI inflation rates, despite the sustained devaluation of the OER. This implies that, as inflation was rising, there was an increasing ADD for foreign currency relative to the increasing scarcity in its supply from export revenues relative to the increase in DMS, which increased the demand for imports more than exports, relative to declining NIR. It clear from figure 4.33 below that the *(insufficient) NBKIs* opened the doors for the *CADs to widen at rates that remained depleting the exchange regime buffer, relative to DMS*, as it *simultaneously pushed domestic, relative to foreign, price levels up*. So, the *inflation-driven demand for foreign currency was pressing the ruling government to bring-in more NBKIs*. Due to severe foreign currency scarcity, there were actually long queues for long times for long days in front the foreign currency exchequers' windows. That reflected a



sustained severe confidence loss that led to run on the Sudanese pound. The official currency pegs was, therefore, forced, and not opted, to be abandoned as its insufficient NBKIs-dependent NIR dwindled, relative to the expanded DMS, as figure 4.30 above shows, while the enormous EDs, and its arrears, continued ballooning. As a result, Sudan witnessed *two* severe *self-filling* CCs in 2008 and 2012 out of five years during 2008 – 2012, whose crisis-moments are established in figure 4.34 below.

Figure 4.33: Positive Relationship between CPI Inflation and Current Account Balances<sup>454</sup>

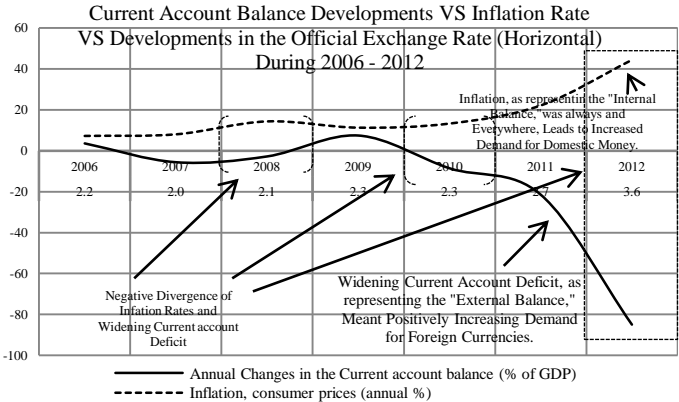
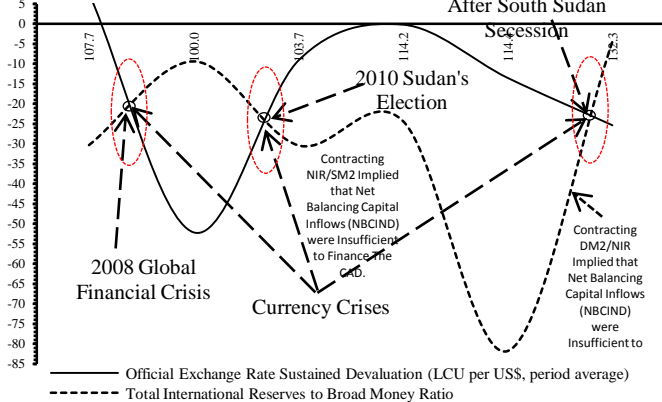


Figure 4.34: Sudan's Three CCs during 2007 – 2012 (ER: Foreign, Per LCU)



Source: WB Data Base

Figure 4.34 makes it obvious that the Sudanese government of the time, as a result of the economy's meltdown, as most African currencies, witnessed catastrophic devaluations during the period of turmoil in commodity markets in 2008/09.<sup>455</sup> Sudanese ruling government was therefore forced, not opted, by an escalating payments crisis to devalue the pound, mainly after the cessation of the Republic of South Sudan in mid-2011. Also, figure 4.34 makes it obvious, the economy, with its unchanged economic structure, with sustained dependence on, or openness to the rest of the economically unstable world, the period between CCs narrowed under the floating, but managed, ERR.

That was the natural consequences for letting DMS to grow at higher rates than exports and NBKIs proceeds, hence the NIR. Of course, that was a weakening policy of the government's own monetary policy. In terms of other prose, volatile NBKIs proved an unreliable long-term relief for domestic short-term commitment to finance distressed foreign exchange market. It only caused the country's ED stock to accumulate and its NIR to deplete rapidly, as sustained EDS increases over time.

Furthermore, due to depending on one major export ICIP, due to the cult belief in the annulled static, not dynamic, comparative advantage canon, hence overall export revenues, in feeding the buffering NIR, was Sudanese governments' greatest historical mistake.

Allowing NBKIs, beside domestic credit, to expand caused DMS to increase rapidly, relative to the buffering NIR growth rate. As a result, the committed ER was pulled-down, in terms of foreign currency per unit of local currency, rapidly in the black market from its ex-prevalled ER relative to foreign currencies and vice versa,<sup>456</sup> as figure 4.34 above shows for the 2008 and 2012 CCs events. This implies an key lesson that expanding the DMS is too much ineffective in stabilizing the ER, via devaluation strategy, relative to its contraction, via interest rate manipulation.

The increased brittleness of the sanctioned heavily indebted Sudanese economy, mainly after the farewell of the Republic of South Sudan, was well confirmed in a “*Letter Of Intent*” to the IMF Managing Director, in March 7, 2014, by the Minister of Finance and National economy and the Governor of the Central Bank. The brittleness of the expanded undeveloped paradigmatic colonial economy was described as follows: -

*“As you know, Sudan’s economy has suffered significant setbacks during the past three years on account of the secession of South Sudan in July 2011, the ensuing rising economic imbalances, civil regional conflicts, continuing U.S. sanctions, and an unsustainable external debt position. In response to these challenges, we adopted a three-year emergency plan covering 2012 – 14, with the task of addressing the post-secession challenges and laying the ground for a reconstruction of our economy. This undertaking is complex, but we believe that, absent debt relief and the support of the international community, it will be difficult to reach our economic potential.”*<sup>457</sup>

The IMF Staff Monitored Report re-stressed that the root structural crisis remained to lie in the Sudanese economy’s structure by stating that: -

*“Sudan is a fragile state mired in a heavy debt burden, international sanctions, and volatile domestic and regional political environments. These problems, together with limited revenue mobilization, are constraining Sudan’s growth prospects and poverty reduction efforts. The economic situation worsened following the secession of South Sudan in 2011, resulting in the buildup of large economic imbalances. The authorities have embarked on a stabilization program*

and are expecting that a return of peace in South Sudan will ensure continuation of oil flows, which are crucial for sustaining the government renewed adjustment process resumed last September.”<sup>458</sup>

Despite the above-disappointing unsuccessful development efforts, the Sudanese economy has actually done considerably better since the crisis began. Sudan has benefited from the monetary easing policy to finance the already opened budget deficit, which means that it didn't pursue austerity policies. despite the fading of the real GDP per capita growth rates relative to that achieved in 2007, the expansionary monetary policy actually helped and supported the Sudanese UUE's to remain afloat, at least till 2010, the year the ER appreciated. It therefore helped the economy to avoid an ominous collapse as figures 4.35 and 4.36 below show. But, at the same time the generated high inflationary pressure led to severe domestic contraction of the domestic aggregate demand, which explains why the growth of the GDP per-capita didn't recover to the pre-crisis level, as figures 4.34 and 4.35 below show. *This confirms, for the second time, that long-run unlimited or unsustainable rapid ADD developmental or secular transformational processes proved to be very risky and crises, and its aftermath recession, engendering power in the case of the unindustrialized heavy-capital-import-dependent undiversified economy. This is because Sudan didn't adopt the safe maximum developmental ADD that the previous experienced historical minimum export revenue and NBKIs would allow for the minimum imports, as implied by the protection policies, when faced with the most severe unfavorable exogenous shock. This is consistent with conclusion of the IMF's figure 4.1B above.*

Figure 4.35: The Recession Caused a Loss of Five Years Of Steadily High Real GDP Growth Rate (annual %)

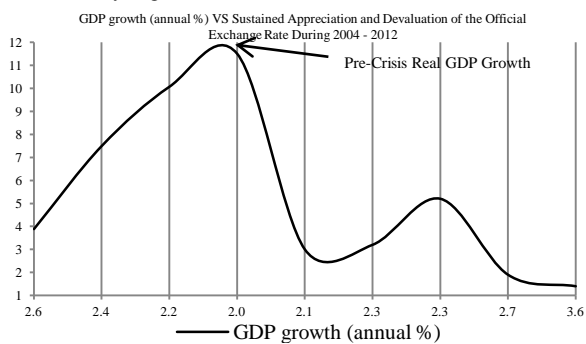
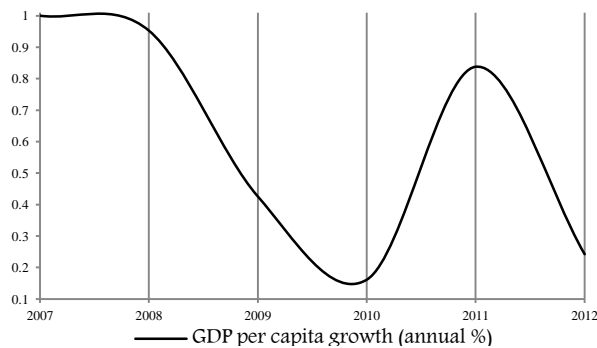


Figure 4.36: GDP per capita growth (annual %)



Source: WB Data Base

As figure 4.33 above shows, the ruling government found itself incapable to support the created mounting excess domestic aggregate demand, relative to the pre-crisis, level except by

financing by the monetary easing policy due to the severe fall of the overall export revenues. As in 1957, the excess aggregate demand was actually created by the diverse, financial and political, unfavorable exogenous shocks that transformed the relatively smaller CADs during 2007 – 2009 and surplus in 2010 into mounting external and internal imbalances. In other words, the sudden fall in the export revenues lowered the capacity to increase the domestic aggregate supply by, at least, the same past levels of imports. All these must by now become naturally expected since there were no significant structural changes to the colonial edifice.

The 2008 and 2012 CCs, in comparison to the 1957 financial crisis, proves that there were no lessons learnt at all from past experiences with CCs. This comparison also proves that there wasn't any genuine development that destructed constructively the expanded inherited colonial economic edifice.

#### 4.6. **Summary and Conclusion:** -

Economic history, as direct field experiment methodology, is impartially an excellent test for understanding the main mechanisms of reality and the policies-response that economic theories are and were talking about. As can be concluded from above, Sudan's economic system's stability remained, as it remains, under the clemency of the exogenous influential international commodity prices that remains based on the cult belief in the "annulled" static, not the genuine dynamic, comparative advantage canon. At the same time, its macroeconomic policies remained deepening its dependence on exogenous factors, under the name of development or stabilization by increasing its dependence on NBKIs. The result was when it was heavily hit by strong exogenous negative shocks, the heavily import and export dependent Sudanese economy's ruling government responded to the contractionary impact of the imported crisis. Almost all the domestic financial crisis was therefore reflection of the imported financial crisis, and as a result were self-fulfilling domestic financial crises that was translated in CC.

As mentioned above, Sudan's governments continued to respect the prevailing international division of labor and specialization, which its core principal was the null and void "static," relative to the genuine dynamic, comparative advantage canon. This was while they were

determined to *change the structure* of the inherited Sudanese economy at rapid speeds. This implied that policy-making in the Sudan was guiding the economy in a CC path whenever it has been exogenously shocked financially. As seen above, the unfavorable domestic, as the external, factors were core player, as the CCs figures above demonstrated.

Pegs are, as a rule, means that countries have struggled for to reduce domestic economic instability. But when they are shattered, the consequences was staggering, mainly in the under-developing world.<sup>459</sup> *Sudan's major problem remained in the fact that while export incomes and NBKIs were stridently volatile with slow growth while ever-increasing payments for import were gradually more inflexible.* Sudan's economic decision-makers, with their extremely undiversified unindustrialized economic structure and different kinds of shocks it faced, often ignored the intolerable risks of the international aspect of Sudan's domestic economic crises. In other words, they never considered Sudan' foreign low-saving generating, unindustrialized undiversified, economic structure to be the root cause for almost all Sudan's long-history with financial, but mainly currency, crises. These crises were caused by increasing dependence on volatile and insufficient NBKIs, as a lender of last resort, during war as peace times, when faced with liquidity crises, in foreign currencies, and typically result in an aftermath recessions when a large portion of the influential international export-commodity prices disappear. The complimentary response was the increase of DMS relative to NIR. *Investors run on the Sudanese currency when they feared that Sudan's government wasn't able to purchase its currency at par.* History, therefore, remains a good place to look for told experiences, knowledge, and theories about tested policies that dealt with diverse, but mainly CCs, events.

As it is clear from the analysis above, Sudan's CC, as such crises in akin countries, was partly due to external factors. The shocks of the falling influential cotton price during 1957/59, as oil disappearance, since mid-2011, were having adverse effects on the external payments position of the Sudan, as many similar countries. However, there were also domestic factors that were also responsible for the CCs. They are usually lumped under the rubric of expansionary fiscal, NBKIs, and their impact on monetary policies. All of which

prepared the domestic economic environment to CCs when adversely shocked. They also played a significant role in the emergence and development of Sudan's ED crisis.

*Since the establishment of the Gezira Scheme in 1925, whose cotton product constituted 13% 1956, as oil 15% 2011, of its GDP, Sudan's economic and currency stability remained strongly dependent on it. CCs in Sudan were strongly associated with the dominancy of its foreign currency revenue, mainly, from one dominant influential export commodity and NBKIs +/- NIR relative to the quantity of DMS in the economy. The latter, reflecting the ruling government's monetary policy, influences the current account balances and, hence, the ERR. In another lingua franca, Sudan's committed ERR remained volatile with the volatility of the buffering NIR relative to allowed quantity of DMS in the economy. Buffering NIR, in turn, remained dependent on the overall, but mainly the dominant and influential cotton's, export revenues, unless stabilized by sufficient NBKIs +/- NIR. If the latter two were insufficient enough to compensate for a sharp falls in overall, but mainly cotton's, influential, export revenues, a situation that was presumed to be rescued by increasing DMS, the Sudanese currency must suffer a sharp devaluation, i.e. CC. Monetary policy, therefore, physically influences the current account balances and, hence, the ERR. Sudan's CCs, therefore, implies that there was a general failure of concerned economic agents to meet or maintain their commitments.*

The Sudanese situation in terms of fundamentals was therefore marked by poor economic development and foreign trade beliefs, with inflation by largely unconstrained monetary policy combined with external borrowing that was sufficiently large to raise the prospect of panic-driven outflows. Actually, that was due to the adoption of unsustainable debt paths that eventually imply that there must a sharp adjustment once an unfavorable exogenous shock hit the economy. Experience showed that diverse unfavorable exogenous shocks hit the real sector to be transmitted to the financial sectors of the economy. As can be observed, the influential export revenue crises can be due to the sudden sharp drop of the influential international export prices and/or due to the sustained fall in the influential supplied commodity quantities for exports. In both cases, NBKIs were unsupportive to maintain the

committed ERR. That is because, as the economy, with its expanded colonial structure, with an alternative commodity, increases its dependence on, or openness to, the rest of the economically unstable world, the period between CCs narrows, depending on the export prices, hence revenues, in its relationship to the buffering NIR. In other words, the monetary authorities must have copious buffering NIR to protect its committed ERR to enjoy a long-run credibility.

This implied that *Sudan*, in both cases, *didn't adopt the safe maximum developmental ADD that the experienced historical minimum export revenue and NBKIs would allow for the minimum imports, as implied by the protection policies, when faced with the most severe unfavorable exogenous shock. Long-run unlimited or unsustainable commodity-export revenue and NBKIs-dependent ADD developmental or secular transformational rapidity proved to be very risky and crises-engendering power in the case of the unindustrialized heavy-capital-import-dependent undiversified economy.*

So, the key to understanding the CCs in the Sudan has to do with an essential feature of its sustained export-oriented and import-dependent UUE's early stage of development. As it became clear now, Figure 4.2 above proves that the Sudan actually expanded the fundamentals of the productive base complex of the colonial economy. That is, the only achieved (fake) development was practically increased brittleness of the Sudanese economy due to increased quantitative heavier dependence on the overall export revenues as was tested by the sharp tumbles in the dominant raw-materials' influential export price. Its heavier dependence on oil revenues since 1999, relative to their weight in the post-independence cotton era, made the GDP, fiscal, and the adopted ERRs to become more heavily influenced by the revenues from the oil sector. That is, as the export-revenue share of one dominant commodity, by almost 90% or more, in the overall export revenues, due to un-diversification, the country's ER vulnerability to crisis increases.

As expected, the slump in the dominant export raw-materials' influential international price caused the economy's fundamentals to follow suit as the figures above show. So, the Sudan's economy, by 2011, became vulnerable to less strong unfavorable exogenous shocks.

Due to its low capacity to import, export revenues caused the insufficient borrowed NBKIs and compensatory DMS expansion to be answers to counter all Sudan's economic troubles in the past 114 years. The lessons from the experienced financial and CCs events must be extremely considered in all the future plans and programs for genuine *structural changes*, relative to the achieved *fake structural reforms*, for stabilizing the rapid growth of the UUE.

From 1957 through 2012, Sudan received enormous NBKIs to establish its modern sector of the Sudanese economy. Sudan is still a prisoner in its UUE raw-material export-oriented development stage. The most brittle point of this established Sudanese undeveloped economy still rests on its very heavy dependence on the international prices of one major export commodity for its income in foreign currency, whether during their favorable or unfavorable times. Both proved insufficient to meet the ever increasing needs of the Sudanese citizens. As a result, it forced a parallel dependence on the expansion of the DMS/NIR ratio. The reason behind the latter's action remained to resolve the economic trilemma because. The 2009 – 2012 CCs demonstrated that the committed ERR was always sacrificed to resolve the economic trilemma trap, mainly when the NBKIs were insufficient.

The sacrifice of the ERR is clearly justified by the severe parallel tumbling of the buffering NIR with the severe tumbling of the influential international price of Sudan's major commodity. So, when the NIR reach very low levels, foreign creditors proved to be unwilling to lend further or sufficiently support to Sudan's ER buffering NIR during such hard times to wither away the CCs event. Speculators' expectations become self-fulfilling.

The insufficiency of the NBKIs shortage was compensated by increasing the DMS, relative to the NIR, causing inflationary pressures that sustain an opened CAD. The realized NBKIs, therefore, is found adding more to existing stock of EDs. After ED reached US\$ 45.4 billion in their March 7<sup>th</sup>, 2014 letter of intent to the IMF, the Sudanese Minister of Finance and The Governor of Sudan's Central Bank divulged that: -

*“We recognize that the achievement of a stable and sustainable macroeconomic position consistent with strong and durable poverty reduction and growth will not be possible without the clearing of Sudan's arrears vis-à-vis the international financial institutions and other creditors and the financial support of the international community.”*<sup>460</sup> [Emphasis added]



In its “Country Report No. 14/203,” the IMF responded to the Minister of Finance and the Central Bank Governor to their financial support request, in the above quote, by stating that: -

*“The external debt buildup dates back to the 1980s. At end-2013, external debt was estimated at about US\$45.4 billion—most of which was in arrears (including to the IMF)—and is unsustainable. The unresolved arrears continue to hinder Sudan’s access to most sources of external financing, including concessional borrowing.” ... “If appropriately implemented, the SMP will allow for the strengthening of Sudan’s cooperation with the Fund on policies and payments, and may, in due course, support the authorities’ request for arrears clearance and debt relief.” ... “The joint IMF/WB debt sustainability analysis conducted at the time of the 2013 Article IV discussions classified Sudan as being in debt distress. This situation underscores the importance of arrears clearance and debt relief in order to bring Sudan’s external debt to a sustainable level and to facilitate the country’s access to external concessional financing. Reaching out to creditors will build broad support for debt relief and needs thus to remain a top priority for the authorities.” ... “Clear its arrears with the Fund, and have a fully financed plan and a timetable to clear arrears with the World Bank and the African Development Bank in order to restore its eligibility to borrow from these sources.”<sup>461</sup> [Emphasis added]*

Past financed imbalances associated with the surge in NBKIs to the Sudan have been worked off via extremely painful and costly ED arrears. Furthermore, taking the whole period from 1956 to the present, Sudan remained suffering from costs in the form of lost growth and inflation sufferings.

And now the ED itself has become the problem that needs to be solved, at least as conditioned by the IMF in the above quote. As the above experiences showed that the threshold for a CC when the prevailing ER is devalued by 13.86% or more. Consequently, it is found that the ensued drastic cut in imports, after the CC event, was causing negative effects on the economy’s economic growth and social welfare. The longer the crisis drags on, the more it looks like Sudan’s had “Lost Years” of rapid growth and welfare after the CCs events. It always takes more years for the growth and the social welfare to recover sustainably to the levels prevailing prior to the crises’ level. That is why old generations always see the old days as better than today. It may be now the high time to change the ruling economic mentality in favor of a new developmental paradigm and efficient macroeconomic regime for overcoming future bad status.

In summary, the existing Sudanese economic structure must be cured by the establishment of a counterbalancing import-substitution sector for the production of heavy and light diversified investment goods and services. The purpose is to make the domestic economy's functioning level exogenous, not endogenous, to the exogenous foreign trade sector, as the experience of the USA's long development history after its independence implies. The top-priority objective must be considering, in the future development plans and programs, the drastically elimination of the engendered set of laws by the past financial crises. Otherwise, the Sudanese economy will remain suffering from growth slowing export revenue volatility relative to the steady, hence rapid, growth of its economy. In other lingo, sustaining the colonial development paradigm for the growth of the Sudanese economy, will keep Sudan unsafe at its current undeveloped economic development stage. Sudan remained to be increasingly influenced by the main export commodity prices, as Sudan's main export and the government's main source of foreign currencies, and NIR feeder under the sustained belief in the static comparative advantage canon. It will therefore remain vulnerable to currency, as other types of financial, crises. Indisputably, it can be concluded that the above case studies proved that the influential commodity export's international prices, in their strong positive relationship to the NIR/DMS ratio, in their relationship to insufficient NBKIs, were the mother of all the currency and ED crises in Sudan.

This chapter argued that, the sufferings of today's Sudan remains hidden in expanding on the benefits of the colonial edifice paradigm. Expansion on the colonial edifice has significantly retarded serious economic development across Sudan during the past five decades. The problems were long in the making. Sudan remained highly dependent on influential cotton, which was replaced by Oil since 1999, revenues that remained financing over half the national budget and over two-thirds of exports. That was the end result of failure to seriously industrialize and diversify its economy since independence.

Relative to any plausible counterfactual, Sudan is now poorer today, with its heavy EDs and its arrears than it would have been had the colonial economic structure paradigm not maintained and expanded. Sudan has to eliminate drastically its increasing dependence on the

influence of the main export commodity price as Sudan's main export, the government's main source of foreign currencies, and NIR feeder.

#### 4.7. Critical conclusion.

The analysis above showed that when the influential commodity's international price collapse sharply, due to recessions on major trade-partners. As GDP/Capita, NIR follow suit relative to already expanded DM2. In chorus, as the CAD widened, which implies an equivalent inflows of NBKIs, there was a counter net capital outflows as reflected in the depletion of NIR relative already expanded DM2. In other words, they happened when negative changes in (unsupportive) NBKIs and commodity prices have been *core triggers* behind the CCs, given the unsupportive context of the global economy, prevailing domestic macroeconomic policies, and Sudan's international political relationships.

That was the expected result due to the undiversified unindustrialized productive-base and nature of the raw-materials of the export structure. NBKIs become negative in such times of need. Such heavy import-dependent economy falls in depression as the supply of currencies becomes scarce. As a result, devaluation is the end destiny of the committed ER.

The CCs analysis proved that the behavior of Sudan's ERs crash reflected Sudan's global and country-specific macro-financial factors. As seen above, and will be seen in the next chapter, given the monetary policy rate, NBKIs supported the central bank to allow its ER to appreciate and domestic credit/money supply boom, mainly via low real interest rates, supporting output to increase. But that was always matched by contractions in net exports or increases in net imports, hence causing the IEIs to worsen and output to decrease despite the adopted ERR.<sup>462</sup> These included the deterioration of the IEIs of the economy. That was the result of the export-oriented UUE nature of the dependent income growth, domestic inflation, current account balances, which equivalent to the size of NBKIs, and NIR relative to the DMS. In simple idiom, increased DMS relative to NIR, as part of NBKIs structure, not only ignite domestic inflation but also, opens, if not worsening, a current account imbalance, which complicate the economy's international financial position by increases in EDs, and destabilize

negatively the country's committed ERR by creating a parallel market base for foreign currency with an additional premium.

Sudan's economic crises have never, therefore, been a fiscal crisis at its root. It has always been a balance of payments, hence currency, crises that deeply depressed the economy, predominantly, due to unsupportive NBKIs during such hard-landing times. Consequently, it has manifested itself, partly, in budget problems, which remained heavily dependent on export revenues, and have then been pushed onto the center of the stage by ideologies. Expansion of DMS relative to shrinking NIR was practically currency-crisis blaster rather than dampener.

One of the main lessons of the above currency crashes is that economic authorities need more effective and more efficient ways to reduce the risks of the other ones in the future while structurally changing the prevailing undeveloped UUE structure. That includes, definitely, macro-prudential policies and restrictions supposedly aiming at putting different brake strengths on the different levels of generated imbalances while structurally changing. In other words, governments should develop a sense of urgency before it's too late. In specific, avoid financial sector's balance sheet expansion that caused, as it will remain causing, inflation sooner or later.

**Chapter 5**  
**Sudan's Increasing Dependence on NBKIs and CCs<sup>463</sup>**

## 5.1. Introduction: -

History is always the right place to study controlled economic policies experiments for discovering the trusted clichés governing the frequent recurrence of a specific phenomenon/objectives. As the previous chapter showed, the world economy is standing on a land of moving sands. Figures 5.1 and 5.2 below show the results of the advanced world economy's drivers' (AWEs) policy-regime shift.<sup>464</sup> They show that the realized major macroeconomic objectives had been higher and better during 1950/72 than 1973/2015.<sup>465</sup> The 1950/72 period witnessed the Bretton Woods' "fixed, but adjustable, ERR" that backed relatively stable prices and relatively lower unemployment rates. The 1973/2015<sup>466</sup> period witnessed the shift<sup>467</sup> to "floating, but manageable, ERR,"<sup>468</sup> that backed relatively lower prices but relatively higher unemployment rates.<sup>469</sup>

Figure 5.1: Advanced World Economy's Macroeconomic Developments

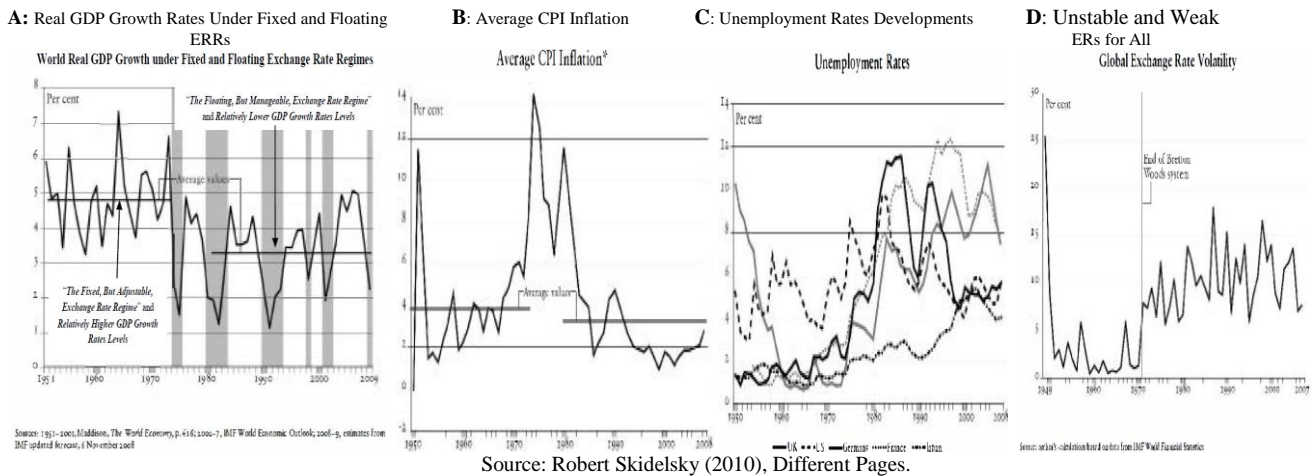
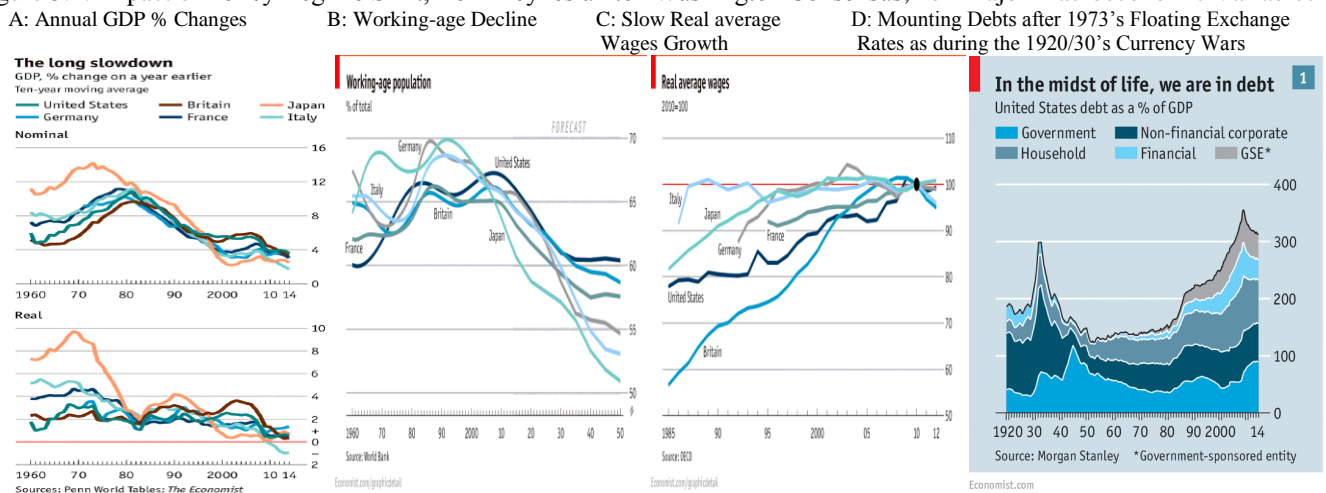


Figure 5.2: Impact of Policy Regime Shift, from Keynesian to "Washington Consensus," on Major Macroeconomic Variables

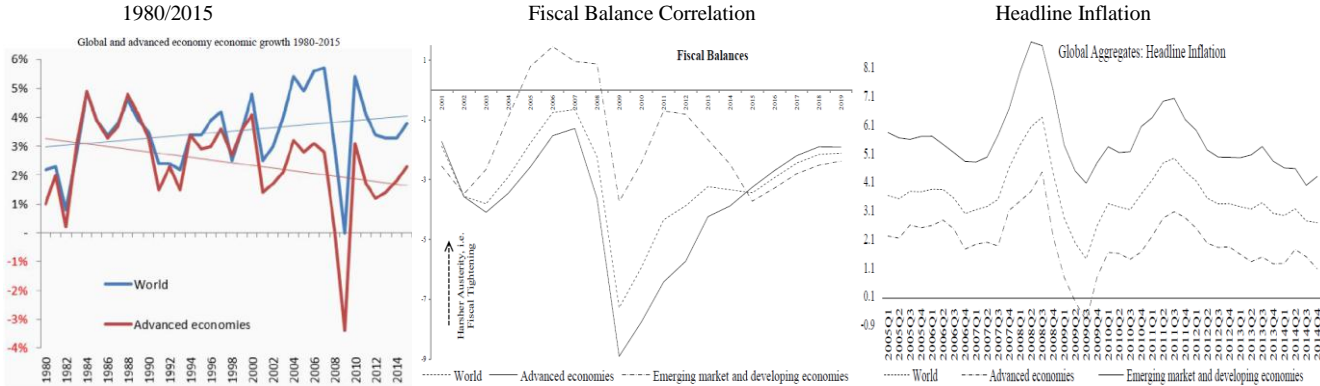


Source: See Footnote<sup>470</sup>

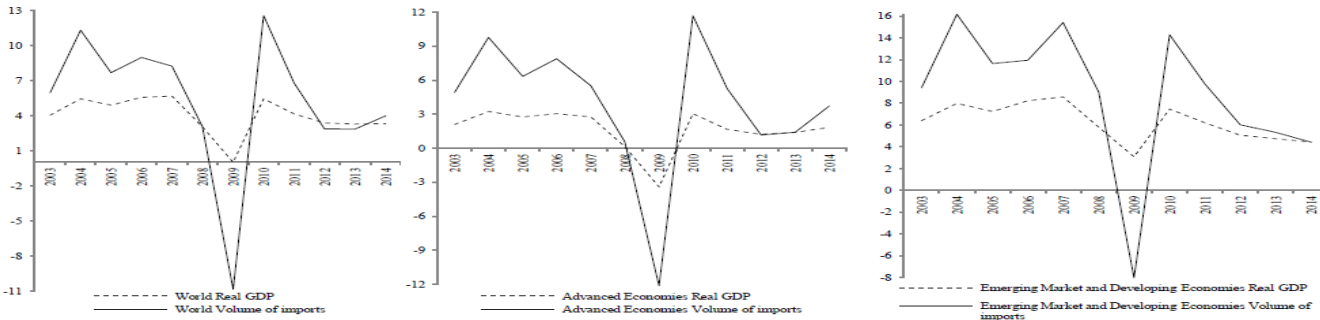
Figure 5.1 in the previous chapter backs the observation that the world economy’s advanced and under-developing economies (UDEs) were strongly entwined via the well established H-STGLP. The tying loop goes from the former to the latter. But the most important feature of this lash is the parallel movement of the UDE’s *humping* GDP with the AWEs’ *slumping* GDP *growth rates*, as figure 5.3A below reveals.

Figure 5.3: Emerging and Developing Countries’ Imports, Fiscal, and Headline Inflation Relationship to World and Advanced Countries’

A: Global and Advanced Economies Growth    B: Global, Advanced, and Emerging Economies    C: Global, Advanced, and Emerging Economies



E: Correlation of the Advanced Countries’ Import with the Emerging and Developing Countries Imports



Source: IMF, March and April 2015.

Despite its different speeds, this positive parallel movement, which is based on the UDE-AWEs’ H-STGLP, is not a Post WWII phenomenon. It actually goes back long before WWI, i.e. *mainly during the gold standard era*, when today’s UDEs were colonized by today’s advanced countries. In the introduction of his Nobel Lecture, the 1979 Nobel Prize Winner, Sir Arthur Lewis documented that: -

*“For the past hundred years the rate of growth of output in the developing world has depended on the rate of growth of output in the developed world. When the developed grow fast the developing grows fast, and when the developed slow down, the developing slow down. ... The principal link through which the former control the growth rate of the latter is trade. As MDCs grow faster, the rate of growth of their imports accelerates and LDCs export more. ... The growth rate of world trade in*

*primary products over the period 1873 to 1913 was 0.87 times the growth rate of industrial production in the developed countries; and just about the same relationship, about 0.87, also ruled in the two decades to 1973. ... More interesting is the evidence that **the relationship was quantitatively the same over a hundred years.***<sup>471</sup> [Emphasis Added]

This quote, of course, reflected the natural consequence of the AWEs' role in framing and establishing the world's UDEs' structures since long before the WWI. These economic structures were established in such firm way that maintained, till today, that H-STGLP to the former via the international trade bonds for the availability of internationally convertible currencies in the latter. As it is well documented, the UDEs' major export commodities incomes constituted more than 10% of their GDP and more than 40% to 90% of their total exports revenues over the past centuries. They also remained financing more than 25% to 75% of the UDEs' total budgets' revenue.

In addition, that remained to be reflected in the former imports volatilities, as shown in figure 5.2E above, as being the major source for the UDEs' exports volatilities. They almost remained, nearly all the time, financing their NIR, despite its parallel fluctuation with the major export commodities' international prices, as Sudan's case showed in the previous chapter. Savvy therefore states that AWEs' growth remained, as it will remain, manipulating the world's UDEs' financial capacities, hence their IEIs under whatever adopted ERR.

As seen above, when the AWEs' economic growth is slowing, their industries become suffering from overcapacity and their ravenous appetites for commodities wane significantly. That, in turn, reflects itself in lethargic multiplier of their effective demand that put downward pressure on commodities prices across much of the world, but mainly the commodity exporters' countries. With AWEs' share in global trade prices rapid reduction, they actually export their domestic deflation problems to other countries as they dump with their cheap manufactured goods the UDEs immature markets through the H-STGLP. Whenever there are large-scale adjustments in the AWE's wages and prices relative to UDEs' trading partners, *the latter find itself automatically enforcing these adjustments in their economies via currency depreciation* rather than via *relative deflation*.<sup>472</sup>



Despite the AWEs' policy shift in its positive correlation to the UDEs, it can be seen that the latter remained: -

1. The BoPs is a prime example of an area in which governments have to make policy decisions in a domestic and international environment of uncertainty;
2. In any one period of time, foreign currency constraint that never been alleviated by unlimited expansion of DMS or by depreciation of the real ER or by other policies to increase their supply relative to their demand, as reflected in the prices per unit of foreign currency. Even in an extremely import-dependent economy, flexible ER, which is, generally, a powerful shock-adjustment mechanism that affect productive organization and sectors differently, cannot increase the foreign currency supply, relative to their demand, infinitely;
3. Their currencies, relative to the AWEs, remains to be internationally inconvertible so that *they cannot be printed infinitely and be used internationally to buy whatever needed imports at whatever prices or quantities.*
4. Point 3 above implies that the UDEs *remained having very limited domestic imports substitution options as a way for reducing their external vulnerability and to reduce the foreign currency demand significantly and for a long period of time.*

The Economist magazine, as referenced by figures 4.1, confirmed, as the IMF above, the continuation of this H-STGLP fact during post-1973 by stating that: -

***“For decades the continent has been hopelessly dependent on commodities to power economic growth.***

***When prices crashed, economies would go into tailspin.”***<sup>473</sup> [Emphasis Added]

The above economist's quote implies that when international commodity markets get in trouble it forces foreign-currency dependent mono-export commodity countries in semi crisis, if not crisis. Exactly the same thing when creditor countries get in trouble, they demand repayment in times that push indebted countries into crisis too. Also, *their currencies drop with every fall in their influential commodity's international prices (ICIP)*,<sup>474</sup> as seen in the Sudan's akin cases. *They will no doubt weaken further when the AWEs' central banks raise their real interest rates relative to UDEs' ones*<sup>475</sup> triggering a wave of deflationary NBKOs from the latter. The UDEs deflated markets always led to bust and recession.

Taking their direct and direct protection system, the AWEs also avoid appreciating their ERs, via importation of NBKIs, to avoid overheating their economies, on the one hand, and also to avoid importing their trade-partners' demand weaknesses. Instead they do weaken their currencies to wilt international crisis importation from, and to allow crisis exportation to, their trade-partners. In this sense, UDEs, among which is Sudan, become vulnerable to AWEs' unstable policies and importation of their demand busts as their demand booms, mainly by those adopting any fixed ER parity. In all these cases, it must be seen that when *domestic real opportunity costs drop*,<sup>476</sup> the economy was put on the verge of overheating and the importation of their trade-partners' crises. The economy then starts suffering from *domestic price indices hike that enforce a compulsory tax on the private sectors' savings* to compensate for *reduced domestic internationally convertible currencies*. If that reduction is sustained, they might *end the economy in falling in CCs quagmire*.

So, it can be concluded that the immediate causes of the UDEs' troubles remained to be exogenous due to the maintained H-STGLP relationship that remained emasculating or fortifying their exports, investment, and ERRs. *But it is important to note that much of their pain remains, practically, self-inflicted*. The UDEs above destiny can be found as the AWEs' performances weakened during post-1973, relative to Post-WWII counterpart. It can therefore be concluded that several unindustrialized and undiversified export-oriented countries, such as Sudan, remained numb to: -

1. The sustained static, not dynamic, international division of labor and specialization structure based on the static, not dynamic, comparative advantage canon;
2. Sustaining an internationally inconvertible national currency with which it can borrow international, while running a large cyclically adjusted primary deficit while NBKI were drying-up during its hard-landing times. They were used to keep cash flowing in the economy's arteries, notionally speculatively, to avoid domestic liquidity crises, austerity, and real contraction. Of course there were capital controls policy, as in Malaysia in 1997, and the introduction of a parallel exchange markets to exit fixed ERR, as in Sudan since 1979. For sure there were sharp devaluations, which led to spikes in inflation, as representing the economy's internal imbalance, and in some years to hyperinflation that opened/widened

CADs, i.e. created/deteriorated external imbalances, that followed, hence swelling, rather than fading, EDs stocks and their arrears more than using meager international for stabilizing the committed ERR;

3. The advanced world economy drivers shift from the post-WWII “*fixed, but adjustable, ERR*” to post-1973 “*floating, but manageable, ERR*;”
4. The relocation of the World Economy from international cheap to expensive oil and other raw material inputs era;
5. Stagnation of labor income in rich, as in poor, nations since 1980.

As hinted above, this *reserved historical parallel and H-STGLP* relation to the AWEs had *survived since the adoption of different variants of precious metal monetary standards and related ERRs to date*. This implies that historically *changed opportunity costs*<sup>477</sup> and ERRs remained totally neutral to the above parallel growth rates between the hub and the edge countries along this very long history. But the most important problem that still remains is the impact of the export ICIP on the fiscal, monetary, and ERRs of the UDEs. In other lexis, the latter exports’ prices/incomes remained to be determined by AWEs’ monetary and ER policies<sup>478</sup> due to the UDEs’ sufferings from the international, as domestic, supply-side shocks.

Sudan was not, as it will not be, at all an exception, given the above international macroeconomic relations’ realities. Along its post-independence history, ex-colonized Sudan, as akin countries, remained vulnerable to the same parallel relationship due to the preservation of the above H-STGLP, whether directly or indirectly. That is, as long as it remained adopting the colonial economic development paradigm in favor of the rest of the world more than for the Sudanese people.<sup>479</sup> Despite its impact on Sudan’s ERR, the Sudanese people were kept dependent on borrowed money during bad times of squeezed export revenues.

As will be seen below, given the monetary policy rate, NBKIs supported the central bank to allow its ER to appreciate, in the open markets, and domestic credit/money supply boom, mainly via real interest rates positive movements, supporting output to increase. But that was always matched by contractions in net exports, during good times, or increases in net imports,

during bad times. The impact of moving these macro-policy tools was to worsen the IEIs and the output to decrease despite the adopted ERR.

So, although the Sudanese planners and macroeconomic managers are aware of the world economy's changes and their effects on Sudan's internal and external balances under different ERRs, unfortunately, they didn't drastically change the inherited colonial economic structure, as figure 4.2 showed. In other words, during 1970/2000, as in the 1960s, Sudan's exports remained: -

"... اساسا من المنتجات الزراعية والزيوت النباتية والمواشي ومنتجاتها. وتشكل المنتجات الزراعية حوالي 90% من حصة الصادرات. " فمع محافظة القطن على موقع الصدارة في الصادرات الا ان اهميته النسبية تقلصت كثيرا " ففي خلال هذه الفترة ما زال " اهم المستوردين للصادرات السودانية هي دول غرب اوربا وتليهم دول الكتلة الشرقية فالدول الافريقية والاسيوية. وخلال السنوات ... حدثت بعض التغييرات في اتجاه صادرات السودان فقلت الهمية النسبية لدول غرب اوربا كمستوردين لصادرات السودان ومع ذلك احتفظت هذه المجموعة بموقع الصدارة في قائمة المستوردين وزادت الهمية النسبية للدول العربية واصبحت هذه المجموعة في المرتبة الثانية في قائمة المستوردين. "480 [التسميك مضاف]

Accordingly, it can be said, Sudan's almost all domestic financial crises, despite domestic exogenous factors, were imported financial crisis, and as a result. They were always revealed domestically as self-fulfilling ones that were twisted into sudden CCs. Of course, fixed ERRs weren't and haven't been a source of problems as it is timeless fate, despite the failure of flexible ER, in correcting the external imbalances for such an economy during 1979/2015. In other patois, even small depreciations augmented, rather than diminished, *Sudan's* IEIs. So, Sudan's managed floating ER, during this period, proved to be self-correcting by more depreciation than correcting the external and internal imbalances. That resulted in complete destruction of several adopted monetary regimes that were ended by changing the Sudanese currency 3 times since 1980. In addition, flexible, as ex-fixed, ERRs in Sudan remained unstable as uncontrolled need for NBKI and ED arrears accumulation, which constituted around 86% of total ED stock, comprising more than 60% of penalties on deferred payments, out public debt of US\$ 54.7 billion, by 2015, weren't stopped from mounting.<sup>481</sup>

Remained sentinel to its historical H-STGLP, it can be observed below that Sudan's economic performance under fixed ERRs was better than under floating ERRs. As will be seen below, it is not outlandish at all to find Sudan's real GDP/Capita, as the advanced countries in figure 5.1 above, was higher during the fixed ER eras than during the floating ER era, as figure 4.6 verified.

## 5.2. Self-Rule Development Test: The TYP (1960/72):

By 1960, Sudan, as akin countries, remained subject to its own H-STGLP relationship under the Bretton Woods' "fixed, but adjustable, ERR." In addition, by that date, its inherited socio-economic colonial structure, of traditional subsistence and modern export-oriented, commodity economy was almost the same in a volatile but progressing world economy.

Remained devoted to static, rather than dynamic, comparative advantages canon, Sudan was still suffering from the absence of a powerful combating sector for the importation of advanced foreign productivity-increasing capital and high-value-added consumption goods. *Naturally, then, Sudan was forced to continue depending on foreign currencies availability to access foreign advanced developmental productivity-increasing capital and advanced manufactured consumption goods.* So, its absence didn't ever back Sudan's inconvertible currency's real purchasing power relative to the AWEs' ones. Also, its absence didn't make the government gain effective macroeconomic policy power for reducing domestic demand for foreign currencies as in the AWEs' ones. *Relative to the targeted rapid development processes, the gargantuan influence of (insufficient) cotton's export revenues remained the economy's governing lord.* It remained constituting, on average, more than 13% of GDP, 40% of government's revenue, and 70% of total exports. It also remained vulnerable to the AWEs' policies changes and their markets' volatilities.

In 1960, the first scientific comprehensive "Ten Year Economic and Social Development Plan" (TYP) was officially launched by the first post-independence military government that alternated/ousted, in Nov. 1958, the first democratic regime. It was, actually, a version of a big-push investment program that was *assumed to cover*, after its extension from seven years, the 1960/61 – 1970/71's period. *Replicating the colonial economic development paradigm, the TYP's targeted development projects were determined to be, partly, dependent on NBKI.*<sup>482</sup> That implied the plan's contribution in the CAD as derisory national savings were not sufficient, which to be complemented by foreign NBKI, to finance the plan's projects.

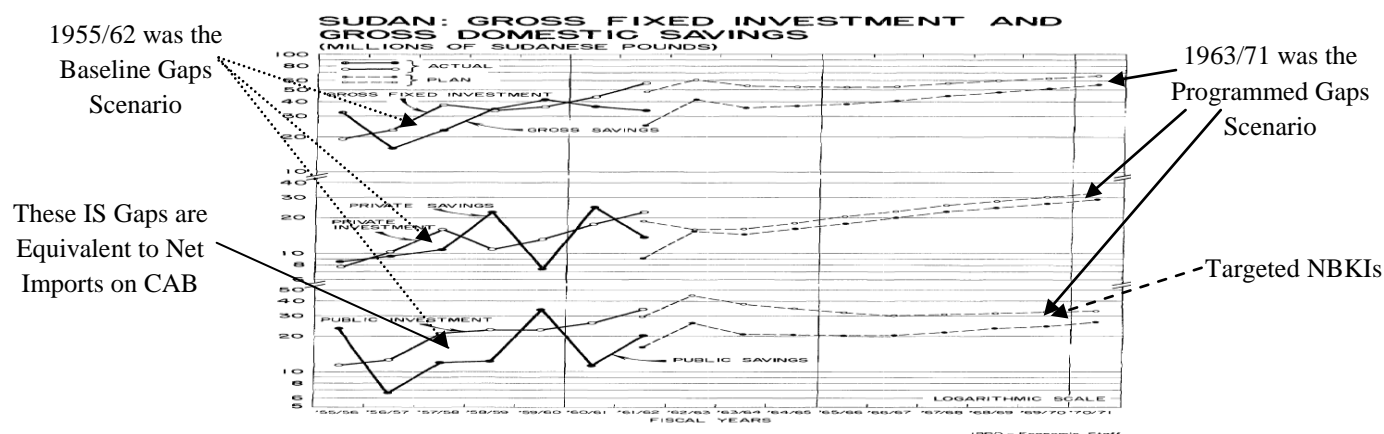
*Assumed national and international normal productive political relationships, the plan's objectives were targeting: -*

1. the “broadening of the structure of the ...” inherited export-oriented and industrial-goods-importing “... Sudanese economy,” via;
2. “a considerable increase in exports and import substitution.”
3. to achieve “an appreciable increase in real income through a satisfactory growth of total production,” while maintaining “a relatively stable price level.”<sup>483</sup>

The TYP’s eminent features were its emphasis on the sectoral approach to planning while suffering from conflicting objectives.<sup>484</sup> *The establishment of powerful combating indigenous productivity-increasing capital producing sector was not included.* The influential foreign trade, as influenced by the cotton commodity, and the foreign capital, at the prevailing fixed ER, were therefore the keys sectors in realizing the TYP’s objectives. Furthermore, its main emphasis was on the foreign-currency dependent modern sector to lead economic growth at an annual rate of 6.9 percent of growth. It totally neglected the non-foreign currency-dependent traditional sector for its operations, expansion, and development.<sup>485</sup> *The foreign capital dependent TYP’s investment program was, therefore, not targeting drastic structural changes*<sup>486</sup> *in the inherited colonial underdeveloped socio-economy.*<sup>487</sup>

Figure 5.4 below documents the TYP’s annual targets for derisory national savings as been complemented by NBKI<sup>488</sup> for establishing the plan’s development projects.

Figure 5.4: The TYP’s Assumed Persistence foreign financed gap between Planned Investment and Planned National Savings



Source: IBRD Report, 1963

From the “*Two Gap Model*” for rapid socio-economic development, the TYP investment programs, as supported by derisory national savings and supplementing NBKI,<sup>489</sup> opened CADs. From, *macroeconomic imbalances approach*, the 1960s’ governments, therefore, decided to adopt *expansionary CAD*,<sup>490</sup> hence monetary, policy that might hurt net foreign

assets in case of NBKI shortages, while committed to the BWIs' fixed exchange regime.<sup>491</sup> *In both cases, the economy will be suffering, basically, from external imbalances, under the name of expanding its productive capacity rapidly. That is simply because it was decided that ADD must surpass domestic APC that affect the economy's internal balance negatively for the establishment of the plan's NBKI-dependent projects.* In all cases, by allowing the Sudanese people, generation after generation, *to live beyond its own means*, they were actually promised to be coerced to afford the economy's IEIs of the UDE that was thought to be temporary. In cases of sudden negative exogenous shocks, they must be coerced to afford the financial crises' heavy costs in the form of *sustained high unemployment and poverty rates* to pay back accumulated debts. That was not so much different from the colonial economic development and management paradigm before Sudan's independence in 1956.

Recalling the 1957/59 recession and the foreign-currency oiling of the economy since 1899/1958, it can be said, as the objectives imply, that the 1960/61 – 1970/71 plan<sup>492</sup> was practically targeting the recovery, rather than the structural change, of the inherited UDE. That was achieved during 1960/63 after launching a strong foreign-currency-financed investment boom, as figure 5.6C below shows. That boom, with supportive foreign assistances and aid, was actually attainable when cotton's ICIP were at 38.3 ¢/p, on average, i.e. below the 1950's average, as shown in table 3 in the appendix.

As will be seen below, the Sudanese planners didn't adopt famous (adapted) Keynes' astuteness that stated: *"It was the 1960/62 boom, not the 1957/59 slump, the time for austerity"* to prevent the economy and the citizens from future harder times,<sup>493</sup> beside the pressing civil war. Otherwise it would be a failure.<sup>494</sup> *Austerity converts downturns into recessions, and recessions into crises, and crises into depressions.*<sup>495</sup> Thus, it can be concluded that the TYP, as subsequent plans, was analogous to the colonial development and stabilization paradigm.<sup>496</sup> As a result, it can easily be predicted that with any significant fall in the ICIPs and NBKIs, the colonial structure of the Sudanese economy must, sooner or later, fall in any one kind of the financial crises pandemonium.

As the 1997/98 Asian CCs and the 2008 Global financial crises showed, resorting to foreign-financed investments had added to the domestically financed–investment boom. Consequently, the IEIs exerted financial pressures on the economy. So, the more sustained foreign, beside domestic, financed investment boom the more the IEIs will be worsened.<sup>497</sup> Unless prudently managed,<sup>498</sup> the rapid development of the economy the rapid national financial resources will be depleted and the sooner the crash as international lenders of last resort start abandoning their financial support. According to the IMF President, Christine Lagarde, world countries’ historical:

*“Experience teaches us an important lesson: **greater financial integration raises the probability and size of financial crises.**”*<sup>499</sup> [Emphasis added]

As the above quote imply for the case of Sudan, the *assumed* stability of the adopted Bretton Woods’ “*fixed, but adjustable, exchange regime,*” while depending on NBKI, *on which the TYP heavily relied,* must be a defeated assumption. In other lingo, as domestic boom busts, it must ultimately face a CC destiny due to sudden reduction in NBKI, hence national savings, as figure 5.4 above shows. So, the Sudanese pound was always victimized *without committing any peccadillo due to mulish adoption of such botched historical experiments by other nations.*

### 5.3. The Plans’ Idealistic Assumptions vs. Realism: -

As it is well-known, the 1960s was dubbed as the golden age for the world economy. Despite the TYP’s several defects, which became just a guide since 1964, table 5.1, in the appendix, summarizes Sudan’s economy’s performance, within the given context of the volatile nature of the world economy and its related international politics, during 1960/72.<sup>500</sup>

Contrary to the TYP’s hub assumptions, the results in table 5.1 can be referred, among others, to the following main hostile events: -

1. ICIP, during 1960/72, remained almost 55%, on average, of its equivalent in 1956, of 69.33 ¢/p, as table 4.2 and figure 5.6A below show;



2. Cotton production reduction due, in part, to different trade-union erratic strikes, mainly in the Gezira scheme. That is, Sudan's economy remained suffering from an idiosyncratic shock to its major export industry rather than a sudden stop in NBKIs;
3. Unstable ruling political system along the period;
4. Declining trend of NBKI as foreign aid, loans, and increased capital flight due to political tensions since 1964;
5. The 1966 Sudanization of the economy decision and the May 1970's nationalization and confiscation decision of the private sector<sup>501</sup> causing increased demand for foreign currency to transfer capital funds;
6. Closed Suez Canal due to the June 1967 war and the later kick-out of the USA Ambassador, not only worsened international political relationships but also international financial assistances and aid;
7. As its preceding periods, Sudan remained suffering from the absence of *an effective combating indigenous competitive capital import-substitution sector*;<sup>502</sup>
8. *The conflict between policy objectives and economic realities* as seen by the excessive budget retrenchment as foreign assistances deteriorated. That was accompanied by imprudent expansion of DMS relative to lower cotton's international prices and diminishing NIR;
9. Mounting ED accumulation and related debt servicing;
10. The AWE's financial markets disturbances during 1971/73 since removing gold in backing the USA dollar. During this period most AEs' convertible currencies were left floating in the world foreign currency markets.

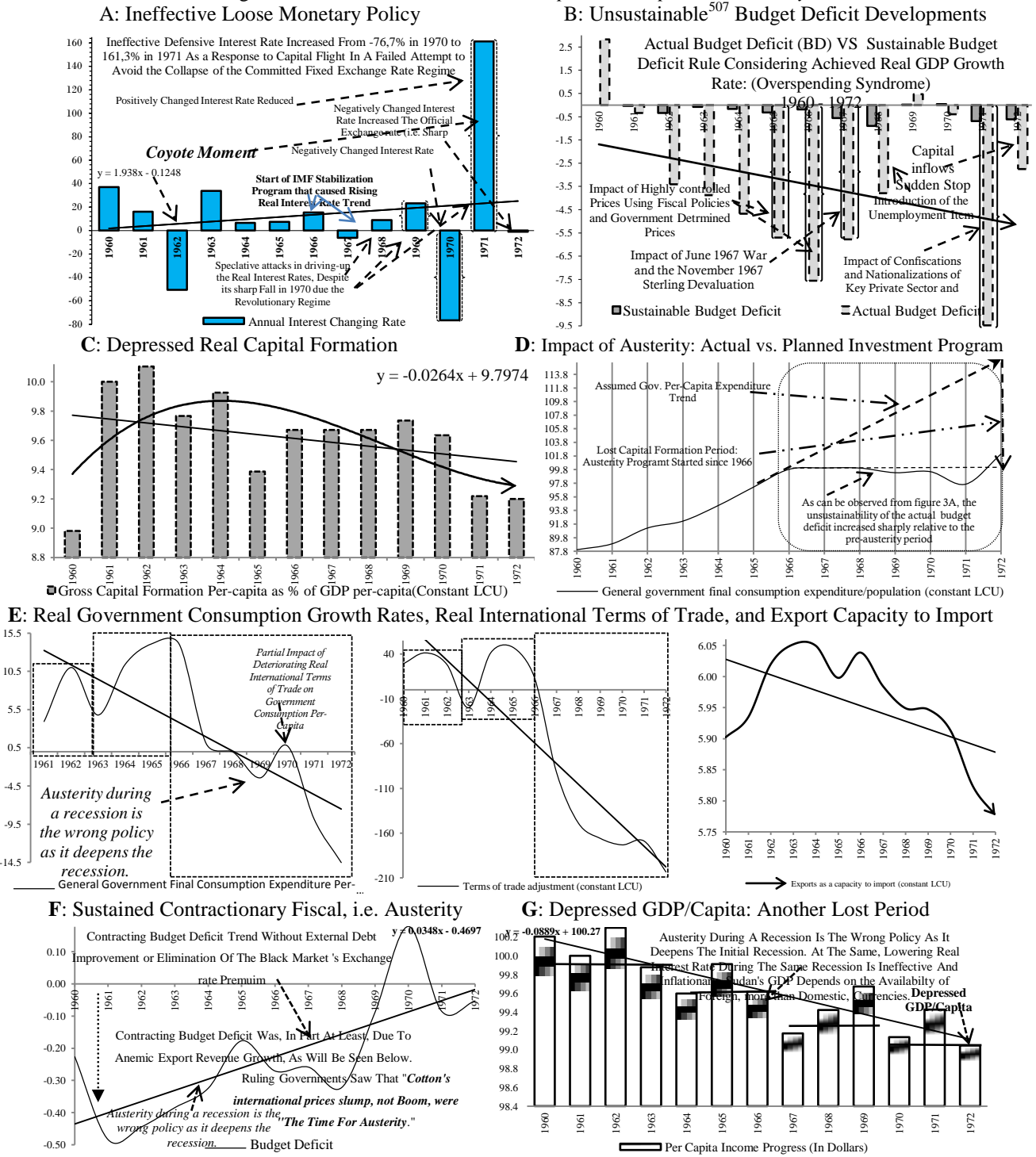
Of course, *these callous political and economic events gained harsher momentum on the economy*. They also formed *callous destabilizing decelerators* against the *assumed rapid real GDP/Capita growth* during 1960/72. They actually caused it to decline sustainably, as figure 5.5D below demonstrates. In totality, that was because *Sudan's economy was still subject to the balances of the influential BoPs accounts for its growth*.

Taking into consideration the *strong inverse relationship between real interest rates with the real capital formation and inverse relationship with the ERs*, Sudan's economic performance, during the 1960s, was well summarized by the WB as follows: -

*“Sudan started the 1960's with substantial external reserves. In the first years of the ten-year development plan which was introduced in 1961/62, major projects were completed ahead of schedule and public investment greatly exceeded expectations.”*<sup>503</sup> ... *“Over the last ten years, the average annual growth rate of merchandise exports has been 3.3 percent.”*<sup>504</sup> ... *“Public sector savings and external financing for the public sector were less than anticipated and external reserves fell, despite high external earnings for cotton in both 1962/63 and 1963/64. Thereafter, poor crops and declining public sector savings resulted, despite the reduction of public investment, in a continued decline in external reserves, leading in the last few years to drawings from the Fund under stand-by and compensatory arrangements. The last two cotton crops have been better and public saving seemed to be starting to recover. Despite the recent improvements in the ordinary budget, prospects for public savings in the future without changes in policies are not entirely favorable.”*<sup>505</sup> [Emphasis added]

Government's (unproductive) meddling with the private sector, combined with excessively loose DMS/GDP ratio and loose budget deficit policy,<sup>506</sup> as in figures 5.10A and 5.5B below, sapped the latter's confidence, despite tightening the low real interest rate, as figure 5.5A below confirms. The gradual investors' loss of confidence was reflected in total investment slow-down at an annual rate -0.3% on average, as figure 5.5C below verifies, as supported by the contractionary real interest rate, more than the inflationary DMS, to attract more NBKIs that can help in defending the adopted fixed ER. As figure 5.8B below shows, contractionary real interest rate, on average, beside domestic political unrest, didn't stop the black market premium over the OER from rising. Loose monetary policy resulted in inflation soaring at an annual rate 25% on average. Practically, almost all of them deteriorated rapidly after 1962 as in figures 5.5B and 5.6B below. As mentioned in the critical conclusion of the previous chapter, the crutch of low, relative to 1950s higher, ICIP and NBKIs *were the crux* triggers of Sudan's financial problems during this period. Accompanied with venomous macroeconomic policies, they caused GDP/Capita to collapse at an annual rate -0.1% on average, as figure 5.5D below validates.

Figure 5.5: The Achieved Real GDP/Capita in a Depressed Economy



Source: Table 5

As figure 5.6C below tells, NIR were falling in parallel with total export revenues. Also, figures 5.5G above, 5.7B, and 5.9D below also tells that GDP/Capita growth was sputtering, the Bretton Woods' fixed ER in the black market was depreciating, as the ED stock was rising. *The 1960/72, therefore, was much more a national income, than overall consumption, crisis period.*<sup>508</sup> It is then clear that the adopted policy system was as unstable as was inapt

one. These observations can be geometrically explained from budget balance and real interest rate policy tools perspectives, in their relation to the external balance.<sup>509</sup> The latter implies that the balance of current account equals (net) capital exports at the fixed exchange parity. So, rather controlling the DMS to control, if not improve, the NIR, the monetary authority, which lost its independence, was allowed/forced to worsen the external imbalance.

Figure 5.5E above shows the *positive association* of the *negative slope* of *cotton export-revenue dependent real government expenditure per capita* with the *negative slope* of constant terms of trade and export capacity to import below 1, as with the *negative slope of exports*, which was dominated, on average, by at least 70% of stagnant low cotton, *revenues* as in figure 5.6C below, that *affected negatively more than 40% of total budget revenue*. Naturally then, it can be seen that there was a *positive slope* of (unsustainable) *budget deficit* with lower capacity to import, as shown in figure 5.5F and 5.5E above, since 1962 under the favoritism of the public sector. *As it can be rightly concluded, with absence of offsetting policy for the stagnant ICIP that could be used with the use of internationally inconvertible currency. It can also be naturally expected, such economies with such persistently weak, international and domestic, demand must suffer from large declines in potential as well as actual output, as figure 5.5G above verifies.*

As can be observed, sustainable contraction in the annual budget deficit, since 1962, didn't eliminate an opened BoPs on the current account, as figure 5.7A below confirms, owing, notably, to a rise in imports over declining exports. Contracting total export revenues, foreign currency dependent budget deficit, worsening terms of trade, export capacity to import, and increasing population size, therefore, explain the *negative slope*, of the sustained drop in, *real GDP/Capita, hence aggregate domestic expenditure and incomes*,<sup>510</sup> as figure 5.5G validates, and with it, of course, total imports,<sup>511</sup> directly and via Keynesian multiplier.<sup>512</sup> *During declining export revenues and NBKI times, cutting spending in a depressed economy would deepen its depression, despite increasing DMS.* Since the internal balance requires that aggregate demand for domestic output to be equal to aggregate supply of domestic output, at whatever ERR, it is clear from figures 5.5F and 5.5G above, that fiscal policy remained, as it

will remain, affecting negatively the internal balance stability that resulted in dwindling real GDP/Capita.

Sudan was trying to offset the effects of fiscal retrenchment with monetary expansion by allowing monetary policy to take over fiscal policy. Although Sudan was incredibly determined to run lower fiscal deficits, it failed to make a significant dent in the debt burden, because deflation ate up any gains from fiscal austerity. *But the ED stock remained at lower growth rates because of the combination of inflation and financial repression that helped keep real interest rates low.* Austerity, by cutting spending or budget deficit, in a depressed economy to reduce high debt levels and/inflation, is beyond any logical optimism. It is an awful mistake and is a self-defeating policy. Successive austerity, contracted real purchasing power, and tightened real interest rate packages have succeeded only in deepening the initial recession, mainly since 1966. By depressing the economy, spending cuts lead to lower tax-base revenues, and are thus self-defeating mainly in a non-stable economic world economy.

Imports, therefore, were much more depressed than reduced. Sustained reduction of export revenues and depressed import payments resulted in *depressed CADs*, as in figure 5.7A below, which is equivalent to diminishing NBKI. The Sudanese economy remained therefore suffering severely from worsening external imbalances as reflected in sustained falling NIR/DMS ratio at the adopted fixed exchange parity.<sup>513</sup>

In normal times, the peer of a CAD is NBKIs, which *reduce nominal and real interest rates, hence the depreciation of the committed ER.* CADs were not practically eliminated as domestic *real interest rate slope* was *slightly, or irrelevantly, positive*, as in figure 5.5A above. As a result, it *attracted below desired level of NBKI*, as implied by the depressed CADs, not only to reverse: -

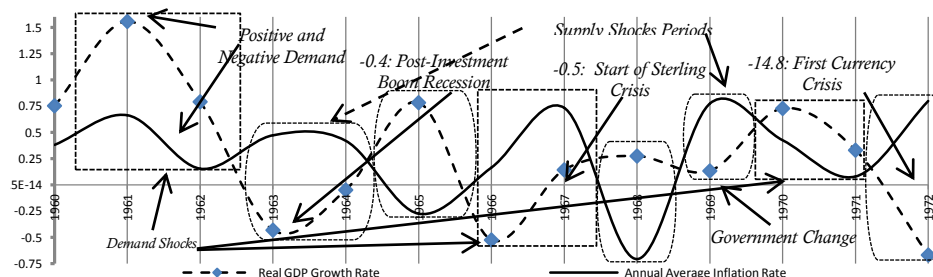
1. the *negatively sloping, i.e. waning, capital formation*,<sup>514</sup> as in figure 5.5C above, but also. While adopting budget austerity, Sudanization, confiscations, and nationalization, the resultant mammoth increase in DMS did not only, via the accelerator, stimulated real GDP/Capita's receding economic growth, hence reduced increasing unemployment, which development processes aimed at eliminating, but also didn't lead real interest itself

to increase effectively. Therefore, *Sudan's economy was effectively in a real liquidity trap*. Sudan's monetary policy was therefore ineffective.

2. the *negatively sloping, i.e. waning, NIR/DMS ratio*, as in figure 5.8D below.

With the reduction in overall foreign currency supply from almost all foreign sources and the central bank while domestic money expenditure was supported by increasing DMS/NIR ratio, as 5B below confirms, the overvalued official fixed ER in the black market was freely depreciating, as in figure 5.7B below. As many of the currency and financial crises have been associated with the contractionary effects of currency depreciation that resulted in substantial output losses. These unsatisfactory results show why the 1960/72 domestic macroeconomic policy packages were incoherent, hence unstable, for such an underdeveloped colonial economic structure in the long-run which remained suffering from stagflation since 1962, as figure 5.6 below validates.

Figure 5.6: Stagflated Economy: The Recession Caused a Loss of Ten Years of Steadily Increasing Real GDP Per-capita



Source: WB DataBase

Figure 5.6 above illustrate much more the impact of stagnant low cotton's international prices and constant terms of trade pick-up from their troughs in 1959, as well as the impact of favorable macroeconomic policies during the period 1960/62 as during 1963/72. During 1960/62, they caused the foreign-currency dependent Sudanese economy experienced a *positive, i.e. spreading out, international demand shock* due to the ICIP pickup from its trough in 1959. At the same time the budget deficit was large and real interest rates were relatively low, i.e. expansionary domestic macroeconomic policies. That was reflected in the rising real GDP/Capita growth in positive correlation with inflation rates. So, during this short period of time, Sudan's GDP/Capita was domestic, as foreign, effective demand-side, not aggregate supply-side, driven.

During 1963/72, the foreign-currency dependent Sudanese economy was suffering from the international supply shock of stagnant low cotton prices and domestic substandard macroeconomic policies. As cotton's international price fell below its 1962 peak, the correlation with GDP/Capita reserved to indicate its suffering from an international supply shock. As a result, the Sudanese economy remained suffering from *stagflation* during 1963/72 as figure 5.6 above clarifies. So, it is clear that the supply of domestic output is elastic and in reverse to the domestic price level when been supply-shocked and positively related when been demand-shocked.

It remains unclear why Sudanese planners and macroeconomic policy-makers, who were assigned the development of an underdeveloped economy, saddled themselves with optimistic assumptions/barriers to the TYP without resorting to historical field experiments and economic theory proofs. Despite political instabilities, the TYP's objectives were therefore defeated by the adoption of incoherent policy-packages. They caused Sudan to lose an important episode for achieving real structural transformation in, and growth of, Sudan's economy. Most significantly, they caused it to fall in CC quagmire as will be seen below.

#### 5.4. The Peg Under Sustained Pressure for A Great Fall: -

Time always splits real from fancy, assumptions, tales, promises, and predictions. As mentioned previously, the colonial modern economic structure was to great extent dependent on the availability of internationally convertible currencies. Recalling the H-STGLP with World Economy's Dynamism, the Sudanese economy, as akin economies, remained importing their economic weaknesses. As a result, the TYP's very optimistic assumptions made the 1960/72 a real financial crisis period. Sudan, with its rigid economic structure, as akin countries, with fixed ERs, as will be seen below, suffered large costs when faced negative supply shocks from the advanced ones as domestic supply shocks.

The seriousness of the sudden acute external payments deficits in the first half of the 1970s, as during 1968/72, forced the new military government to resort to three supporting IMF-economic stabilization programs. The three stand-by arrangements with the IMF were covering fiscal 1972/73, 1973/74, and 1974/75. However, the last two programs were

abandoned in mid course, due to domestic political pressures.<sup>515</sup> In all cases, the impose of tightening policies, amid a depressing advanced economies since 1973, on which the Sudanese economy remained dependent on their import demand, added its recessionary powers to the already existing domestic recession in the 1970s, as during the 1960s. But despite this fact, that meant Sudan's sustained need for international lenders of last resort, mainly during its economic turmoil, and instabilities, times as its development processes. Against the ruling government's ideology, the IMF Policy Prescription was conditioning a big government bite from domestic real aggregate demand while the Sudanese economy was struggling to find a bit of it from the rest of the world via increased export demand.

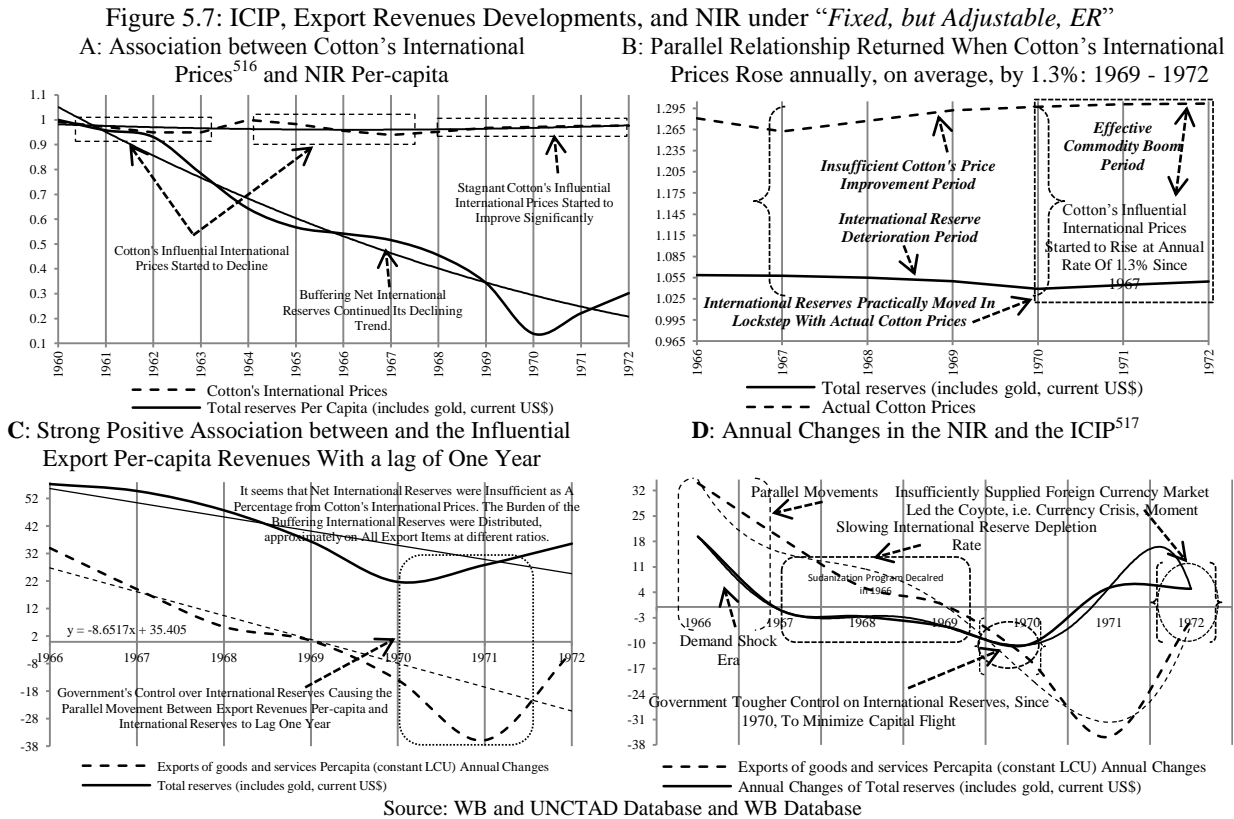
Starting with foreign trade markets, figure 5.7 below discloses the fact that the cotton's influential international prices remained fluctuating in the range of 43.3 – 34.3 ¢/p of an *overall average of 38.8 ¢/p for 1960/72*. After its *69.3 ¢/p peak in 1956*, this average was almost equal to the recessed average ICIP of *38.11 ¢/p during the 1958/59* that was resisted by borrowing sufficient NBKI since 1958. Beside the diminishing NBKI, in figure 5.9 below, *this stagnant low average price was unsupportive to the buffering NIR/DMS to defend sustainably the committed fixed ERR*.

In lingua franca, the committed ERR's buffering NIR remained eroding along 1962/69, despite its meaningless pick-up, during 1970/72, relative to its pre-crisis levels, if not relative to 1969, as figure 5.7A below validates. Figure 5.7A below shows that the parallel relationship between ICIP and NIR was totally lost during 1960/72. The parallel relationship was attained when ICIP picked-up, meaninglessly, during 1970/72, as figure 5.7B below demonstrates. The long-run parallel relationship of declining NIR with declining total export/capita revenues, with one year lag, was gained, as figure 5.7C below shows. In both cases, it is clear that Sudan's currency peg was under pressure from stagnant low ICIP. Black market premium reflected its questioning about the sustainability of the committed peg.

NIR built up during times when cotton prices were higher in the first half of 1950s were eroding when they halved in the 1976/72. Un-independent Sudan's central bank did not have alternative tools, and it was not prepared to move for the Bretton Woods' committed ER

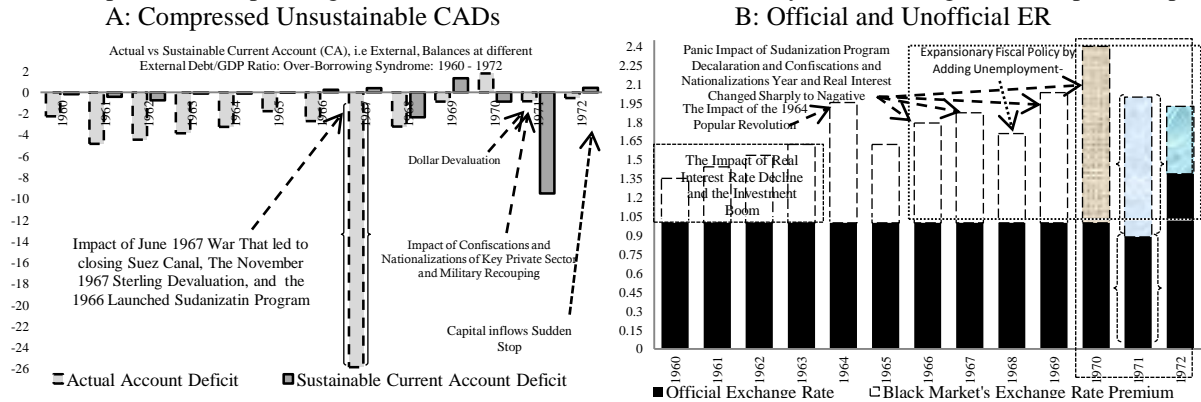


arrangement to any alternative too. This implies that the ruling governments imposed, in one way or another, a tax on total export revenues to its parallel relationship with NIR during the period that preceded 1970/72. In chorus, it is clear from figure 5.7D below that the ruling governments were pressing hard for protecting the buffering NIR from rapid erosion as total export revenues and their import capacity were falling rapidly.



Sudan remained running annual CADs for over a decade, as figure 5.8A below shows, implying the adoption of expansionary monetary policy, relative to contractionary NIR, as figure 5.10B below shows. This implied that Sudan’s domestic residents’ demand for foreign currencies remained outpacing domestic supply for them on the account for increasing (insufficient) NBKI and/or reducing NIR. Figure 5.7D above shows, real export revenues were falling at rates higher than the NIR ones, at least till 1970. The OER depreciation in the unofficial foreign currency market, as figure 5.8B below validates, indicates to the low dispensing rates of NIR to defend the OER. That also implies that NBKI were insufficient to support exports and the central bank’s NIR to maintain a sufficient supply of foreign currency to meet the demand for it to eliminate the increasing black market’s ER premium.

Figure 5.8: Compressed Import Payments, Relative to Declining Export Revenues, and Incoherent Expansionary Monetary Policy, during 1960 – 1972, didn't stop the Official Fixed ER from Depreciating Freely in the Unofficial Market (The unofficial depreciation, capital flight, and weak domestic demand had already resulted in significant import compression)

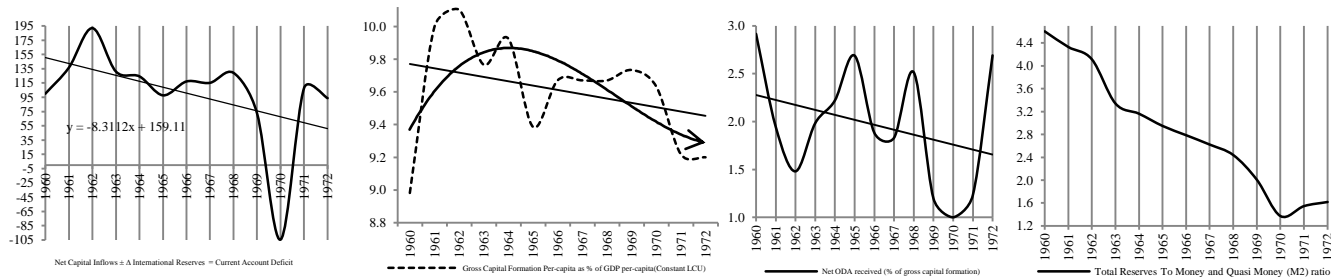


Source: WB Database

Despite its negative impact on domestic costs of production and prices, the free black market's was practically enforcing an expenditure-switching policy to adjust the overvalued OER's unrealistic equilibrium. The unofficial black market for foreign currencies was therefore beating the official policy package to achieve its TYP's objectives by reallocating the available factors of production away from the targeted sectors by the TYP via expenditure-switching via higher prices above the TYP's assumed level of stabilized prices. *But it is important to note that it was with the help of the official policy responses to falling ICIP, hence revenues to the budget, which led to the increase in DMS/NIR ratio.*

As concluded in the above paragraph, it can be seen from figure 5.9 below that since 1962, NBKI, including "ODA," started its dwindling down trend till it slumped fully in 1970 and with it went gross capital formation processes. With the latter, Sudan's slow-growing economy recessed. As mentioned above, domestic aggregate, as export, demand remained diminishing in GDP/Capita terms. Furthermore, Sudan's sudden NBKIs, as total export revenues, drop syndrome led its moribund economy to face a foreign liquidity crisis. So, it was then a "sudden stop" crisis that caused vast capital flows into Sudan to come to an abrupt halt. It also precipitated a severe domestic hardship in the form of declining real GDP/Capita as export and NBKI dependent fiscal revenue and NIR/DMS dwindled, mainly since 1963. So, the fiscal, in its relationship to real GDP/Capita growth, problems were a consequence, not a cause, of this NBKI sudden stop syndrome. Furthermore, the export industry was suffering from an idiosyncratic shock more than a sudden stop in capital inflows shock.

Figure 5.9: NBKI and NIR/DM2 Ratio (Annual Cumulative Changes from Peak Year)  
Suffocating the Sudanese economy as NBKI, beside export revenues, dwindles irrespective of capital controls  
1958/63 was the Debt-Boom period



Source: Table 5 and WB Database

It was clear therefore from the above field experiment model, of 1960/72, in figure 5.9 above, as related to the TYP's assumptions of sustained NBKI and NIR/DMS ratio, were optimistic and unrealistic, hence idealistic, to great extent. The model above and the foreign-currency dependent TYP's projections disappointed the Sudanese, and supportive WB, planner and policy-makers.

As it is clear from the field experiment model above, the weakest and ineffective policy tool was the real interest that led blemished economy's currency to collapse.<sup>518</sup> As this policy implies, time policy-makers were relying heavily on the ineffective monetary policy to compensate for the recessing export and import dependent economy to recover. That, implicitly, included, in part, the budget deficit financing resulting from deteriorating export revenues of the export-oriented public sector. As figure 5.5A above revealed, real interest rate cuts didn't stave-off the realized disaster of declining GDP/Capita, as figure 5.5B implies, or the deteriorating OER in the unofficial foreign currency markets, as figure 5.8B above demonstrate.

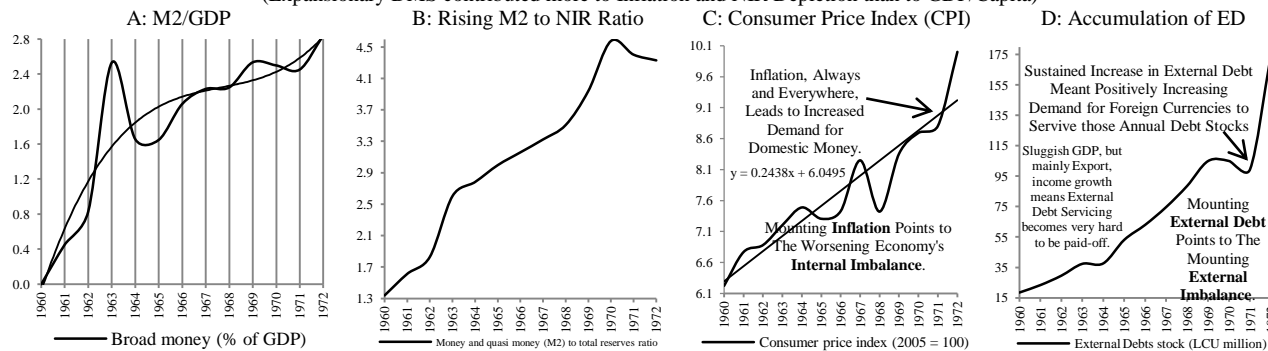
This increased DMS was recognized by Francis and Brooks for the 1956 – 1972, by observing that:<sup>519</sup> -

*“Money and near money assets ... has grown in importance in the Sudan and that the ratio of M2 to GDP increased in the period 1956 – 72 from 0.102 to 0.224. Also ... the expansion of liquidity ... has been impressive, with the non-bank public increasing its share of liquidity at 67.7 percent of total liquidity ... in 1974.”* [Emphasis Added]

The above observation was backed by the Bank of Sudan's 12<sup>th</sup> Annual Report for the period 1960 – 1971, by documenting that: -

*“The total currency in circulation increased substantially by 229 per cent during 1960 – 1971 .... This ...period of remarkable economic expansion ... has largely been financed by substantial foreign capital inflows, heavy utilization of public sector balances accumulated from past years and through bank credit. Over the same period the price level has risen considerably and simultaneously, with a rise in ... need for cash ....”*<sup>520</sup> [Emphasis Added]

Figure 5.10: Broad Money  $\equiv$  DMS/GDP, NIR<sup>521</sup> to DMS<sup>522</sup> Ratio, and the CPI Developments  
(Expansionary DMS contributed more to Inflation and NIR Depletion than to GDP/Capita)



Source: WB Database

The resultant mammoth growth of DMS, as representing rapid domestic aggregate demand growth, produced only sustainable rising in overall domestic prices, including indirectly, the ER in the black market, more than real output, as figure 5.10A above shows. That meant too much money was chasing relatively fewer and fewer goods and services in the economy. It is not strange therefore to find CPI was mounting, as figure 5.10C above reveals, causing the internal imbalance to worsen. It was also allowed to increase at rates higher than NIR. That also meant that too much money was chasing relatively diminishing NIR at the prevailing black market ER premium over, and beside, the official fixed exchange parity, as figure 5.8B above validates. That policy also led to impair sustainably their ratio leading to worsening the external imbalance of the economy, as figure 5.10B above reveals.

As mentioned in the previous chapter, due to diverse unfavorable exogenous shocks, DMS/NIR ratio was extensively used to compensate the shortage in domestic incomes, export revenues, and/or NBKI. But the mammoth increases in DMS ends in domestic import demand increases more than exports, hence, enforcing the fixed ERR to destabilize and the buffering NIR to diminish. As explained in the previous chapter, expanded DMS lead to widening CADs, hence demand increases for, relative to export supply of, foreign currencies, which destabilize the adopted fixed ER. In addition, it leads to increasing ED stocks to mount, and NIR depletion, mainly, in times when the capital accounts didn't generate sufficient surpluses.

As can be expected, any committed ER must be destabilized. So, *deteriorating DMD/NIR ratio*, as domestic IR reflected, is a *very good indicator for a depreciating ER and the mother of all types of financial, but mainly, CCs*.

This can be explained by recalling that different investors always, in seeking for a safe higher real return, decide where to place their funds. They always choose between assets denominated in different currencies for higher real returns, not only domestically but also, globally. This, automatically, connect interest rates, around the world, firmly to ERs. So, *in an open economy, such as the Sudan's, the link between interest rates and ERs movements is much stronger and more direct than the link between interest rates and DMS*.

So, the above analysis can be seen from the “impossible trinity” perspective. In Sudan’s case, GDP fell sharply and showed no sign of recovering during 1960/72. So, it is clear, therefore, that all roads were leading to a CC. Sudan’s remarkable increases in DMS/GDP ratio, as validated by figure 5.5A above, reflected, from a practical point of view, the loss of Sudanese monetary policy independency. The monetary authorities’ independence loss at a time Sudan was committed to the Bretton Woods’s fixed ERR, allowed the ruling government the freedom to borrow foreign funds under the TYP name. The results of this noxious policy mix were the creating of adverse domestic macroeconomic realities that created unfavorable investment environment that undermining investors’ confidence. That led to the 1972 BoPs crisis, as will be seen below.

The problem that remained facing Sudan, as akin countries, was the given, i.e. *uncontrollable*, stagnant low export demand and supply of foreign funds<sup>523</sup> in the face of increasing *controllable* domestic money expenditure, less exports, on which imports remained dependent. The size of the latter depends, of course, on the size and distribution of the (controlled) DMS. If abnormally increased, imports per additional unit of real domestic purchasing power, given the population growth rate, must increase and NIR will rapidly be depleted, if the *uncontrollable* export revenues and NBKIs were relatively *insufficient*. If sustained, the adopted fixed ER parity must depreciate, at least, in the unofficial foreign currency market, even beyond the crisis threshold.

### 5.5. Pushing The 1960/72 Official Peg to Its Coyote Moment: -

All indicators of the above analysis showed that ‘normal’ economic situation, under the prevailing UUE structure and fixed ERR, had worsened a lot since 1956. The pains of setting development and macroeconomic stabilization policies formula to return to the assumed bonafide equilibrium ‘normal’ were actually a noxious formula for attaining very putrid upshot. The *foreign liquidity trap*, which was shoving Sudanese economy to fall in *real GDP deflationary cycle and towards the 1972 CC*, speeded after the adoption of the IMF’s policy prescription during 1966 – 1968. As mentioned above, monetary, as fiscal, policy, for such structurally undeveloped economy, were ineffective in pulling it out of such a trap. Using local currency to finance economic activities exacerbated, rather than solved, the stagflation problem it created as Sudan’s international economic relationship deteriorated, resulting in net capital export under the adopted capital control policy.

The AWE’s dependence on the monetary sector was the natural response with deteriorating real aggregate demand, in foreign, not domestic, currency, due to sustained fall in the influential foreign export sector as reflected in stagnant low ICIP during this period. Dwindled export revenues and NBKI caused NIR to be depleted relative to increased DMS, as a failed effort to make the depressing economy to roar. So since early 1960s, according to the 1967 IBRD report, NIR fell to barely 2 months' imports by June 1966 due to: -

*“Credit expansion to both the private and the public sectors was rather substantial during the four years.*

*Inflationary pressures were kept in check essentially by a loss of foreign exchange reserves.”<sup>524</sup> ... “It is clear, however, that after the first years of the 1960's when Sudan had achieved a fairly high level of economic activity with a peak cotton crop followed by a great increase in public investment the rate of growth declined in 1965 and 1966. ... but over the whole period since 1960 it is doubtful whether income has increased at a greater rate than the growth in population which is said to be 2.8% per annum.”<sup>525</sup> [Emphasis Added]*

The situation was much more convoluted by the Sudanization program for the economy declaration,<sup>526</sup> in addition to adoption of the austerity program, as agreed with the IMF for the first time, in 1966.<sup>527</sup> The political insecurity situation was much more worsened by: -

1. The on-going civil war;

2. The kicking-out of the USA and the UK ambassadors in 1968. An action that weakened the international political, hence financial relationships;
3. The Military coup in 1969 that caused a political and economic regime shift;
4. The costly and extensive Ansar's uprising, supporters of the Umma Party, erupted in Omdurman and in the Aba-Island against Nimeiri's military government that attacked, with the help of the Egyptian air force to bomb the Aba Island in el Gezira;<sup>528</sup> and
5. The re-coup in 1971 over the communist supporters<sup>529</sup> beside the 3<sup>rd</sup> of May 1970 nationalization and confiscation program which increased the capital flight. The 1970/71 Nationalization and confiscation were seen as a thrust for the Sudanese economy to realize self-sufficiency and diversify the unindustrialized economy instead of dependence on a single commodity.<sup>530</sup> These latter objectives were incorporated in the 1970/75 plan;
6. As can be seen from figure 5.5A above, the negative real interest rate in 1970 was accompanied with the launching of 1970/75 plan.

So, each one of the above events was, by itself, a trigger for deteriorating the economy's macroeconomic fundamentals. All of them together prepared the economy for the 1972 CC event. The CC exploded, not only because of these events but because the country's monetary policy stance was increasingly unfavorable since 1956. Francis A. Lees and Hugh C. Brooks recognized this stance and documented it by mentioning that: -

*"In the period 1969 – 73 the central government fell short of ... stated goals .... Ordinary expenditure tended to pull ahead of revenue, and there were no surplus with which to finance development expenditure. Taken together, development expenditure and public entity deficits threw the public sector into substantial deficit. **Approximately 60 per cent of this deficit was absorbed by means of bank financing, and the remainder by external loans ....**"<sup>531</sup> [Emphasis Added]*

The 1966 Sudanization, May 1970/71 nationalization of the economy, and domestic political unrest and violence drove out foreign investors causing a shortage of dollars. The resultant macroeconomic stance as summarized by the fall in the real GDP per-capita. The major sources were the financial complications in the core. The following quotes reveal this fact. According to the 1972 Economic Survey: -

*“The net foreign assets ... deteriorated considerably by £ 9.9 million in 1972 compared to a more substantial decrease of £15.7 million in 1971 and £ 10.5 million in 1970. Since foreign assets are subject to great fluctuations, the percentage increase in money supply rose 20% in 1972 compared to 6% and 11% in 1971 and 1970 respectively.”*<sup>532</sup> [Emphasis added]

Another description of the economic situation in Sudan, before 1972, was reported by the 1979 WB Report by mentioning that: -

*“The years before 1972/73 were a period of great political uncertainty for Sudan, characterized by civil strife. Development expenditures were at a low and stagnating level and growth was slow. ... The balance of payments developments reflect a number of fundamental deficiencies in economic policies and management which center mainly around (a) resource mobilization and allocation, including management of domestic and external resources; (b) the package of incentives for the productive sectors; and (c) the performance of public enterprises.”*<sup>533</sup> [Emphasis Added]

According to the 1970 Central Bank Report: -

*“... following the steep rise in the dependence of the public sector on the banking system in 1968/69, bank financing to that sector increased further by almost the same previous levels in the year 1969/70. Consequently, the two consecutive fiscal years to end June 1970 witnessed a sharp increase in the rate of monetary expansion. ... the bulk increase in total money supply (65%) occurred in the second half of that fiscal year (January/June, 1970). It was associated with marked deterioration in the fiscal situation of some public entities.”*<sup>534</sup> [Emphasis Added]

According to the 1973 Economic Survey: -

بعد التوسعات النقدية التي حدثت في العام المالي 1969/68 نتيجة للزيادات في الاجور الحكومية انخفض النمو النقدي في عام 1970 بالرغم من فائض ميزان المدفوعات الذي نتج عن عن التغيير الزموني للصادرات والواردات. ويعزى هذا الانخفاض لانكماش نشاط القطاع الخاص بما يعادل 6% وعدم الاستقرار الذي اصابه نتيجة للتأميم والمصادرة. وفي عام 1971 حدث توسع مستمر في الإنتمان بالنسبة للقطاع الخاص ولكن نتيجة للعجز الكبير في ميزان المدفوعات لم تزداد كمية النقود المتداولة الا بنسبة ضئيلة. اما في عام 1972 ازدادت طلبات القطاع العام بنسبة 33% كنتاج لتحويل نطاق تمويل القطن من القطاع الخاص الى القطاع العام ولكن نسبة العجز القياسي في ميزان المدفوعات في تلك السنة لم يتوسع عرض النقد إلا بصورة محدودة. وفي خلال العام المالي 1973/72 بلغت زيادة عرض النقد رقماً قياسيماً .... وكان من أهم العوامل التي أدت إلى هذه الزيادة زيادة ... في ودائع الجمهور تحت الطلب وكذلك ارتفاع ملحوظ في ممتلكات الجمهور من العملة ... كرد فعل لحقن كميات كبيرة من السيولة والتي كانت مصحوبة بسياسة تهدف الى الحد من الاستيراد، ومن الناحية الأخرى إزداد شبه النقود ... في هذه السنة وكان من نتاج ذلك التوسع النقدي إزداد تمويل الجهاز المصرفي للقطاعين العام والخاص ... [التثقيب مضاف]

As summarized by the 1972 Economic Survey: -

*“The year 1972 has shown a large expansion in the domestic assets. ... this substantial increase was due mainly to an increase in the public sector’s borrowing from the central bank ... during the second half of the year ... which was reinforced by a record increase in lending ... to the private sector in that period.”*<sup>535</sup> [Emphasis and

Underlining Added]



The resultant end of such inapt macro-policies was a severe shortage in the aggregate supply of goods and services was described by Prof. Ali Abdalla Ali, the situation: -

*“In May 1969 (at that time I was still in Oxford) Nimeiri took over and one of the reason behind the coup was the economic issue and shortages. ... I remember [a] friend who was a Sudan airways pilot told me that **things are so difficult in Sudan such that there are no matches!! He added that he will not be surprised if a ... military soldier might take over.** Next day he phoned me from London telling me that ... Gaafar Mohamed Nimeiri took over the power in the country.”*<sup>536</sup> [Emphasis Added]

In this case, investors were rightly worrying about, as new military leaders didn't stabilize their new political regime for, an economy that remained so reliant on one influential commodity for the influential export revenues. The quote-above, clarifies the state of fiscal crisis in financing its deficit, when the high share of NBKI was equivalent to the average share of cotton's revenue in the budget revenues. It also reflected the erosion of the domestic tax-base as 60% of the budget deficit was compensated by deficit financing due to 1966 – 1968 austerity policies. The loss of taxes was the result of domestic supply scarcity of different goods and services in the economy. as mentioned above, the sustained worsening of internal imbalance was reflected in diminishing of real GDP/Capita, as figure 5.5G above shows. it confirms the fact of the economy's shrinking real aggregate supply.

So, whatever the real reason is, that was practically an inefficient policy during such hard times since *“bad domestic money drives out of circulation good foreign money.”* Substandard macroeconomic policies, therefore, were translated into attractive incentives for currency speculators and investors to change their domestic, for foreign, financial assets. The impact of these substandard policies, which contributed to the 1972 CC, was summarized by the USA Global Investment and Business Center as follows: -

*“... the nationalization carried out in 1970 and 1971 discouraged private sector investments in productive undertakings. Foreign private sector became negligible and domestic private capital was put mostly into areas considered less subject to takeover such as service enterprises, housing, traditional agriculture, and handicrafts.”*<sup>537</sup> [Emphasis Added]

Moreover, when the central bank lowered its real interest rate, it actually worsened the *internal imbalances*. By doing so, it supported an increased domestic aggregate (money) demand, hence imports. It therefore reluctantly created an incentive to move derisory funds

abroad for imports, hence worsening the *external imbalance*.<sup>538</sup> So, *the generated inflation can be considered to be the powerful force for accelerating ED growth and non-accelerating the country's international finance position*. As mentioned by Nureldin Hussien, solving these imbalances, due to sustained *shortage of foreign exchange*, via failed series of effective devaluations, ended in a *sharp* currency re-alignment.<sup>539</sup> As he put it: -

*“The Sudan has been plagued for many years by a shortage of foreign exchange. Despite a series of ‘effective’ devaluations in the early 1970s, resulting from the 1971/72 currency re-alignments and selective tax and subsidy changes, a steady deterioration in the balance of payments continued.”*<sup>540</sup> [Emphasis Added]

Nashashibi<sup>541</sup> put in more explicit wordings by stating that: -

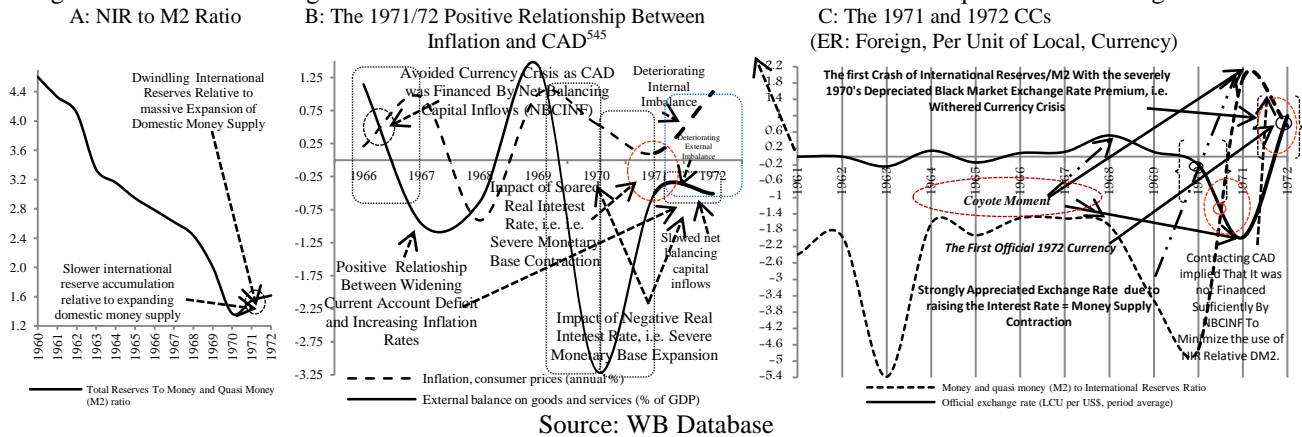
*“Under the 1972 devaluation, the official exchange rate of LSd 1 = US\$2.87 was depreciated to an effective rate of exchange of LSd 1 = US\$2.50 by means of a tax subsidy scheme of 15 per cent on all external transactions except proceeds from exports of cotton lint and gum arabic.”* [Emphasis Added]

The WB Country report documented the same by stating that: -

*“In 1972, an exchange tax/subsidy scheme was put into effect, except for cotton, which amounted to a de facto devaluation to LS1 = US\$2.50, coupled with an implied 15% export tax on cotton.”*<sup>542</sup>

The 1971 real interest rate hike, as figure 5.5A above shows, implied the tightening DMS/NIR response that led to stronger currency, as figure 5.11C below and 5.8B above show. By 1972, the run on the domestic currency pressure continued more severely. Given the above unfavorable macroeconomic veracity, the government was objectively having no alternative option but to devalue sharply in the face of severe run on domestic currency relative to severe foreign currency shortage, as in figure 5.11A and 5.11B below verifies. In other lexis, the demand for foreign currency remained outpacing its supply in 1972, leaving the government short of sufficient foreign cash. Amid the world economy's absolute floating ERR chaos, during 1971/73, that (*Coyote*) moment opened the doors wide for the black market's opportunistic traders to sell their foreign currencies at a premium over the official rate. That forced bankrupted central bank to devalue sharply its BWIs' committed ER to bring business back to normal, mainly after the de-nationalization process.<sup>543</sup> So, the realigned currency, as the above-quotes described it, was actually a real CC quagmire in which Sudan fell in 1972 as figure 5.11C below verifies.<sup>544</sup>

Figure 5.11: The Close negative association between the real interest and the Sudanese pound's ER during 1960/72



The signs were very clear-crystal. Having a slowing-down economy, monetary easing, relative to waning NIR, and a confidence-loss crisis, as reflected in declining NBKI, and mounting foreign currency denominated debt, the Sudanese pound was practically depreciating as was clear in the parallel black market. As mentioned above, Sudan had been squeezed by NBKIs reversal, rather than an external public debt servicing crisis. NBKOs were indicated by the increasing black market's ER premium beside the rapid deterioration in NIR/DMS ratio, which dropped sharply, till it reached its minimum threshold as defined by the central bank.<sup>546</sup> As expected, as another indicator, was the widening, not closing, gap between hiking inflation, i.e. *aggravating internal imbalance*, and widening CAD, i.e. *worsening external imbalance*, during 1972, as figure 5.11B above validates.

Objectively, the illegal black market reflected the impact of mounting excess domestic aggregate demand, which remained surpassing the shrinking real GDP/Capita, due to excessive expansion of domestic, relative to foreign, money supply policy. Sudan's currency had rapidly hard-landed and crashed in 1972, as shown in figure 5.11C above. That was a natural punishment for the dependency on the undependable, including the misuse of the fiscal and the monetary tools that weren't used to combat, instead of aggravating, the internal as the external imbalances of the fragile underdeveloped Sudanese economy.

### 5.6. The 1973/78 Plans' Idealistic Assumptions vs. Realism. –

#### Age of Weakened International Financial Relationships: -

By 1969, Sudan was still subject to the above H-STGLP under the Bretton Woods' "fixed, but adjustable, ERR." As mentioned in footnote 100 below, since early 1970s, the May 1969

military government was forced to resort to a series of supporting IMF-economic stabilization programs due to the seriousness of the unresolved acute external payments deficits. Among the three stand-by arrangements was the implemented one that covered the fiscal 1972/73.

So, the immediate clear economic problem for the new military regime was one of boosting a depressed UUE foreign-currency-dependent economy during 1960/72. The enforced ER devaluation, due to the 1972 CC, might have had been assumed as a time policy to improve the country's overall troubled external sector imbalance of payments, by increasing exports revenues, and to permit a relaxation of import restrictions, to give the impression of adopting open doors system.

But unfortunately, Sudan remained during the 1973/78 period a producer and exporter of *non-final materials* that was still dominated by the influential 62.5% cotton commodity. As its predecessors, the ruling government of Sudan, during 1973/78, was caring to establish large-scale projects for the production. In 1969, the Second Military, which alternated/ousted the Second Democratic, Government embarked on another ambitious foreign-finance dependent Five-Year Plan of Economic and Social Development: 1970/71 – 1974/75 (FYP). It aimed at creating an independent national economy with steady growth for prosperity and further development of cultural, education, and health services on the basis of socialist principles.

As the British colonial administration's belief in public sector dominancy, the 1970/71 – 1974/75 plan assumed a grand importance for the nationalization and confiscations processes of foreign and national private enterprises, in 1970 and 1971, for its success. Unfortunately, the nationalization processes resulted in negligible financing, mainly by the foreign private sector. It also discouraged them to undertake productive activities, as it remained, beside the civil war, shuffling the private investors as budget expenditures were kept low. So, as it is well-known, *any plan without financial resources will remain forever just a dream*. As mentioned above, this period witnessed also the political and financial disruptions that ended with the 1972 CC. So, the government felt that its plan failed to provide for transportation improvements and large-scale productive projects. Most importantly, it also failed to realize its overall-optimistic projections of 7.6% real GDP growth rate, as table 6 in the appendix.

There were also more political developments in 1972. By 1972, Sudan signed the Addis Ababa Accord that ended the first Sudanese Civil War (1955/72) and devalued the national pound sharply, for the first time since 1957. Both these deeds, in addition to the *de-nationalization* in the same year,<sup>547</sup> made Sudan look ripe, from the perspective of improved international trade competitiveness and freed war-resources, for rapid growth. As a result, the defeated foreign-finance dependent 1970/74 *Socialist Plan* was replaced by the (1973/77) “*Interim Action Program*” (IAP). The new program made adjustments in the size and distribution of the investment program of the original 1970/74 plan.<sup>548</sup> It targeted, in addition to the 1970/74 plan’s objectives, the removal of severe infrastructural bottlenecks, attaining self-sufficiency in some consumer goods, and expanding agricultural exports. Moreover, the ruling government also targeted to finance oil exploration, digging Jonglei Canal to better exploit the Nile waters, and establishment of a range of industrial and agro-industrial projects such as the giant sugar factory at Kenana. *But what was most remarkable, after de-nationalization and the issuance of the (1973/77) “Interim Action Program, was foreign private sector’s investment increase in development processes.*<sup>549</sup>

By 1973, being led by the public sector, the Sudanese government adopted the open doors policy, i.e. after the Oct. 1973 Arab – Israeli War that ended the low international oil price. The major objective was to attract the windfalls of the Arab oil-producing countries by enticing their governments to make Sudan their “*Bread-Basket*” farm after the USA threat them by stopping exportation of food to their countries if they again dared to stop exporting oil to them for whatever reasons in the future.<sup>550</sup>

Consequently, Sudan attracted an unprecedented amount of external investment, and the government borrowed extensively to finance its major ambitious national comprehensive developmental (1973/77) “*Interim Action Program.*”<sup>551</sup> But it is important to note also that, after 1973/74, those foreign finances were practically used to target transformation of Sudan into the largest ‘*Breadbasket Scheme in the Middle East.*’ From the colonial development paradigm perspective, it is clear that this looks as if Sudan was still living the colonial era. That looks like the establishment decision of the 1920’s world’s largest single irrigation

Gezira scheme model for the Liverpool and Lancashire industrial Textile Monopolies.<sup>552</sup> In absence of effective and strong import-combating industries, the assumed foreign currency earnings were assumed to be used to exchange them, as during the colonial era, for the needed imports for the population, domestic firms, foreign companies' profit transfers, foreign labors' transfers, and EDS ... etc.

In 1975, Sudan's BOPs suffered from a severe crisis.<sup>553</sup> By 1976, unconsidered realities in the past plans and actions led to the issuance of the six-year plan.<sup>554</sup> Due to the 1976 sharp decline in the world demand for cotton and increased international competition (especially from China) Sudan's export received the paralyzing knock that led to "*large trade imbalance in Sudan.*" Consequently, the Sudanese government negotiated a failed IMF financial support. As put by Prof. Ali Abdallah Ali:<sup>555</sup> -

"خلال الجزء الأخير من عام 1976م كانت هناك مفاوضات مضنية مع صندوق النقد الدولي للحصول على موارد مالية لدعم الإقتصاد السوداني والإصلاح الإقتصادي. كان السودان يعاني من ضعف في الموارد وعدم توازن داخلي وخارجي في أوضاعه المالية مما أدخل السودان في مفاوضات طويلة مضنية وصلت ذروتها في الربع الأخير من عام 1976م."

By early 1977, the government published the successor net foreign, but mainly Arab, finance dependent Six- Year Plan of Economic and Social Development, 1977/82. This plan targeted the transformation of Sudanese economy to reach its self-financing growth stage by 1994/95.<sup>556</sup> It was never effectively implemented and stopped in 1978. The reasons were, not only due to continued deterioration in the IEIs<sup>557</sup> but also: -

*"In 1977 Sudan signed a mutual defense pact with Egypt. One year later, in 1978, Sudan reluctantly supported Egypt's signing of the Camp David peace accords with Israel. Camp David placed Sudan in a difficult position: on the one hand, Egypt had broken ranks with the other Arab league members; on the other hand, Egypt and Sudan shared many common interests, including the Nile waters and exporting of cotton. Perhaps tempering Sudan's involvement in the Arab-Israeli conflict was the knowledge that Israel was simultaneously supporting Southern Sudan rebels: from 1965 to 1972 Israel armed Anya-Nya soldiers from Uganda in an attempt to draw Sudanese forces from the Suez Canal Zone ..."*<sup>558</sup>

As it is well known, Sudan's almost all national plans and programs, since 1960, were either opening or widening a CAD due to their dependence on net foreign finance from the start. In a world of changing political and economic international relationships, unstable world and national, economy such a strategy is not sustainable in the long run. They must be always

expected that they will never be fully implemented once they faced the fact of net foreign finance shortages due to troubled international relations. Despite his observation on the foreign-dependent “*Phased Action Plan*,” the 1970s’ plans were can be described, as put by Prof. Ali Abdalla Ali, as follows: -

“..., **short-term plans** continued and public sector continued in the sectors of irrigation, agriculture, transport, roads, electricity, industry, and social services, yet the **benefits to the economy were not visible**. Individual entrepreneurs and those in the private sector did not have the chance to participate, although they were officially welcomed. Heavy taxes were incapacitating, and in addition the continued drain of human skills led to further deterioration of the economy and of the management of its major sectors.... Generally, **the service sectors expanded at the expense of the productive sectors.**”<sup>559</sup> [Emphasis Added]

Of course, the failure of implementing development plans to their full details cannot be explained by political instability alone. *Realistic robust Plans are unrealized dreams unless needed finances, skillful planning and implementation technical capacities are made available*. So, insufficient NBKI availability and ruling government’s inapt macroeconomic policies are the most relevant exogenous factors for the failure of any plan. They, therefore, both formed good predictors for the resultant CC. Imposing austerity in times of NBKI and NIR shortage, such as in case of Sudan, that its effects cannot be offset by expansionary monetary policy inflicted only pain without any gain whatsoever. Austerity actually ends in reducing the future size of the economy, in per-capita terms, hence the tax base and the fiscal outlook, and contributes to the worsening of the internal and external balances position.

The products of these projects were basically targeting the Arab World populations and others for foreign currencies to satisfy the needs of modern sector’s population. That was also like the colonial governments that were caring to produce raw cotton for the Lancashire and Liverpool industries for foreign currencies. In other lexis, there was no real interest in establishing projects like the above ones for the production of products that are needed by its own Sudanese population rather than make it dependent on foreign currencies to satisfy its needs. In other words, The Sudanese people were which left at the mercy of the availability of foreign currencies from the export of the produced raw materials to import what satisfies its needs. That is, the ruling governments were not interested structurally change the UUE to produce for the satisfaction of the Sudanese, rather than the rest of the world, people. So, in

both eras, as during the 1958/64<sup>560</sup> and 1989/2011, the ruling governments were caring to establish NBKI-dependent productive large-scale projects for the rest of the world.

The created problem of borrowing massive NBKIs are reflected in increased demand pressure on the committed ER as the import-dependent export-oriented economy was made to consume and invest beyond its own productive capacities, under the *uncontrollable* net foreign funds dependent socio-economic development plans, mainly via increasing the *controllable* DMS.

### 5.7. Disclosing the 1973/78 Undeveloped Economy's Flaws: –

The 1970s was dubbed as the 'stagflation' decade. It was a decade during which world countries tended to avoid importing additional weakness for their economies via other countries' weak currencies. Consequently, it can be seen that the period 1973/78 started by another worldwide speculative attacks' pressure that ended the 1944/72 Bretton Woods' "fixed, but adjustable, exchange regime" system as major developed countries shifted, since 1973, to "floating, but manageable, ERRs" and deregulation of the financial systems. As mentioned in chapter 1, the world, practically, shuffled itself with a new uncertainty barrier that accompanied the shift to these new regimes. As a result, under-developing economies, under fixed ERRs, such as Sudan, became much more vulnerable to increased frequencies of speculative attacks and financial crises besides the already existing direct and indirect advanced countries' protection system.

As mentioned in the introduction above, the advanced world economy's drivers, whose currencies are internationally convertible, hence their aggregate demand, thence their imports, were growing at declining rates after their shift towards the "floating, but manageable, ERR" since 1973. So, under-developing countries, including Sudan, remained, since 1973, facing a growing world demand for their exports at diminishing rates. Accordingly, they remained facing BoPs problems as been reflected by different kinds of financial crises in different regions and countries since mid-1970s.

CADs, as reflecting recent and future financial plights in the external sector balances, remained to be mainly to the manufactured goods import-dependent economies. So, it was a



time of BoPs problems, hence the currency's value abroad, for all countries, mainly as Sudan's underdeveloped economic structure.

During this world economy's turbulent period, Sudan remained resorting to the international community to fix its suffering external sector's payments problems. During such tumultuous period, Sudan's sustained dependence on inapt domestic macroeconomic policies and the rest of the world, whether for exports revenues and/or financial support was, the mother of all kinds of its crises. As can be observed, the above two expansionary NBKI -dependent plans implied the recovery of the economy via *massive foreign-finance-dependent investment program. That implies a recovery of domestic demand, at least via the decided investment programs, must lead to increases in imports more rapidly than exports. In other lingua franca, CADs would be opened, if not widened.* Predictably, that must worsen more the already opened current-account deficit and worsen Sudan's already weak fixed ER buffering net-external-asset position.

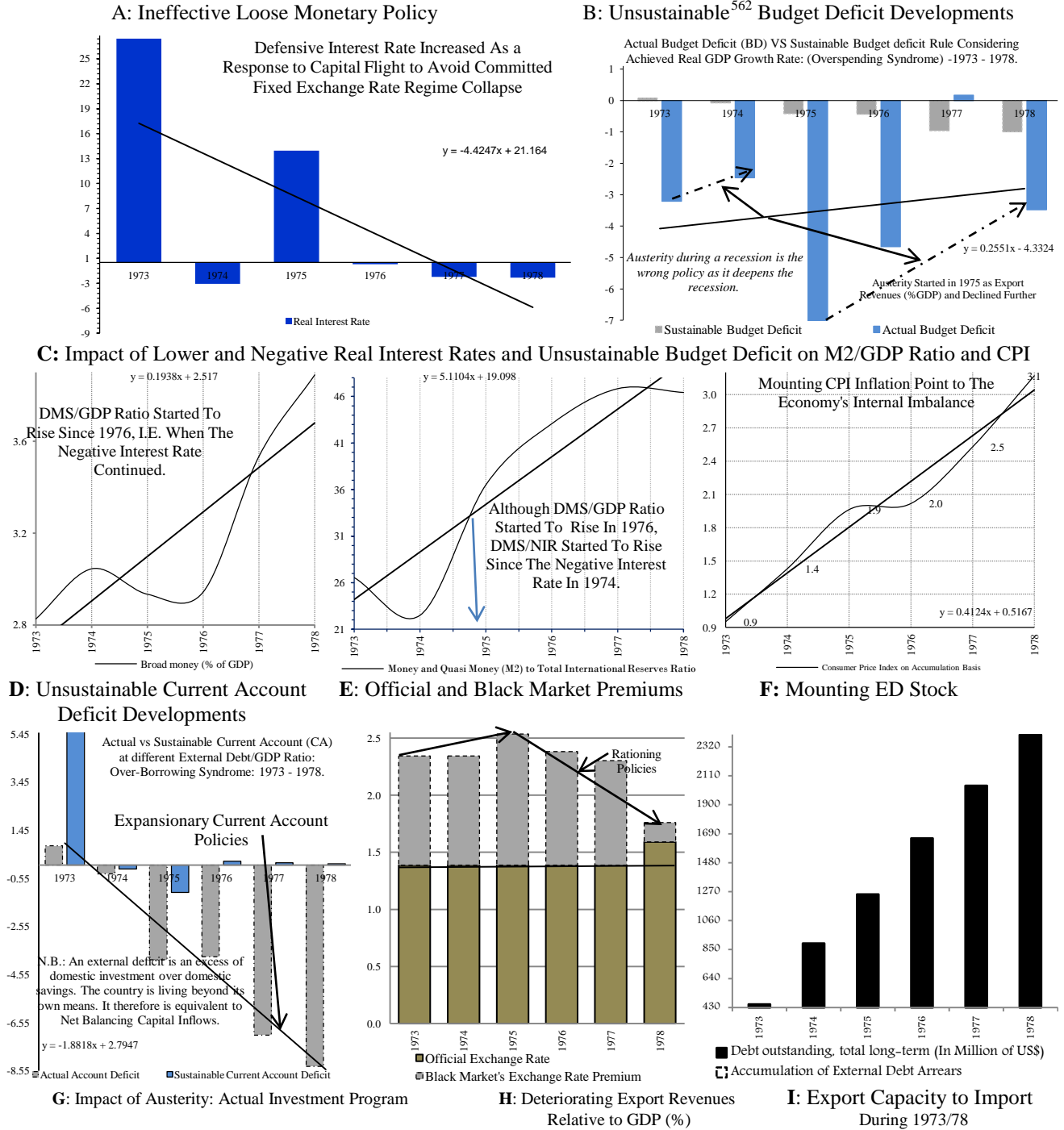
Despite Sudan's ruling governments' plans and stabilization programs' several defects, table 6 in the appendix summarizes its UUE's performance, within the given volatile nature of the world economy and politics, during 1973/78.

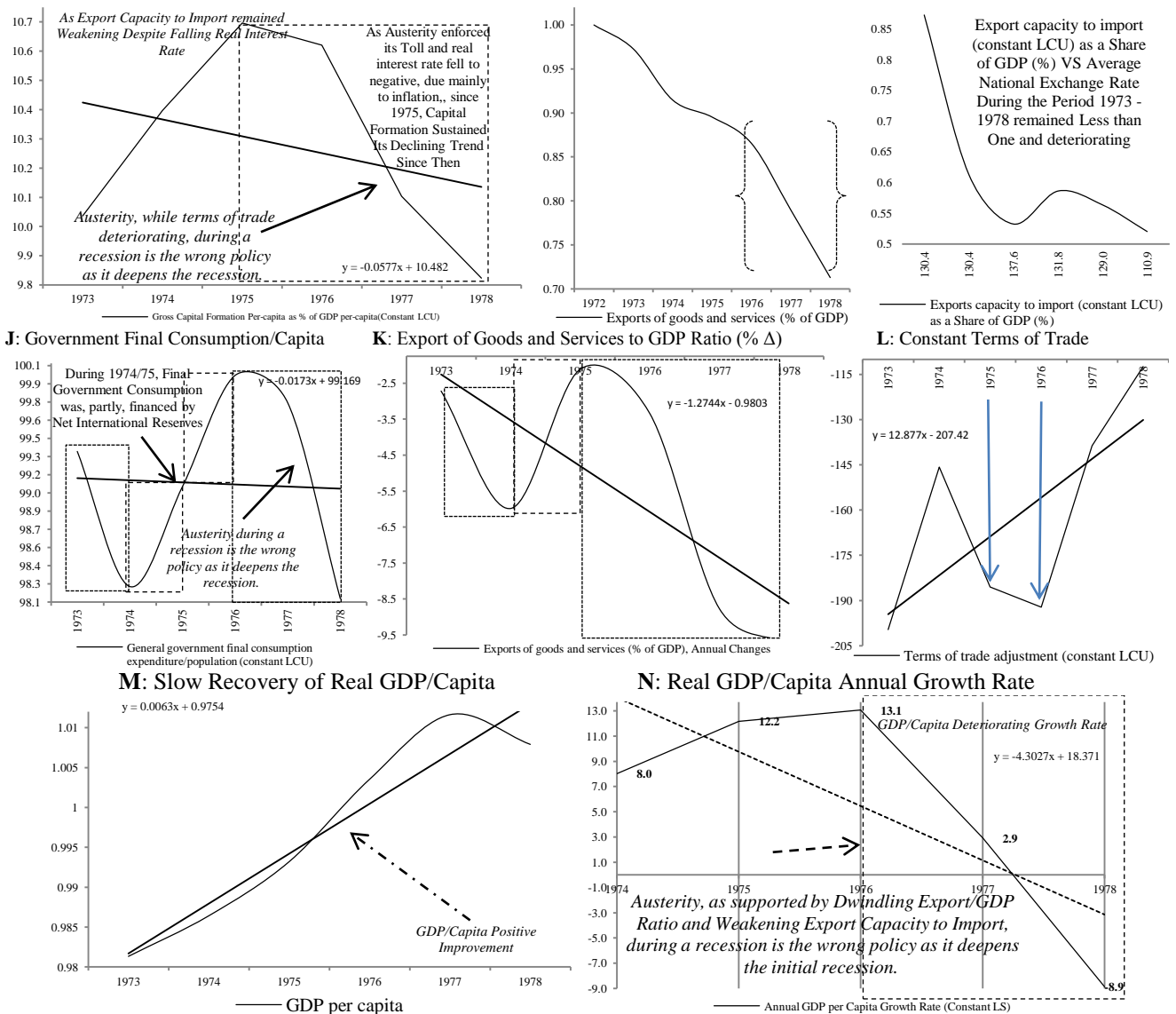
Despite its maintenance of, and subjection to, the H-STGLP, Sudan's very small UUE's calamities, remained, as it will remain, always minor shocks regionally and a non-event, of course, globally. Despite *its serious dependence on increasing DMS to keep its economy roaring, Sudan found itself always in an acute financial/liquidity crisis trap due to insufficient supportive regional and international lenders of last resort. That is because of its insufficient historical cotton's, beside others, influential export revenues<sup>561</sup> remained dominating the budget revenues and the central bank's NIR.*

The FYP remained, as its predecessor and heirs, adopted the colonial economic development paradigm, rather than breaking the established H-STGLP, of the inherited colonial export-oriented and import dependent UUE. The FYP was therefore not solving Sudan's root structural foreign finance-dependency problem. It actually neglected it via sustained establishment of foreign-currency dependent non-developmental projects that remained

related, whether directly or indirectly, to the foreign trade sector. As a result, *it can be concluded that the 1972 crisis was not well-diagnosed to be considered in the FYP*. Given the adopted macroeconomic policies, it must naturally be expected that another CC must be on the road ahead as the economy's malfunctioning, of table 6, can be analyzed, geometrically, as follows: -

Figure 5.12: The Achieved Real GDP/Capita in a Depressed Economy





Source: Table 6

As figure 5.12D above shows, annual CADs were growing at average rate of -1.9%. It started to worsen since 1975 due to increased expensive capital equipment imports after the oil's international price hikes in 1973/74. Therefore, *national savings*, during the same period, were insufficient to pay for all the needed *foreign produced capital equipments*. By 1975, as figure 5.12L above shows, Sudan suddenly fell in a sever BoPs crisis<sup>563</sup> as real terms of trade reached its trough in 1976. This says that the FYP and the IAP didn't consider the declining impact of export revenues, as % of GDP, as figure 5.12H above validates, on the contracting export-dependent *budget deficit* at annual average of 0.3%, as figure 5.12B above shows, which forced the slow real government expenditure per-capita contraction, at average rate of -0.02%, as figure 5.12J shows. Generally, *during declining export revenues, besides the*

*insufficient increasing in NBKI, times, cutting budget spending in a depressed economy would necessarily deepen its initial depression, despite increasing DMS.* Despite deteriorated international political relationship after the October Egyptian – Israeli War in 1973, these developments were documented in the 1975/76 Sudan’s Ministry of Finance’s Economic Survey as follows: -

السودان كاحدي ... الدول المنتجة للمواد الاولية قد تأثر ب... التطورات، كالتضخم العالمي وارتفاع اسعار البترول والمواد المصنعة وتدهور نسب التبادل الدولي. ورغم هذه الصعوبات فان الدولة تسعى جاهدة ... بتنفيذ برامج طموحة للتنمية. وفي سبيل ذلك فان أعباء جديدة تضاف الى ميزان المدفوعات لمقابلة حاجة البلاد من معدات التنمية<sup>564</sup>

As it is well-known, *budget deficit equals the sum of excess private national saving over investment and the CAD under whatever monetary and ERR.* Sudan, therefore, under its adopted fixed ER and interest rate regimes, was severely suffering from an increasingly widening unsustainable CAD, equivalent to widening *national S – I gap*, during 1973/78. Widening CAD and increased investment projects, therefore, implied that the private national savings were not sufficient enough to finance the realized budget deficits. That was clear in figures 5.12F above which shows that the budget deficit retrenchment didn’t prevent *the ED stock from mounting-upwards*. Austerity, by cutting spending or budget deficit, in a depressed economy to reduce high debt levels and/or inflation is, beyond any logical optimism, an awful mistake and is a self-defeating policy. By depressing the economy, spending cuts lead to lower tax-base revenues, and are thus self-defeating mainly in a non-stable economic world economy.

Moreover, the impact of improved real terms of trade since 1976, as figure 5.12L above shows, on domestic overall price index formed a new pressure for a shift in domestic aggregate demand to create additional pressure on the adopted fixed ERR. As figures 5.12H and 5.12I above show, the sharp decline in export revenues, as % of GDP, and their waning capacity to import, were mainly due to: -

*“The sharp decline in the world demand for cotton after 1976 and increased international competition (especially from China) have been a crippling blow to Sudan's export prospects.”* ... leading to *“large trade imbalance in Sudan.”* ... *“The mounting external finance gap could only be filled by resorting increasingly to medium- and long-term loans.”* Unfortunately, due to their insufficiency, *“... between 1975 and 1984 GDP showed little or no real growth while population grew at about 2.8 percent, so that Sudan's per capita real*

*income declined by 2.8 percent a year on average. This highlights Sudan's present desperate economic situation and slim prospects for the future.*”<sup>565</sup> [Emphasis added]

Mounting CADs meant, therefore, that real ADD, including imports, was annually surpassing APC, including exports, capacities. But it also meant that they were financed by insufficient increasing NBKI to finance the development investment programs, according to *The Global Investment and Business Center's* quote below.

As mentioned above, *there is a direct and strong relationship of the real interest rate to the prevailing ERR despite DMS changes.* The resultant mammoth growth of DMS at an annual average rate of 0.2% was therefore *10 times* the 0.02% annual growth rate of real GDP, as figure 5.12A above shows. This says that *too much money was chasing relatively fewer goods and services.* It is not eccentric, then, to find that Sudan's (*controlled*) CPI remained hiking at a rapid annual rate of 0.4%, as figure 5.12C above reveals, *to worsen the internal imbalance.*

As it is well known, not all consumers in Sudan, as everywhere else, would purchase the same bundle of goods and services at the same set of domestic prices during the same, or different, time-period. Consumers, therefore, shift their real, DMS supported, effective demand, i.e. change that bundle of goods and services structure, when they face different set of prices, given the decided national income distribution. In such circumstance that prevailed during 1973/78, the goods and services bundle's structure must be biased to more cheap imports, as real, DMS supported, ADD, to increase domestic demand for foreign currencies.

The effects of the central bank's selling of NIR, which was growing at -0.03% annually, beside its low and negative real interest rate, to meet the, relative to export, mounting excess import-demand, was *worsening* the DMS/NIR ratio, which grew at a horrific speed of 5.1% annually, as figure 5.12C above shows. So, it can easily be seen that the increase in DMS/NIR ratio shows that that *too much mounting DMS was chasing relatively diminishing* NIR at the prevailing official fixed exchange parity. *That policy, therefore, impaired awfully the external imbalance of the economy,* as figure 5.12B above reveals, *and the related fixed ERR.* So, it is not eerie, at all, to find the black market premium over the official fixed ER parity to be sustained, as figure 5.12B above validates.

In addition, there was the diminishing annual *real interest rates* fact. Diminishing real interest rate didn't support the increase in needed national savings to attract more investors or to pull down the CPI inflationary pressures or reduce the demand for foreign currencies or reduce the EDs. As figure 5.12G above shows, when real interest rates were relatively positive on average, during 1973/75, capital formation was also positive, *during which CPI inflation and the black market ER's premium were rising during the same period*, as figures 5.12C and 5.12E shows. But when it crossed the zero-zone to the negative zone, during 1976/78, capital formation slid downwards as with export revenues, as a % of GDP, and its capacity to import as figures 5.12K and 5.12L above shows. In addition, the resulting worsening of DMS/NIR ratio, as in figure 5.12 above, meant that debt dynamics for any given budget deficit level was worse, i.e. unsustainable enough than should be, as in figure 5.12B above. It is important to note that the worsening NIR/DMS ratio implied that the overall BOPs balances were weakening the government capacities to service its EDs. It actually failed to service it in 1978.<sup>566</sup> Of course, it defaulted on its EDs because it wasn't in its own currency to print it to erode its real value and to meet its committed EDS. In addition, low real interest, which worsened the DMS/NIR ratio, explains the widening of the CADs, which were equivalent to borrowing, rather than attracting, NBKIs to protect the NIR from diminishing. That indicates, not only to weakening international political relationships but also, to Sudan's *sustained worsening external imbalance* and the related *committed fixed exchange parity*.

Furthermore, as can be observed from figure 5.12D and 5.12G above, the induced expansionary CAD rate, of -1.9%, was higher in speed than the sustained contractionary budget deficit rate, of 0.3%, as figure 5.12B above shows. According to the Global Investment and Business Center, the enforced slow fiscal austerity was due to: -

*“Earnings from public corporations, however, fell short of projections, and growth in government current expenditures greatly exceeded revenue growth. As a result, not only were there **no surpluses in the public sector**, but the government had to borrow from the Bank of Sudan, to cover the current expenditure account. Foreign capital, although abundant, also did not equal the spending on development, and, contrary to the expectation of the plan drafters, the government had to resort to domestic borrowing to proceed with project implementation.”<sup>567</sup> [Emphasis Added]*

The only way to achieve the enforced slow fiscal austerity, in the face of eroding export revenues, as a % of GDP, and tax base was to sustain a rising of domestic, relative to foreign, overall prices. So raising inflation was making it possible for the government to realize the decided size of the fiscal austerity adjustment.

It is important to note also that the 1970 governments' optimistic prospects of obtaining external assistance to carry out their development program were good. Of course, those prospects were part of the governments' ruling economists' cult belief in the NBKI's role in expanding, rather than structurally change, the productive base of the under-developed Sudanese economy. *Based on that optimism, the: -*

*“...government development expenditures did expand rapidly, and huge amounts of foreign capital were made available.”<sup>568</sup>*

But those prospects proved to be bogus. As figure 5.12G above confirms, declining overall investments, at an annual rate of -6%, implied that private savings were actually insufficient to finance their own investments and/or the (contracting) budget deficit, mainly after 1975. It can be concluded that, under the public sector dominance, the fiscal austerity was, therefore, mostly been financed by (insufficient) NBKI, including the dwindling NIR for the development purposes, as the quote above confirms. The insufficient NBKI and private sector financing enforced the ruling government to resort to the central bank's printing press to tax domestic private consumption and savings, via inflationary pressures, partly, to finance its shrinking deficit. As put by LaVerle Berry:<sup>569</sup> -

*“In early 1977, the government published the successor Six- Year Plan of Economic and Social Development, 1977-1982. Its goals and projections also appeared optimistic because of the **worsening domestic economic situation, which was marked by growing inflation**. The inflation stemmed in large part from deficit development financing (**printing money**), increasing development costs because of **worldwide price rises, and rising costs for external capital**. **During the plan's second year, FY 1978, there was no economic growth as the deficit development financing in the mid- and late 1970s led the Sudan into a deepening economic crisis**. At the same time, **external debt pressures mounted, and Sudan failed to meet its scheduled payments**. A substantial cutback in further development expenditures became unavoidable. The result was an abandonment of Six-Year Plan projections, a restriction of expenditures generally to the completion of projects under way, improvement of the performance of existing operational projects, elimination of transport constraints, and a series of short-term "rolling" programs that particularly emphasized exports.”* [Emphasis

Added]

That also indicates to the country's *sustained worsening internal imbalance* of the Sudanese economy at *the official fixed exchange parity*.

It is important also that an attention should be paid to the contracting public expenditure were moving in inverse direction to the constant terms of trade and in positive direction to the export revenues, as shown in figures 5.12G – 5.12I above, under the adopted fixed ER. In the absence of an advanced combating import-substitution sector, the share of imports to its total government expenditure remained high contributing to increased total imports. Accordingly, it contributed to the worsened BoPs on current account, owing, notably, to a rise in imports, as national GDP/Capita sustained its rise.

It is therefore clear from figure 5.12A above that the sustained reduction in the real rate of interest caused an external deficit that was attempted to be improved by the reduction in the budget deficit, as figure 5.12B above shows, to restore its balance, failed. Irrespective of the expansionary real rate of interest, the internal-balance absolute positive slope, as represented by inflation, in figure 5.12C, confirms the failure of real domestic expenditure, hence imports, to respond to the reduction in budget. That is because the domestic aggregate demand for money must have had increased by the increasing domestic price level, at the low and negative real interest rate. The reason for the increase in the domestic aggregate demand for money was the proportional increase in real GDP/Capita, which leads to increased imports. Therefore, it can be said, the internal imbalance aggravated the external imbalance during the 1973/78, which led to the famous (avoided) ED crisis in 1978. Objectively, Sudan was having a severe BoPs crisis since 1975,<sup>570</sup> as figure 5.12F above validates.

The above analysis can be seen from the “impossible trinity” perspective. With the ER fixed, however, the increase in the DMS merely creates excess liquidity, an export of capital, a BoPs deficit, and a reduction in the DMS real value with no shift. Sudan's remarkable increases in DMS/GDP ratio, as validated by figure 5.12A above, reflected, from a practical point of view, the loss of Sudanese monetary policy independency. The lost monetary authorities' independence was at a time when Sudan was committed to an internationally committed fixed ERR and allowing the ruling government the freedom to borrow foreign



funds under the different plans' names while inadequate foreign demand and financial support were destroying Sudan's capacity to supply domestic goods and supply.

The results of this noxious policy mix, under the prevailing international trade and finance-growth parameters and the inapt domestic development and stabilization policies, were undermining investors' confidence by creating unfavorable domestic investment environment.

#### **5.8. Pushing The 1970s' Committed Peg To Its Coyote Moment. –**

As mentioned above, time always splits real, from fancy, assumptions, tales, promises, and predictions. The 1972 currency collapse vividly reminded everyone of the dangers that capital inflows can suddenly turn to capital outflows, that international confidence can give way to panic, as facilitated by expanded monetary basis, relative to rapid depleting NIR, and the ER foreign anchor can give way to devaluation/depreciation.

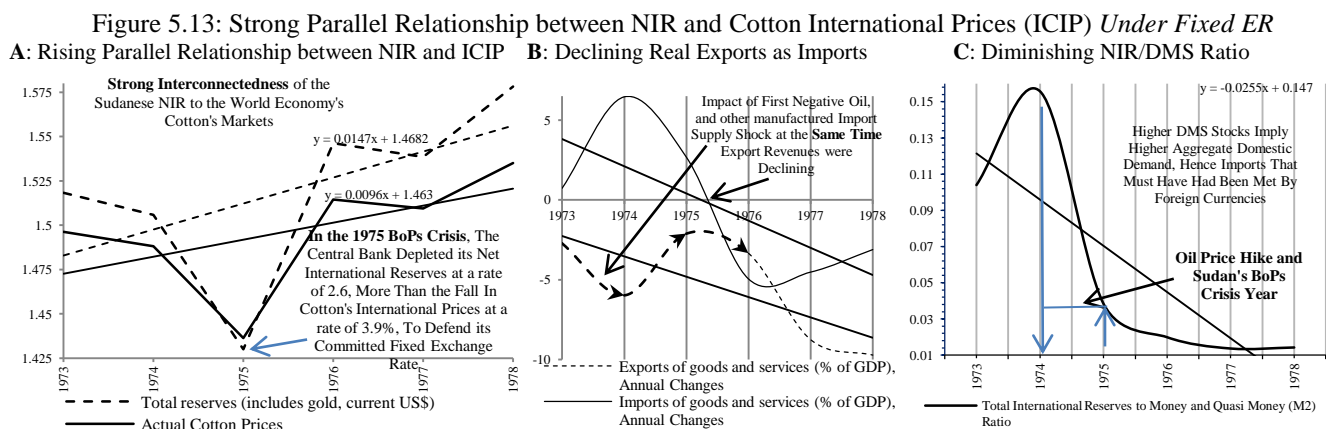
As mentioned previously, the colonial undiversified unindustrialized modern economic structure remained, to a great extent, tied to the H-STGLP relationship with World Economy's Dynamism. The 1970s planners, as their ancestors, therefore, failed to grasp the strength nature of the global deflationary forces that remained shaping Sudan's economy's IEs at the adopted fixed ERR. As a result, Sudan, as akin countries, with its fixed ER, paid large costs due to its suffering from the 1970s negative supply shocks. Consequently, it can be said, the unfeasible 1970s foreign currency-dependent Plans for the foreign-dependent economy made the Sudanese to lose the 1973/78 painful period.

Figure 5.13C below discloses the fact that the ICIP remained fluctuating in the range of 86.9 – 103.7 ¢/p of an *overall average of 88.0 ¢/p for the 1973/78*. As compared to an average of 38.8 ¢/p for 1960/72, this average was almost 126.8% of the 1960/72 average. *This average price formed more than three times the 1960/72 average*. Despite the increasing NBKI, which is equivalent to the mounting CADs, in figure 5.12D above shows, *the realized revenues from the exported cotton volumes was unsupportive to the diminishing buffering NIR/DMS ratio to defend sustainably the committed fixed ERR*. The influential Cotton exports, in real terms, declined by some 13% between 1970 and 1977. Its volume in 1977 was 35% lower than in

1971.<sup>571</sup> As figure 5.13A below shows, total exports, as total imports, were both declining during this period. The 1976 WB Reports about the Sudan detailed the reasons as follows:-

*“Externally, two developments since 1973 have exacerbated the foreign exchange constraint to growth and intensified the budgetary difficulties. On the one hand, higher rates of international inflation coincided with the Government's attempt to step up the pace of public investments and, on the other, recession in major industrialized countries adversely affected export earnings from cotton (Sudan's major foreign exchange earner). In addition to a four-fold increase in crude oil prices, price increases of more than 100 percent were registered for such commodities as sugar and fertilizers, and more than 50 percent in the case of wheat, electrical machinery and steel. As a result the current account of the balance of payments deteriorated from a surplus of US\$16 million in 1973 to a deficit of US\$260 million in 1974 and to US\$420 million in 1975.”<sup>572</sup> [Emphasis Added]*

But as figure 5.13A below shows, there was a strong positive parallel relationship between growing ICIP, at 1.5% annually, and the growing NIR, in absolute terms, at 0.1% annually.



Source: Table 6

Despite its production reduction, it is clear from figure 5.13A above, that the world's high ICIP supported positively Sudan's central Bank's NIR. But to compensate for NBKI shortages, which was matching the widening unsustainable CAD, as figure 5.12D above shows, the government allowed NIR/DMS ratio to deteriorate rapidly since 1975, in figure 5.13C above, to sustain the establishment of diminished targeted development projects. It is clear, then, that the 1975 BOP's crisis was clearly having a very heavy toll on Sudan's NIR, relative to DMS, as the black market's ER premium soared sharply, as figure 5.12E above shows.

As mentioned above, the origin of that malaise lied in the creation of excessive public debt to fund development investment and construction. As a result, Sudan was caught in a trap where mounting ED burdens did not fall and where monetary policies alone were inadequate to stimulate global demand, rather than merely redistribute it. As Richard Brown put it: -

*“The money supply (M2) increased from LS.127 million in 1970/71 to LS. 669 million in 1977/78. Net domestic assets increased over the same period from LS. 153 million to LS. 887 million, with the increase in claims on the public sector representing the largest component of this increase.”*<sup>573</sup> [Emphasis Added]

It is clear, thence, that *Sudan’s currency peg was under high pressure* as a result of increasing DMS/NIR that sustained a higher real aggregate demand for the Sudanese UUE. But that policy, despite increasing ICIP and NBKI, was not helpful in protecting the government’s committed fixed ER buffering NIR from deterioration due to the mammoth increase in DMS, as summarized by the worsened NIR/DMS ratio. It is not weird, then, that the black market premium over the OER reflected the fact that the ruling government was adopting inapt domestic macroeconomic policies during the world economy’s turbulence. Despite the deterioration of the NIR/DMS ratio, as figure 5.14C below shows, that policy sustained a widening CAD as an increasing consumer prices.

LaVerle Berry<sup>574</sup> pointed to another problematic policy by documenting that: -

*“... from 1974 to 1977, large-scale borrowing occurred and new commitments were made. As the economy began to deteriorate in the late 1970s, the government began a series of reform efforts, although the first reforms covering 1978 – 84 were not fully implemented. In 1978 Sudan failed to meet all of its debt-service obligations.”* [Emphasis Added]

Richard brown<sup>575</sup> documented for the internal imbalances worsening reasons as follows:

*“In 1977/78, before the stabilisation policies were introduced, Sudan's rate of inflation was running at a level of about 26 percent; the government's budgetary deficit was just over five per cent of GDP, 90 per cent of which was financed by domestic bank borrowing. Over the preceding five years, the money supply had grown at an estimated average annual rate of 29 per cent.”* [Emphasis Added]

It is not therefore strange that Sudan reached its Coyote moment edge to fall in a CC event in a very short period of time as relative to the 1960/72 period. The foreign currency liquidity problem was aggravated by 1977/78, when the relationship with the West and the Arab World deteriorated. The ruling government, according to Mamoun Behari,<sup>576</sup> was *forced* to seek the (conspiring) IMF’s financial and technical support, after it led to the drying-up of the Arab

Countries' financial support. A. P. Thirlwall<sup>577</sup> documented the worsening reasons for Sudan's external imbalances as follows: -

*“The Sudan has been plagued for many years by a shortage of foreign exchange. Despite a series of ‘effective’ devaluations in the early 1970s, resulting from the 1971/72 currency re-alignments and selective tax and subsidy changes, a steady deterioration in the balance of payments continued. Heavy borrowing both on commercial and concessional terms took the country’s outstanding debt to £433 million in 1978, which it could not repay. **Capital inflows from the West and the Arab oil-producing countries dried-up, and the conditional assistance of the IMF were sought.** This took the form of three agreements: the 1978 standby Arrangement, the 1979 Extended Arrangement, and the 1981 Standby Arrangements. **The content of these three agreements was an integrated IMF stabilization programme aimed at improving the country’s foreign exchange position.** A part of the 1978 Stand-by Arrangement was a proposed devaluation. ... In June 1978, the Sudanese pound was devalued by 25 per cent from US\$ 2.5 to US\$ 2 for all transactions other than cotton. The rate for cotton was devalued from US\$ 2.87 to US\$ 2.5. In return, a standby arrangement of £S 10.4 million (SDR 21 million) was agreed, plus drawing on the trust fund of £S 15 million and a compensatory Financing Facility of £S 12.9 million.”* [Emphasis Added]

With declining export revenues and NBKI trend during 1973/78, Sudan was facing domestic, as international, (real) financial difficulties. According to the WB 1979 Report: -

*“External and domestic financial difficulties rose to crisis proportions in 1977/78, just at the time when the Government was about to embark on a new six-year development plan. **The lack of foreign exchange has caused widespread scarcities of spare parts and other vital inputs, which severely hamper production and the development effort.**”*<sup>578</sup> By 1978, and “... after several years of development effort, the country is now much worse off financially than six years ago. The most immediate problem is **the crisis situation with respect to the balance of payments.**”<sup>579</sup> [Emphasis added]

The quote above made crystal-clear that the spare scarcity and other vital inputs made ex-working productive units to stop working were due foreign exchange scarcity. So, the resulted supply-side bottlenecks were a due to falling in a “foreign scarcity trap” that ended in the 1978 BOPs crisis that was due, partly, to higher activities of currency speculators domestically as reflected in the black market premium over the government’s OER.<sup>580</sup> That must be naturally expected as Sudan, as mentioned above, preserved its own H-STGLP that subjected its economy to the rest of the world havocs.

Its response to the tumults of the advanced countries’ drivers of the world economies was always defeating its committed ERR. As its ancestor, this world economy’s melancholy

period for the Sudan and the Sudanese ended with the 1978 CC, as shown in figure 5.14C below that defeated the ruling government's committed ER.<sup>581</sup> Unfortunately, it remained known, not as the 1972 CC but *just, as "the 1978 devaluation"* as it is clear from the following quote in the 1979 WB Report about Sudan: -

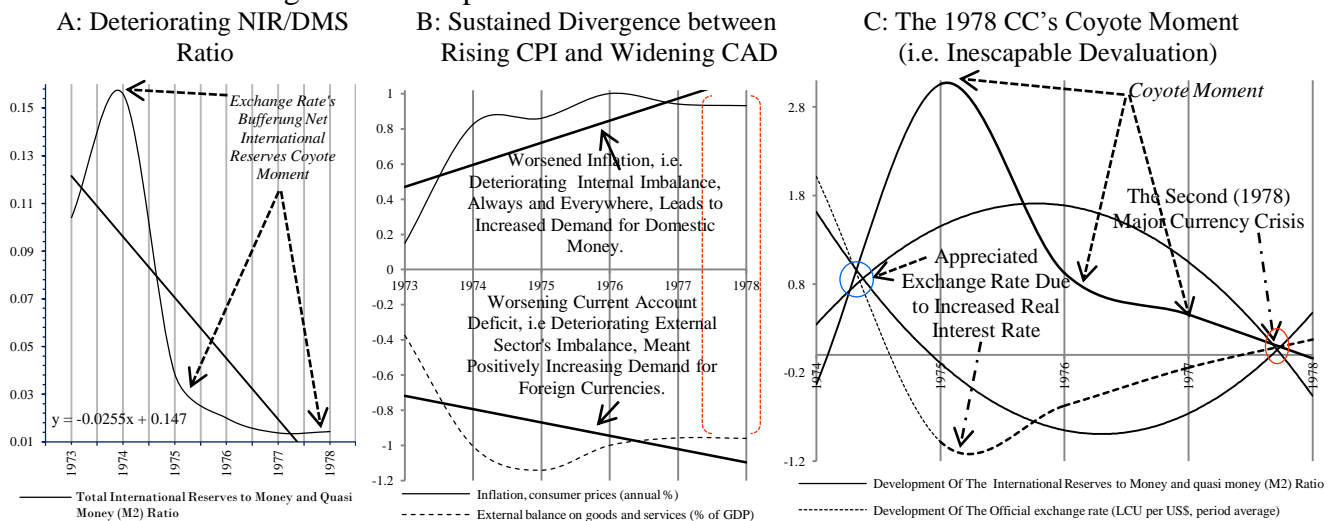
*"Until June 1978, the official exchange rate remained unchanged at LS1 = US\$2.87. ... Nevertheless, after that the Sudanese pound became an increasingly overvalued currency, as indicated by the excess domestic demand for foreign currency, and the fact that the inflation rate in Sudan, at an average of 20 percent a year over the last five years, was about twice as high as in most industrialized countries. ... In a general way, the overvalued exchange rate has, therefore, contributed to the scarcity of foreign exchange. ... In June 1978, the Government devalued the official rate of exchange of the Sudanese pound from LS 1 = US\$2.87 to LS 1 = US\$2.50."*<sup>582</sup> [Emphasis Added]

It was also considered, not as a CC event but, *just as currency devaluation* in the language of the supply-sider economist Nashashibi: -

*"In 1978, the official exchange rate was set at LSd 1 = US\$2.50, while the effective exchange rate was depreciated to LSd 1 = US\$2.00 by means of taxes and subsidies for all external transactions except proceeds from exports of cotton lint. On September 16, 1979, the tax subsidy system was abolished and the official rate of exchange was set at the previous effective level, i.e., LSd 1 = US\$2.00. Additionally, a parallel rate of exchange was established at LSd 1 = US\$1.25 for nontraditional exports (about 8 per cent of the total) and for about 30 per cent of imports that were imported previously mostly under the nil-value license system, as well as some invisibles. Effectively, this amounted to a further depreciation of about 5 per cent."*<sup>583</sup> [Emphasis Added]

As can be seen in figure 5.14A below, rapid depletion of the insufficient NBKI -dependent NIR relative to the excessive expansion of DMS remained due to insufficient export revenues/Capita relative to increasing trend in import/Capita. That meant the demand for foreign currencies remained outpacing its supply. It also led to a sustained repulsion between rising domestic consumer price level and widening CAD, as shown in figure 5.14B below. The latter figure explains the role of rapid rise in inflation rate, as a guaranteed incentive to imported goods speculators, in widening the pre-CC CAD as NIR/DMS ratio weakens sustainably. The generated inflation was the powerful force for accelerating ED growth and non-accelerating the country's international finance position.

Figure 5.14: Inapt Macroeconomic Pressure Ended In the 1978 CC Event



Source: WB Database

The 1974 an increased NIR/DMS ratio, as figure 5.14A above shows. This implied the tightening policy response that led to stronger currency, as figure 5.14C below. Despite whatever increases in export revenues, in absolute terms, the above pieces of evidences lead to the conclusion that due to the abuse of macroeconomic policy tools in the face of world economy's melancholy that led to the full deterioration of the ratio of the *uncontrollable NIR* relative to the *controllable DMS* by 1978. That was the same year when Sudan, as mentioned above, started to fail servicing its increased outstanding ED stock that rose from US\$ 388 million in 1970 to £433 million in 1978. Consequently, Sudan fell in the 1978 CC quagmire that compelled its central bank to decide to devalue its pound's ER sharply. Relative to the 1972 currency, *that took fourteen years to be realized, the 1978 CC took only six years to fall in its own policy package bayou.*

*The core reason for the rapid crash was the rapid deterioration of the foreign fund dependent NIR/DMS ratio, relative to the 1972 counterpart. As can be noted, in the 1972 and 1978 CC, the NBKI, to finance widened CAD, were not sufficient enough to stop the committed ER buffering NIR from depletion, relative to the expanded DMS. Also, in both cases, inflation started to hike sharply. So, it is very illogic that policy-makers listen to the cult believers in the need for borrowed foreign finance on the justification of rapid development that rapidly boomed foreign-finance dependent domestic aggregate demand, via*

*rapidly boomed investments spending and its multiplier*, relative to the 1960/72 counterpart period.

#### 5.9. Pressing Exogenous Forces During 1979/96: –

Despite the 1966/68, Sudan's history witnessed, since 1978, the ever longest IMF/WB involvement, with its *blemished* supply-side story. Its justification was the Sudanese governments' failure of to get rid of Sudan's ED arrears under the adopted fixed ERR. As it is well known, during different world economy's bad times and/or bad international political and/or financial relationships, domestic structural rigidities do prevent countries, such as Sudan's foreign-currency dependent economy, from recovering rapidly, whether with or without the technical support of the IMF/WB's *fancy* policy-prescription.

Despite rampant domestic poverty, unemployment, productive idleness, and ever-increasing domestic price-levels rates, domestic multipliers become high at relatively deteriorated distribution of incomes causing domestic output gap to sustain its widening. Sudan's available data showed that deteriorated saving-rate, as result, led, not only to lower real investment spending but also, to widening budget and CADs, hence increased borrowed foreign savings. So, although this supply-side fairy-tale does not hold in the face of domestic and international facts, it, unfortunately, continues, to date, in providing the intellectual underpinnings of the IMF/WB and Sudanese policymakers, i.e. insisting on structural reforms during 1979/96 period as afterwards.

To say that Sudan's stumpy economic progress, since independence, was due to phony supply side problems, as a result of domestic structural rigidities, is not supported by Sudan's experience with different economic and political supply-shocks and export demand shortages that led to CCs as shown above and the previous chapter. In other words, concentrating on supply-side for more flexibility in different sectors of the economy<sup>584</sup> for growth acceleration without balance of payments, and hence currency, crises is a full gobbledygook as seen above, previous chapter, and will be seen below.

To clarify, figure 5.11 in the previous chapter showed that Sudan's sustained suffering was from international supply-shocks more than supply-side rigidities. That was reflected in

*sustained stagflation* since 1962 that caused Sudan's economy to suffer from the *simultaneous rise in IR and decline in real GDP growth rate and respectively in vice-versa*. The fundamental reason actually lied in Sudan's very heavy dependence on the cotton's ICIP and supportive NBKI. Its sufferings from sustained international demand shortages, hence foreign currencies, for its different productive sectors that kept working during the availability of foreign currencies proves that the problem was not structural rigidities that should be cured by flexibilities for the productive sectors for consumers to absorb those supply shocks.

As seen above, in the previous chapter, and will be seen below, Sudan's own H-STGLP, as summarized by the above parallel relationship between NIR and ICIP, not *the superficial structural rigidities, that was the mother of all its crises under whatever adopted political ideology*. That H-STGLP remained to be root structural restraining factor for any stabilization programs and rapid foreign-finance development processes for the economy. It is still the problem that the Sudanese development planners and policy-makers failed to neutralize, since independence, its negative impacts on, via serious structural changes of, the poor UUE. *Insistence in preserving that historical crippling H-STGLP, Sudan's UUE remains to be in sustainable need for real positive international demand-shocks for its growth, stabilization, and real rapid structural changes, as during 1960/62, and to get rid of the EDs as been realized by early 1957 as the ICIP reached the 60 ¢/p limit..*

#### **5.10. Disclosing the Economy's Reserved Flaws During 1979/96: –**

The Sudanese economy, during this period, remained dependent, as during previous episodes, on exporting the influential cotton commodity and some other primary ones. Starting with the dollar strength by late 1970s to mid-1980s, due to abnormal increase in interest rate on the dollar supply to fight stagflation, beside the 1979 Iraq-Iran war, it can be seen that the ICIP of the under-developing commodity exports remained declining sustainably between 1980 to mid-1990, as figure 4.1C shows. As a result, it can be seen that many governments, including Sudan's ones, that had borrowed in U.S. dollars found that paying those debts, in local currencies, were getting more expensive, via optional or compulsory



devaluation of their domestic currencies. By 1982, and as a result, it can be found that countries, such as Mexico, were courageous enough to declare default on foreign debts.

As mentioned above, Sudan defaulted on its EDs since 1978 and after which it started to accumulate arrears, as figure 5.13 in the previous chapter shows. In the same year the Sudanese pound was forced, due to CC, to be devalued by 14%, as NIR to DMS approached its zero limits. That was due to the adopted inapt macroeconomic and structural changes policies more than the deteriorated international political relations and unfavorable world commodity markets. Since then, the fixed ER ended by much frequent optional, but, devaluation while some others were compulsory, as a result of CCs, as will be seen below. Most of them were due to the adopted IMF's policy package, since 1978, which included its traditional fiscal austerity, monetary, and ER contractionary, policies.

Under the sustained recessing world economy, domestic exogenous natural and man-made shocks, and deteriorated international political and financial relationships, Sudan's consecutive governments, during 1979/96, issued several foreign-finance dependent programs and plans. they were with the direct or indirect consent of the Bretton Woods' Institutions, to stop economy's IEIs sustained deterioration to sustain EDS. These were 1. The 3-years program for 1979/81; 2. The failure to implement the 4-years recovery program in 1984; 3. The implementation of 1990/93 Salvation program;<sup>585</sup> and 4. The adopted 1992/2002 National Comprehensive Strategy. For all these programs, it can be observed from table 7, in the appendix, that the adopted OER regimes were sustainably devalued, to get the external balance back to normal. The results of these programs, to bring Sudan's equilibrium back to normal, are summarized in table 7 as follows: -

Despite adopting it even during deteriorated period during 1984/96, Sudan, as akin countries, adopted the IMF's fancy supply-side policy prescription since 1978, as during 1966/68. The establishment of a stabilization program with the IMF, during times of worse macroeconomic condition, is *considered by international financial community*, more than most of the country's economists, as a government's confession about adopting the wrong,

not the right, macroeconomic policies *that caused the country's ER buffering shock-absorbers to be misused.*

Sudan experienced full-scale domestic recessionary shocks, from the international community, as its oil and other industrial imports bill suddenly increased tremendously since mid-1970s. That recession had led to a painful, although gradual, “*internal devaluation*” as real labor costs came down, making Sudan politically unstable rather than economically competitive. In other prose, reduced unit labor costs didn't boost exports as might have been assumed. Sudan's actually started to witness stagnations resulting in anemic GDP/Capita growth rate that remained fluctuating between negative and positive signs, as table 7 clarify.

The IMF's supply-side structural reform cult of expansionary-contraction policy prescription called, not only for fiscal austerity but also, for interest rate hikes and wage freeze, and devaluation of the ER of the Sudanese pound, assumingly, to boost export revenues at a speed higher than its import's counterpart. In other patois, it was recommending the heavy reliance on the private sector *that ex-colonial regime denied their effective financial role, mainly to national budget.* It also recommended an ill-advised monetary tightening, extreme fiscal austerity, to contract overall domestic aggregate demand, hence imports. The purpose remains to free, at least some, tradable goods for expanding export by allowed market depreciation, beside the official devaluation, of the ER. The Bretton Woods' Institutions believes in its policy prescription as a believer in his/her wholly book. That was *despite Sudan's sufferings from domestic social unrest, international political and financial relationship and the advanced countries' boom or bust situations. Of particular importance, both political and the economical crises, during 1978/96, under the fear to lose Sudan's creditors' confidence, were under the auspices of the IMF. As table 7 shows, these policies led more to deepening, not the resolving, Sudan's original, IEIs, crises.*

In other vernacular, quick overall scrutiny of table 7 makes one observes that Sudan performed miserably during 1979/96, despite its witnessing 1. Civil war that re-launched in 1983; 2. Drought, desertification, and flood problems; 3. Domestic political unrests; 4. Deteriorated international relationship with the international community since 1984; 5. Shift

of Sudan's ruling political regime from a military, to a democratic, political one in 1985, and again to a military political one in 1989.

It can be observed, from table 7, that there are seven major symptoms that were important in signaling the existence of an economic crisis in the mono-commodity-export dependent Sudanese economy during the period under investigation. These were mainly: -

1. Domestically and internationally unstable political relationships and environment;
2. Unstable world economy due to the booming/busting commodity prices and the shift of the advanced countries to the “*floating, but manageable, ERR,*” related liberalization policies, since 1973, that lowered world trade volumes and GDP per-capita along the period till the fall of the 2008 GFC and its aftermath recession;
3. decline of output and productivity, hence volatile GDP per-capita growth rates, due to under-utilization of existing productive capacities and declining capital formation;
4. unsustainable *fiscal*, and related *national S – I gap*, imbalance;
5. unsustainable external imbalance and related NBKI needs;
6. deterioration of the committed ER in the (*created*) *parallel market to avoid central bank's NIR depletion to sustain servicing ED obligations in due time*; and
7. in a heavy export import-dependent UUE, *spiraling CPI becomes much evidently related much to the deterioration of the committed ER, in the (created) parallel market than to any (expected) improvements in the NIR/DMS ratio.*

#### 5.11. Ideology-neutral Sudan's Flawed Economic Structure Performance. –

The 1978 currency collapse vividly reminded everyone of the dangers that capital inflows can suddenly turn to capital outflows, that international confidence can give way to panic, as facilitated by expanded monetary basis, relative to rapid depleting NIR, and the ER foreign anchor can give way to devaluation/depreciation. As it is well-known, *internal balance* necessitates that aggregate demand for domestic output to be equal to aggregate supply of domestic output at full non-inflationary or non-recessionary employment. In the same manner, *external balance* entails that the balance of trade equals (net) capital exports with a stable defensive NIR at the committed fixed exchange par.<sup>586</sup>

Based on the above definitions, table 5.3 is translated into figure 5.15 to see visually the foreign-currency dependent-economy's performance at sustained ER devaluations, during 1979/96.

Figure 5.15: The Achieved Performance of the Depressed Economy

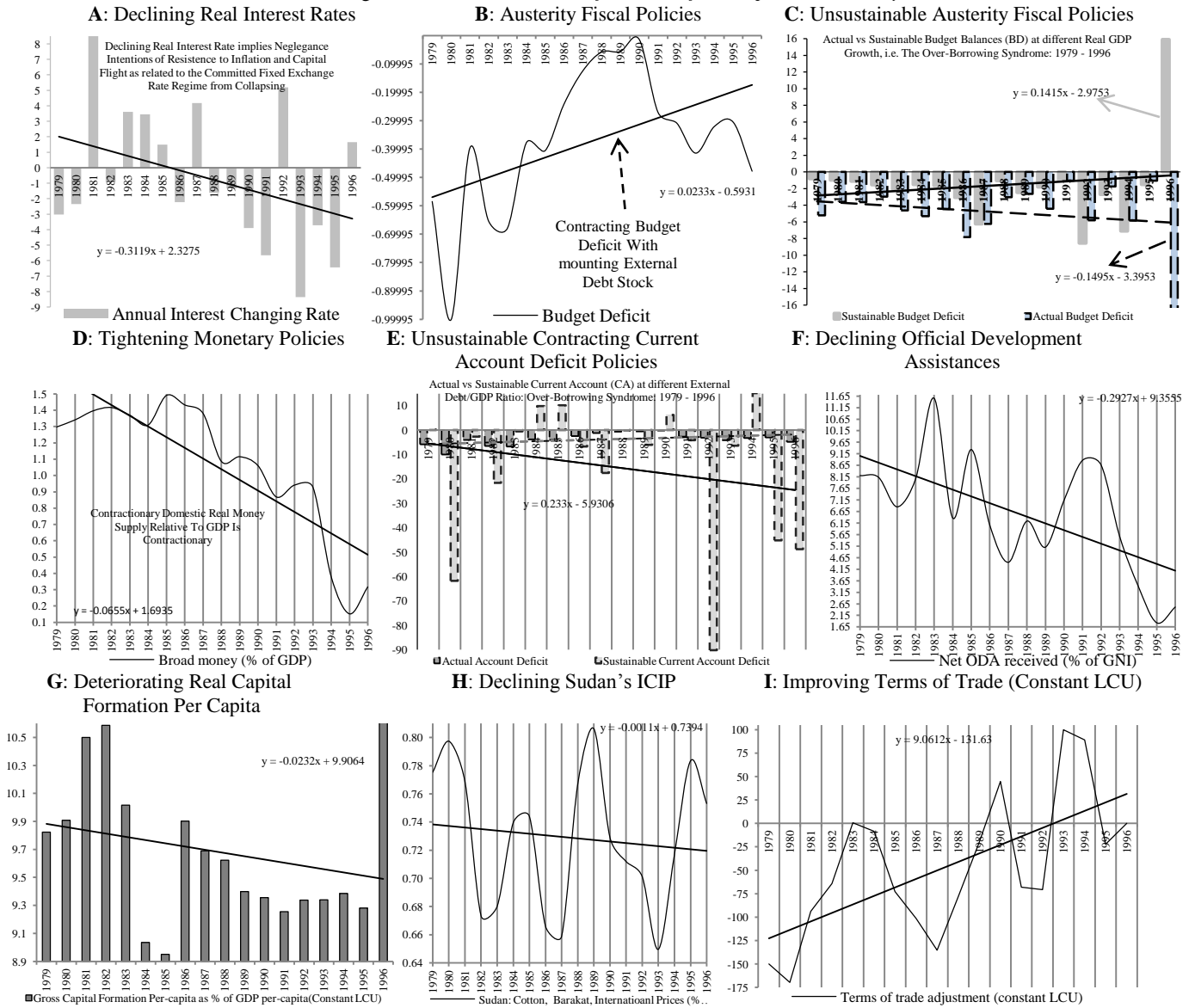


Figure 5.16: Inflationary ERs Devaluations Didn't Stop ED and Its Arrears Stocks From Mounting

A: CPI Inflation Became Associated With ER Devaluations      B: Black Market Premium over OER      C: Mounting ED and its Arrears Stocks

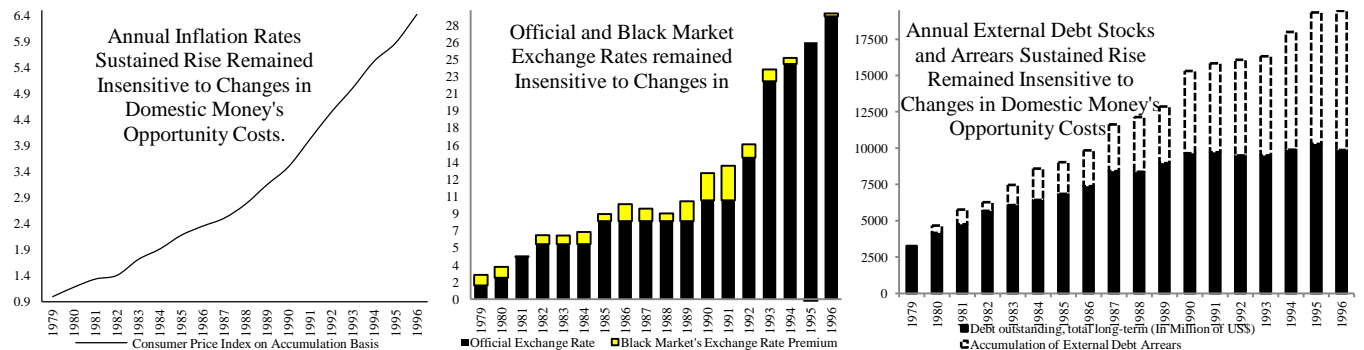


Figure 5.17: Economy's NIR/DMS Ratio, GDP/Capita, and Government Spending/Capita

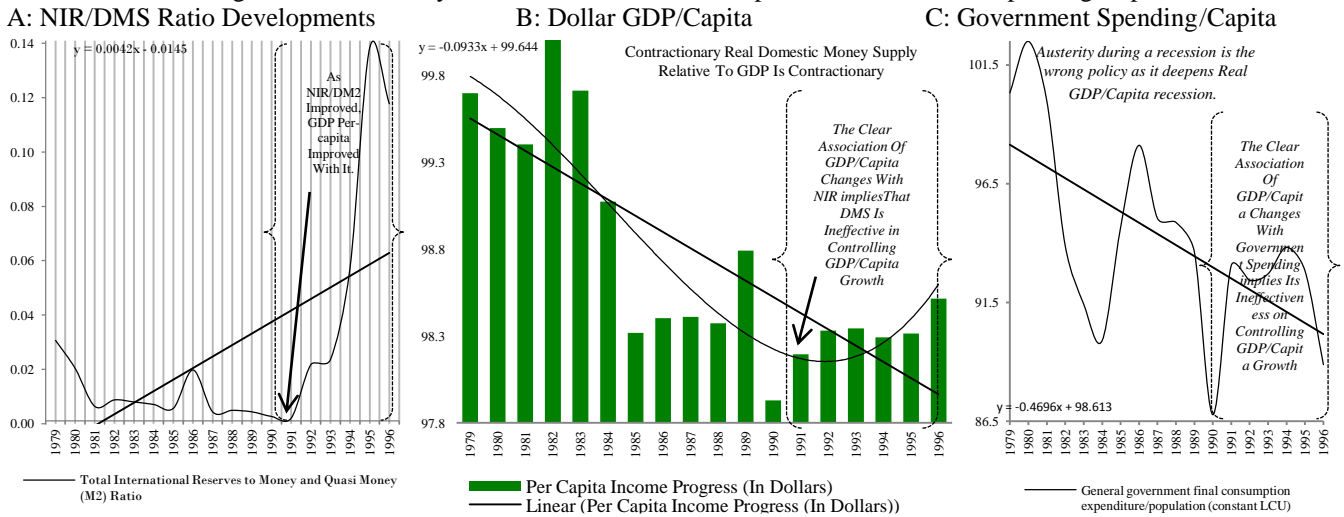


Figure 5.18: Nominal and Real Export performance Relative to NIR and its Capacity to Import

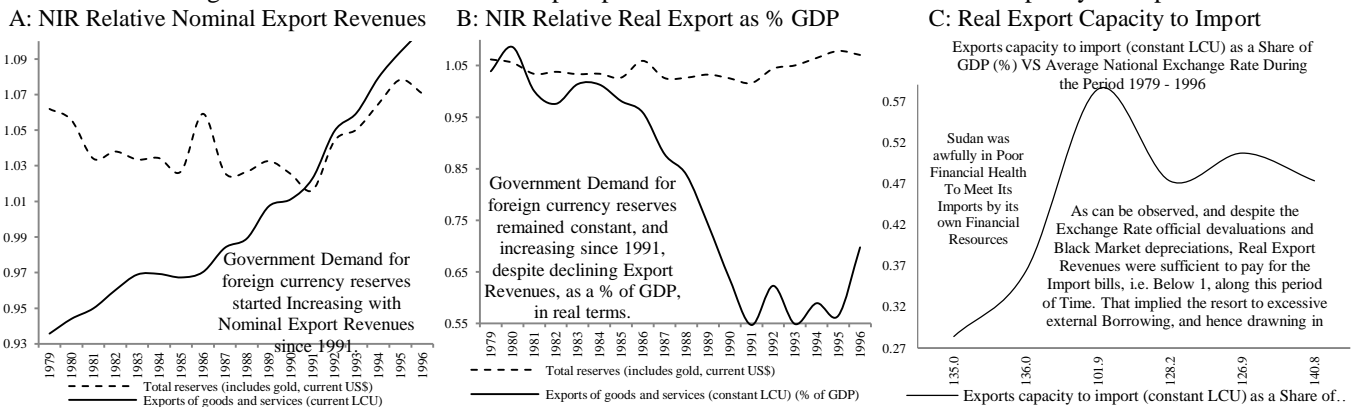
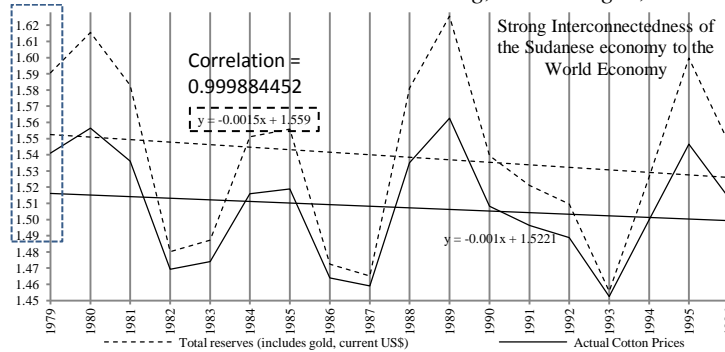


Figure 5.19: Sudan's NIR Parallelism to the ICIP Points to Interconnectedness to the World Economy  
Semi Perfect NIR Parallelism to ICIP<sup>587</sup> Under Floating, but Managed, ER



Sources: WB Database, CBS, and Angus Maddison

Figure 5.19 above shows that the Sudan's ER-buffering NIR remained dependent on the underlying supply shock of the changes in the ICIP on its economy's macroeconomic performance. As figure 5.19 above shows, NIR sustained its *decline*, at a relative rapid rate of -0.2% annually, in parallel with sustained *decline*, at comparatively annual slower rate of -0.1%, in the 50 - 60% export-cotton's influencing ICIP. That is because the latter's decline affected negatively the overall real export revenues, as % GDP, as figure 5.18B above shows.

Contracting unsustainable CAD, at a rate of 23%, as figure 5.15E above clarifies, implies that annual NBKIs,<sup>588</sup> as figure 5.15F above, *were insufficient enough* to stabilize NIR/DMS ratio at the *(changing) preventing threshold* from falling in CC quagmires. As in the 1960/72, it was also a “sudden stop” crisis that caused vast capital flows into Sudan to come to an abrupt halt. It also precipitated a severe domestic hardship in the form of declining real GDP/Capita as export and NBKI dependent fiscal revenue and NIR/DMS dwindled. So, the fiscal, in its relationship to real GDP/Capita growth, problems were a consequence, not a cause, of this NBKI sudden stop syndrome.

With such unfavorable exogenous adverse shock, it is clear that the committed ER was vulnerable to crisis due to the deepening recession period in world economy’s drivers,<sup>589</sup> since 1973, as figure 5.5 in the previous chapter shows, was extended for much longer period. As it is strongly evidenced by figure 5.16B above, Sudan remained *suffering from increasing foreign currencies shortages* as reflected in *sustained black market premium over the sustained official devaluation of the committed ER*.

*It is important to observe that, despite contracting DMS/GDP ratio, as figure 5.15D above shows, the sustained depreciation of the overall ER didn’t stop Sudan’s CPI or its EDs and related arrears stocks from rising as figures 5.16A and 5.16C above clarifies. As it can be rightly noticed, CPI’s rise was much more associated with the overall ER depreciation more than contracting the DMS/GDP ratio.*

From the impossible trinity perspective, even large NIR can quickly be exhausted when there are large NBKOs. If a country chooses to stabilize an ER by adjusting its monetary, rather than through intervention, policy it must divert monetary policy from other goals, notably stabilizing the economy and managing the inflation rate. The sharp contraction of NBKIs and real exports’ share in GDP, as shown by figures 5.15E and 5.18B above, led to rapid NIR losses due to interventions in the foreign currency market. Losing its ERR’s buffering weapon, Sudan’s central bank wasn’t able to remain committed to stabilizing domestic, relative to foreign, CPI, as figure 5.16A above shows, which became determined by exchange reate depreciation more the contracting DMS/GDP ratio. Despite their different

growth rates, NIR rapid depletion meant the central bank's contribution in increasing DMS at sustainable depreciation of the official and unofficial ERs.

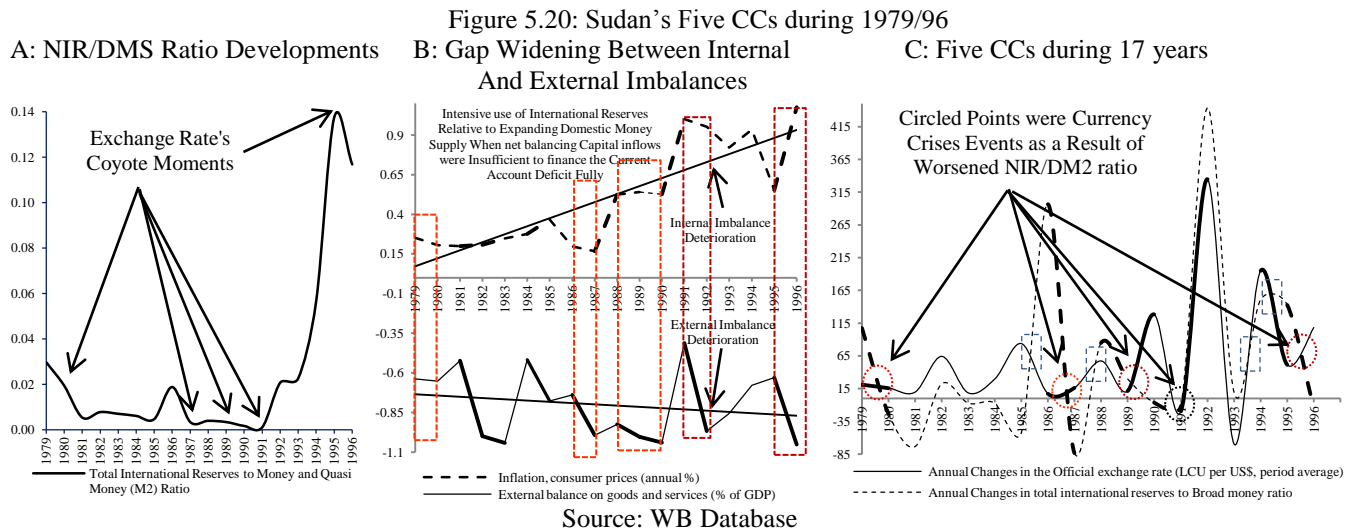
As shown in figure 5.17A above, these sustained exogenous factors' pressures led to sharp drops in the NIR/DMS ratios in 1980, 1987, 1989, 1991, and 1996. Its sharp drop led the governments' committed ERs to their *coyote moments* and forced the central bank to opt sharp devaluation of their committed ER by more than the minimum 13.86%. The hard landing was therefore driven by the inability to access sufficient NBKI to support its NIR/DMS ratio. The purpose of enforced devaluation was clearly to squeeze, severely, the overall private, and public, spending, hence imports, at least to slow-down NIR depletion to meet as much international financial commitments as the available NIR can allow.

Despite the disagreements about the adopted policies, all can agree that "*bad domestic money drove out of circulation the good foreign counterparts*" during such domestic and international hard times. That by itself remains as an indicator to the inferiority of the adopted macroeconomic policies. Inferior macroeconomic policies, therefore, were translated into attractive incentives to change domestic, for foreign, currency speculators and investors, to reflect their uncertainties about future policies that forced them, during this long bad time, to lose confidence.

To see why, figure 5.20A below shows that despite the NIR/DMS ratio improvements during 1991/95, as it can be seen, in figure 5.20B below, that the IEIs trends were swerving from each other one year after another. They swerved sharply from each other in 1980, 1987, 1989, 1991, and 1996. That implies the surpassing of ADD, hence imports, the economy's capacity to produce tradable, including exports, and non-tradable goods and services. In other patios, repulsion between the domestic inflation rates hike, as a proxy of worsened internal imbalance, encouraged import-speculators to widen pre-CC CAD, as a proxy of worsened external imbalances as NIR/DMS ratio weakens sustainably. All in all, the generated inflation became an ED accelerating and international finance position non-accelerating force.

So, the resulted inflation sharp rise pressure caused its generated excess demand for foreign currency to surpass its available supply. Consequently, Sudan, objectively, by such sustained

sharp devaluations, went on falling into the CC quagmire, as can be seen the crash points in 1980, 1987, 1989,<sup>590</sup> 1991, and 1996, despite the stronger currency in 1985, 1988, 1994, 1995, due to tensed DMS/NIR ratio, as shown in figure 5.20C below.



As evidenced above, even under normal international political relationships, reliance on the influential real commodity export revenues and complementary NBKI, to support excess real domestic aggregate demand over real domestic aggregate supply, ascertained them to be unreliable under whatever adopted ERR. In other patois, given the excess real domestic aggregate demand, diminishing NBKI, and real export revenues, as % of GDP, led the economy always to sink in CC quagmire and its aftermath recession, despite civil wars and the international political and financial relationships. The adopted resolving macroeconomic policies proved to be aggravating the economy's recessions, since 1960, rather than it keep afloat.

### 5.12. The Contractionary Foreign Currency Dependent Policies Led to the Above Five CCs: -

It is then clear that Sudan's Policy regime shift, along the studied periods, were all of the incoherent types to prevent the Sudanese UUE from falling in CCs. as figure 5.20 above shows, even under direct and indirect involvements of the Bretton Woods' Institutions, the same Sudanese economy couldn't be prevented from falling in the same quagmire. The atrocious results in table 7 were achieved under the following sustained major pressures: -

1. Sudan's own H-STGLP;



2. Natural and human made disasters;
3. Beside world economy's sustained recession, the Sudanese economy also suffered from International financial embargo, not only for accumulating external arrears but also, for adopting the Islamic Sharia since 1983;
4. Repeated social and political domestic unrest;
5. Incoherent inflationary domestic macroeconomic policies.

Based on the above backdrops, Sudan foreign-convertible currency dependent economy was suffering, during 1979/96. That suffering can be geometrically analyzed from budget balance and real interest rate policy tools perspectives, in their relation to the external balance.<sup>591</sup> As it became established by now, the balance of current account is equal to (net) capital exports at the adopted exchange parity.

Contrary to the 1960 and 1970 development plans while adopting the fixed ERR, the 1979/69 stabilization programs and strategies were targeting, at least, the impasse of worsening IELs by adopting a floating, but managed, ER. But despite the declining real ER, as figure 5.15A above shows, in its strong relationship to the volatility in the ER, it can be observed that DMS/GDP ratio was tightened sustainably during 1979/96, as figure 5.15D above shows. This implied that the domestic, relative to foreign, real interest rate incentive was weakened. Their first impact was reflected in a sustained devaluation and depreciation of the ER in the official and unofficial foreign currency markets. Their second impact was reflected in the persistent and tentative slowed-down of the UAE's *real capital formation per capita*, as figure 5.15G above demonstrate. As can be seen from figure 5.17B above, the economy's *growth lost its momentum* since 1979 as the *unsustainable budget and CADs started to contract*, as figures 5.15C, and 5.15E respectively.

The ineffectiveness of the unsustainable fiscal, foreign trade, and financial contractionary policies, was reflected in the diminishing dollar GDP/Capita. The latter remained declining till it reached its minimum in 1991, i.e. the year in which the NIR/DMS ratio climbed abnormally. This *proves* the postulation of full dependency of the UAE on the availability of foreign currencies to roar, mainly by the complementary ER-buffering NIR-supporting NBKI

during export/GDP ratio sustained dwindling, as figure 5.18B shows, for realizing higher positive GDP growth rates.

Furthermore, it is logical that the made available national savings, from the contracting dollar GDP/Capita, were, alongside diminishing, and hence, insufficiently enough to reverse the capital formation declining trend, as figure 5.15G above shows, in order to reverse the dollar GDP/Capita contraction, given the linked exogenous natural and man-made shocks. It is consistent, therefore, that the contracting gap between national savings and aggregate investments, which is equivalent to the contracting CADs, given the contracting budget deficit, as figure 5.15C above shows, couldn't support the real interest rate from reversing its declining trend, as figure 5.15A above shows.

The resultant *real interest rates declining trend* can be considered as a failure for mobilizing sufficient, and declining, national savings, given the supporting contraction trend of the DMS/GDP ratio, in local currency. In its strong relationship with the declining trend of the real interest rate, more than its relationship to DMS, the devaluation and depreciation of the ER, in the official and unofficial market, as figure 5.16B above confirms, can be understood, hence it can go unsaid. But it is important to note that the contracting trend of the DMS/GDP ratio, also, lost its thrust in reducing domestic, relative to foreign, CPI. With declining the real interest rate incentive for mobilizing national savings, CPI, as mentioned above, became controlled by the black market ERs that increasingly began meeting the panicked demand for foreign currency.

But despite the real interest rate declining trend, it can be observed that the NIR/DMS ratio remained diminishing till 1991, after which it climbed abnormally during 1992/95, as figure 5.20A above verified. Despite the contribution of the DMS/GDP ratio contraction, as figure 5.15D above shows, in the annual contraction of the CADs, that actually enlightens the insufficiency fact of the *NIR-supporting NBKI declining trend for bigger sustainable CADs*, as figures 5.15E and 5.15F implied. Declining NBKI was, at least in part, due to the weakened financial relationships with the international community that lost confidence in Sudan's macroeconomic management policies as EDs arrears sustained its mounting trend, as figure

5.16C above verifies. Given the sustained diminishing real export revenues, as a % to GDP, the diminishing *NBKI*, therefore, caused *NIR/DMS* ratio to fall below its preceding level in 1980, 1987, 1989, 1991, and 1996, as figure 5.20A above confirms. These were the same years during which the CCs events fell, as figure 5.20C above shows.

### 5.13. Conclusion. –

It is well established in different literature and reports that different governments have, as they had, a crucial role to play in the well or ill functioning of the economy. Sudan's economy was established on the basis of the colonial paradigm for it to roar, stabilize, and develop. As a result, it can be seen that it remained, as akin countries, subject to the H-STGLP since the colonial era. As a result, it can be found that *most of Sudan's problem was the State's failure to increase national income beyond the overall consumption increases, to maximize national saving beyond investment spending. It also failed to establish an economy that produce what the Sudanese can consume or make the Sudanese consume what they produce.* As expected, its export revenue and NIR insufficiency history, on which its economy's growth was dependent, was not empty from insufficient-NBKI-dependent CCs events, as shown above.

Irrespective of the severe 1930's and 1957/59s' contractionary financial crises, *Sudan witnessed nine major CCs events, beside the several non-CCs devaluations, after its independence in 1956. Despite the changed rates of exchanges, they were identified by the different due-time intersection of converging ER to the converging DMS/NIR ratio as shown by above figures. They were always accompanied by severe divergence of imbalances in either internal or external or both sectors of the economy. The worsened imbalance of any one or both sectors, due to unaccommodating net capital flows, caused NBKI-dependent NIR/DMS ratio to reach its minimum as defined by Sudan's central bank.* Panicked aggregate demand for the foreign currency was featuring its scarcity in foreign currency market relative to prevailing stock of DMS. Consequently, in any worsened imbalances and faded NIR relative to the prevailing DMS case the committed ER was sharply devalued beyond 13.86% threshold in all cases.

*They were realized under different variants of fixed and floating ERRs. They were also realized under “normal” and “abnormal” international and/or national political and financial relationships conditions. Furthermore, they were realized as its export sector remained suffering from an idiosyncratic shock more than from NBKIs’ sudden stop shocks that helped in leading to them. Recalling the strong inverse correlation between real interest rate<sup>592</sup> and ER, their realizations were very weak and slow in process under the former conditions which was typified by the revulsion of the foreign capital inflows. That revulsion resulted, not only in low CADs, as during 1960/72, but also, in limited supportive levels to the buffering ERRs’ NIR/DMS. During the fixed ERRs era, real GDP/Capita was higher, and CPI levels were lower, relative its later counterparts under the floating ERRs.*

*They were very rapid and strong in process under the latter conditions which was typified by the allure to the foreign capital inflows. That esteem resulted, not only in large CADs, as during the after 1960/72 studied periods, but also, in limited supportive levels to the buffering ERRs’ NIR/DMS. Furthermore, during the after-1972 devaluation and floating ERRs era, real GDP/Capita was lower, and CPI levels were higher, relative to its 1960/72 counterpart under the fixed ERRs. This implies that the expansionary stimulate of a given increase in DMS, relative to NIR, was always greater when Sudan adopted the floating, or semi-floating, ERR than it was adopting the fixed rate regime.*

*Except in 1987, the other six fell under the rule of Sudan’s military political regimes rules, despite the ruling economic ideologies. Furthermore, they were achieved mainly after every, direct or indirect, IMF intervention pressure for changing the DMS/NIR ratio, as after 1966 and 1978, rather than without its intervention periods. In the end, it remained the response of UUE structure of the economy, within the context of its H-STGLP, to the adopted incoherent macroeconomic policies that ended with those CCs.*

*Beside the inappropriate domestic export-revenue dependent inflationary/contractionary macroeconomic policies, the core reason the realized CCs episodes that remains hiding behind was the heavy dependence on the uncontrollable volatile ER-buffering NIR-supporting NBKI for the claimed rapid development processes. That meant when the different governments,*

since the colonial era, resorted to NBKIs they actually forced imports growth to surpass export revenues to support meager national savings, due to low real GDP/Capita growth rates, to finance developmental and expansionary investment projects.

In lingua franca, they always forced real ADD to surpass, and beat the internationally uncompetitive, real domestic productive capacity of the UUE. When the unreliable NBKIs suddenly stop flowing in the same quantities, mainly during export revenues shortages, the Sudanese currency falls in a CC, as the DMS supported ADD cannot fall in the short run.

**Chapter 6**  
**Summary, Conclusions and Recommendations<sup>593</sup>**

### 6.1. Prologue: -

Theories are telescopes through which reality is seen and analyzed. They are distinguished by defining terms and setting criteria to make genuine argument about related realities. Good theoreticians used their theories to pinpoint the underlying driving forces behind reality transformations. Fundamental to understanding reality remained in discovering the interactions of those driving forces in mitigating the reality products. Their focus, therefore, remained in analyzing key "exogenous" forces behavior in sustaining the reality predicaments.

Literature reviewed in chapter 2 showed that each CC<sup>594</sup> theory were very helpful in completing this research. But they were not helpful enough for Sudan's case. Sudan's UUE's mono-commodity-export oriented variety<sup>595</sup> and import-dependent economy showed that each theory by itself, or any mix of them, crash in explaining fully Sudan's CCs events in different times.<sup>596</sup> In other lexis, given the monetary policy rate, NBKIs led to an ER appreciation, domestic credit boom and output increases. But that is matched by the contraction in net exports or an increase in net imports, hence causing the IEIs to worsen and hence decreases in output despite the adopted ERR. Unfortunately, financial, mainly currency, crises have materialized frequently throughout history. Despite constant endeavored to purge them; it seems indefinable that they will not be recurred in the future.

In this direct-data field experiment research, additional and reconstructed variables supported its hypothesis' arguments by using simple, although not easy, statistical techniques in the backyard.<sup>597</sup> They presented evidences that explained Sudan's accomplished self-fulfilling CCs events. Under the pressure of the ruling H-STGLP with rest of the world, *they showed clearly that when the internal and/or the external imbalances diverge from each other, a CC becomes inevitable, not a policy option, as NIR/DMS ratio worsens.*<sup>598</sup>

These simple techniques revealed important and insightful developmental and stabilization policy mistakes. *So, it can easily be used by interested academicians and executives in different institutions to explain their dynamics with strong predictive power. As excellent indicators, despite the CADs, which are prepared annually, IR, NIR, and DMS can be*

*monthly, if not weekly, monitored to adopt the appropriate preventive macroeconomic policies against future falls in CCs quagmires.*

## 6.2. Synopsis: -

Sudan's colonial economy was founded on the basis of the famous international division of labor and specialization law. It was established by the use of *static, rather than dynamic*, comparative advantages criterion that established a H-STGLP with the rest of the world. The core objective was that the Sudanese should "***produce what they do not consume and consume what they do not produce.***"

Sudan's case showed that the establishment of the Gezira export-oriented scheme in 1925, and its semi-replicates, as oil since 1998, was unsupportive in stabilizing, *nor structurally changed*, its economy. They were established to make commodity export-income in an uncertain domestic and international environment for goods import-payments in domestic markets, finance the national budget, and feed the country's NFA. These projects made Sudan heavily dependent on the revenues from the export of the influential commodity quantities, which they were exclusively dependent on the influential international prices. The latter remained, along the studied period, in strong correlation to the Sudan's ER buffering NIR.

It is very clear from the studied CCs figures, in the previous chapters, that any major reduction in the influential commodity's international prices led to reduction in NIR. The insufficiency of NBKIs, which contributed to the expansion of DMS that forced domestic, relative to foreign, IR to rise at the level beyond which real GDP/Capita starts to decline and the CAD to widen. As NIR/DMS ratio deteriorates, the nominal ER starts to deteriorate too to the stage that triggered, and made the economy to fall in the quagmires of, CCs.

History proved that *most of Sudan's post-independence core problem was its State's failure, via its adopted incompatible economic doctrines that ruled its economy, to increase its national income beyond the overall consumption increases, hence export income beyond import payments, to maximize national saving beyond investment spending. Accordingly, these imbalances are results of post-independent Sudan's consecutive governments' failure to*



*modernize the Sudanese people's productive capacities above their regional and national poverty line,*<sup>599</sup> to improve their living standards sustainably.

*In the lack of indigenous competitive productivity-increasing capital-import-substitution sector,* Sudan's inherited modern economy was made to become predominantly dependent on *unmanageable foreign,* relative to *manageable domestic,* currency-denominated markets. With cotton's, as oil's, dominant and volatile shares in GDP and total exports, Sudan's budget's total revenue, monetary authorities' foreign assets, and its overall national income were made to depend sturdily on the given international prices of the influential volatile raw-cotton, as oil, in any point of time.<sup>600</sup> So, Sudan's established colonial and post-independent economic structure was designed to recover, grow, and stumbles with the rise and fall of the influential cotton's international prices. Accordingly, Sudan, with its inconvertible currency, couldn't shield itself from the world economy's agonies nor have the capacity to close or stabilize the economy's above-mentioned foreign markets' dependent imbalances.

On that basis, Sudan's ER-NIR link, relative to DMS, remained dependent on the following combined factors:-

1. The slowing of the economy's activities, due to growing internal and international political instability, that deteriorated economy's external imbalance and international financial position, causing the Sudanese living standards to rapidly, if not steeply, drop;
2. The persistent increase in DMS,<sup>601</sup> relative to foreign asset, stocks policies led to persistent mounting domestic overall price indices more than output increases. As it means persistent increases in overall price index, domestic IR therefore is an incentive for speculators to increase their today's demands for foreign currency, at whatever ER, to import goods whose tomorrow's domestic price increase are guaranteed. The latter might increase more than the internationally given and volatile price of export and exchange devaluations. Inflation therefore sustains opened/worsened CADs that remained to be filled with NBKIs, hence accumulation of EDs. So, it is an incentive for the private sector to worsen the external imbalances that depletes the ER buffering NIR/DMS ratio, as private capital owners run on DMS, due to run-IR, that ultimately ends in ER crisis;

3. The influential cotton's, as oil's, bubbling international prices as related to the world economy's advanced economies booms inflicted immense damage when they burst and become busts and/or sanctions shock;
4. The foreign capital inflows' construction of domestic investment bubbles to inflate domestic currency, as happened to Sudan's pound, to unsustainable heights that burst when that capital declines or fly out of the country.<sup>602</sup>

That meant that the import-dependent Sudanese economy's roaring, stability, and growth, and related ERR, were destined to depend on exogenous volatile availability of foreign currencies and associated domestic macroeconomic policies.

Post-independent Sudanese economy remained expanding the inherited colonial economic structure, at independence, on the basis of the inherited colonial's development paradigm. As the colonial governments, post-independent governments kept Sudan's development processes to remain, weirdly and heavily, dependent on the inflows of NBKIs for the production of raw-materials to the rest of the world more than for the Sudanese, who were destined to depend on import final goods from the generated export revenues.

International borrowing was supposed to finance Sudan's different plans' capital formation. They were supposed to supplement domestic scant savings to support a relatively high rate of investment in productive capacity and realize net foreign-income surpluses. Sudan had borrowed so much (insufficient) money to such little purpose and failed as it became as completely a victim of its own NBKIs'-dependent policies. The Sudanese people were kept consuming and investing, i.e. absorbing, beyond their economy's income capacity by opening, or worsening an existing, external imbalance and made 46% of its population live below the poverty line by 2009.

*Increasing domestic absorption, beyond own income, remained opening the doors for NBKIs through widening CADs at rates that depletes the exchange regime buffer, relative to DMS, as it simultaneously remained pushing domestic, relative to foreign, price levels up as shown by different CCs figures.* This implies that the successive ruling governments remained increasing the demand for foreign currencies to access foreign goods and services beyond what overall export revenues could supply. So, the excess demand for foreign currencies was

being met, before replacing the circulating Egyptian pounds with the Sudanese counterparts in 1958, by increasing the DMS/NIR ratio. Letting DMS to outstrip real GDP growth rates force domestic general prices to mount persistently. But the IR pressures create a domestic absorption gap that makes even inferior import qualities profitable. In other lingo, it leads to increased demand for foreign currencies, not only to increase imports but also, to run domestic currency by mounting ED stocks.

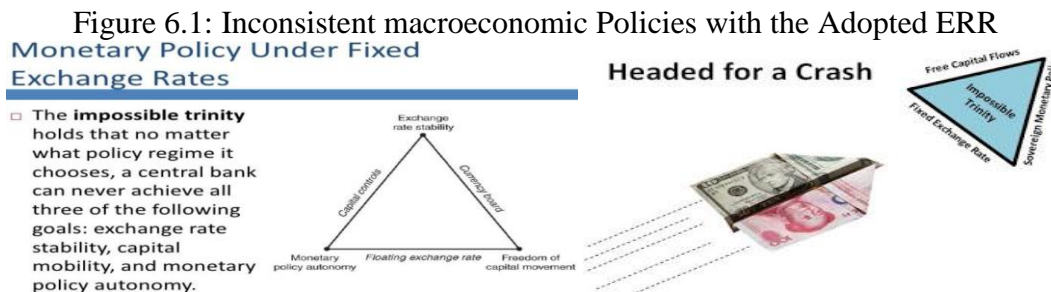
In all cases, those inflationary pressures start destabilizing the official committed ERR. That of course increased Sudan's vulnerability to CCs. The research text, as in other similar subjects, offered a number of the key tests by straightforward observations that required no more than a two-dimensional graph. That is because they were necessarily sufficiently of the nonlinearly specifics that proved to be stubborn to be explained in other ways,<sup>603</sup> unless a very longer time was allowed.

The main results suggest that the relation depends substantially of the underlying shock to the inelastic Sudanese UUE that leads to the ER appreciations/depreciations due to the surge of capital inflows or outflows. These render NBKIs, in supporting NIR, to be relatively less favorable for real GDP growth. Consequently, GDP growth and the real ER become endogenous variables and their co-movement is likely to depend on the underlying influential cotton's, as oil's, international prices driver.

So, once the NBKIs fall short, for a relatively long period of time, NIR/DMS ratio rapidly decline. The sudden expanded domestic aggregate demand pressures on the shrinking buffering NIR ultimately last the committed ER with CCs. *It is important to note that all the realized CCs events happened during Sudan's military, not democratic, political regimes.*

The "impossible trinity thesis" proves the above conclusion for the case of Sudan. That is, if the home central bank tried to free domestic, relative to foreign, money supply, there will be a depreciation pressure on the grave foreign handed indebted home currency as investors activate their capital outflows capacities by selling their low yielding domestic, relative to higher yielding foreign, currency. Similarly, if the central bank wanted to adopt free capital flows system, the central bank must sell its limited NIR as the only way to prevent

depreciation of the home currency. Since NIR of a central bank are limited, once the NIR are depleted, the domestic currency will depreciate. So, Sudan's dream of a monetary autonomy and a fixed ER didn't go well together as capital controls and limited NIR can only give central bank a temporary relief.



Source: Google Images<sup>604</sup>

In other lingo, when currencies decline atrociously, due to helpless NBKIs or controls with fully uncontrolled DMS, they explode a vociferously bombardment that ultimately terminates the decline in a self-fulfilling CC destination. It is important to jog memory by the fact that *borrowing NBKIs during the pre- CC proved to complicate, rather than abridges, the economy's future problems when there are foreign currency shortages and it suddenly becomes helpless.* Sudan's CCs implied that its governments weren't saving sufficiently enough, for long periods of time, when cotton's, as oil's, international influential prices were high for times when they unexpectedly sharply plummeted or disappeared.

### 6.3. Summary: -

Post-independent Sudan's economy remained for decades as a major import-dependent mono-commodity export-oriented, as was the colonial, UUE. In other idiom, since much of the material that goes into Sudanese exports remained itself imported, and any devaluation mustn't be supposed, as a result, to boost exports that much to achieve significant net exports. That is because it remained at the mercy of its low international prices, beside the impact of different shocks, dynamics. In one way or another, it determined the stability of GDP, employment, and ED growths performance.

*Depending on the adopted fiscal policies, and availability of NBKI, it became clear that when their international prices and NBKIs dipped, so did the economy's performance and its currency's nominal ER.* The latter was always seen to drop with every fall in commodity

prices and/or weaken further with the AWEs' unfavorable macroeconomic policies. As a result, it was forcefully devalued, and the country fell in CCs' vicious circle, when NBKOs intensifies its outflows and its NIR/DMS ratio fell approximately to zero level as decided by the Sudanese Monetary Authorities. So, seeking for the correct diagnosis for discovering the right policy prescription and medication, *it requires a much deeper analysis and revision of the existing economy's foreign-currency-dependent structural defects.*

Sudan's economic crises have, therefore, never been exclusively a fiscal crisis, at its root. Although heavily dependent on export revenues, the budget was actually the transmitting tool. It was the influential international commodity's prices that triggered injurious episodes to the buffering NIR/DM2 ratio, with the support of preceded wrong short-sighted macroeconomic and development policies. It has always been a balance of payments, hence currency, crises that remained deeply depressing the Sudanese economy. *NBKIs, as pivotal CCs predictor, during such hard-landing times, were predominantly unsupportive to different ERRs' buffering NIR/DMS ratio.*

Furthermore, inflationary GDP growth, mounting EDs and the CCs outcomes indicate to the failure of development planners and the economy's managers to set the economy on the right sustainable economic stability path from the start. They also failed, *even with the made-available NBKIs, to stave off the realized CCs with strong international financial position and with the right measures to regain and maintain market confidence.* In such circumstances, it needed strongly and persistently to, at least, stave investors' demand for higher premium risk, shorter maturities, seniority priority, and sharp devaluations, i.e. CC. NBKIs proved, since the famous 1980s global debt crises, to be more destabilizing and destructive than stabilizing and constructive.

The CCs outcomes and mounting EDs indicate to the failure of development planners and the economy's managers to set the economy on the right sustainable non-indebtedness economic path. The governments' macroeconomic straightjacket policies were always setting the Sudanese economy on the "*Recession Path*" to CCs destinations. That was irrespective of the alteration of the ruling political regimes from democratic to military regimes and vice

versa. Their ignorance of establishing an indigenous productivity-increasing capital producing sector led them to concentrate in satisfying the needs of the unmanageable foreign markets more than satisfying the manageable domestic markets on the basis of static, rather than the dynamic, comparative advantage canon.

Consequently, it has manifested itself, partly, in budget problems, which remained heavily dependent on export revenues, and have then been pushed onto the center of the stage by unsupportive ideologies. Taking into account the very heavy dependence on imports, it made the country's imports significantly influenced the tax revenues, as other countries' demand levels, causing budget to avoid, at least, import-reduction policies.

Everything else of the time remained equal for Sudan's small underdeveloped open economy, expansionary domestic monetary, *relative to insufficient buffering NIR*, from falling GDP/capita perspective, did not offset either the drag of Sudan's fiscal tightening nor the diminishing NBKIs from the rest of the world. *Increasing internationally inconvertible DMS, at whatever level, will not buy much more foreign currencies than what is made available for the country from the rest of the world during any one period of time to buy foreign advanced physical capital goods for the named developmental processes.* In other words, *expansion of DMS relative to shrinking NIR ratio was practically currency-crisis blaster rather than dampener.* The result becomes clear when it was heavily hit by strong exogenous negative shocks, the heavily import and export dependent Sudanese economy's ruling government responded to the contractionary impact of the imported crisis. Almost all the domestic financial crises were therefore a reflection of the imported financial crisis, and as a result was a self-fulfilling domestic financial crisis that were translated in CCs.

In general, normal international relationships, economies undertaking fiscal austerity are best served by expansionary monetary policy, mainly, to the diversified industrialized, capital-producing, economy. It can put the economy on a viable path to strengthen the economy's sustainable ED level. It also increases the government's capacity defense of the committed ERR. As can be seen from the 1960s' interest rate figure, the Sudanese central bank was manipulating its short-term interest rate. The Bank of Sudan, in other words, did what was

necessary to keep domestic aggregate demand on a stable growth path, but beyond the economy productive boundaries, during such times. Given the evidence shown above, the Central Bank did offset the fiscal tightening via lower and negative real interest rates and, as a result, maintained permanently a higher inconvertible monetary base path. Accordingly, everything else of the time remained equal for Sudan's small underdeveloped open economy, expansionary domestic monetary, relative to insufficient, and falling, buffering NIR, from falling GDP/capita perspective, did not offset either the drag of Sudan's fiscal tightening nor the diminishing NBKIs from the rest of the world.

Despite shifts in the ruling political and economic paradigm, since independence in 1956, another major feature of the Sudanese economy was its becoming more vulnerable to supply, more than demand, shocks. Consequently, it remained suffering from stagflation and financial crises since the establishment of the modern (colonial) economy up-to-date. This research divulged the fact that Sudan's development processes ended, by 2011, in much grave, rather than lethargic, specialization in the production and export of one dominant raw-material. In other lingo, it remained heavily dependent on the influential international of export prices to satisfy Sudanese wants and needs and to sustain its developmental processes. In the meanwhile, Sudan's real economy remained ailing along the period under study. In addition, disturbing NBKOs and *dwindling NBKIs* let the economy sink in the recession quagmire, by trimming the externally financed domestic aggregate demand, rather than keeping it afloat on clean waters. *As it can be concluded, there were no achieved structural socio-economic changes.* That was due to Sudanese planners being dedicated to the colonial canons of international trade, despite the AWE's drivers' shift in their own policy regimes.

In addition, the adopted methodology also helped enormously in disclosing the fact those exogenous forces had led to Sudan's different CCs events and were confirmed by the most popular known dates. They also validated some parts of the Mises, first, second, and third generations of CCs models' hypothesis that not all currency devaluations were CCs events. The adapted Mises and third generation, with some core theses of the first and second

generation models of CC, by adding more activating dynamic variables, is much more appropriate to Sudan's case.

Sudan's witnessed CCs events that happened when the monetary authorities devalued the nominal OER at minimum threshold of 13.86% or more. They resulted from the interactions of several exogenous factors. The most important major variables, within the performance context of the unstable world economy's drivers, were domestic overall macroeconomic policies, globally volatile international prices of the undiversified export revenues, and NBKIs. Irrespective of their attempts to sustain their externally-financed domestic aggregate demand boom, declining NBKIs, mainly during the hard-landing episodes, was trimming it and with it the value of the committed ER. When NBKIs collapsed they remained triggering a severe output collapses to bring income/capita levels back to its lower, if not its equilibrium, levels to establish a real value to the ER.

It can be concluded that CCs in Sudan were realized in the following dynamic mechanism. The net NIR-ER link remained dependent, generally in parallel, on the changes in the influential cotton's, as oil's, international prices and the received (volatile) quantity of NBKIs. Experience showed that NBKIs actually ebbed when the commodity's international prices suddenly plummeted and the NIR follow them in parallel. Sharp diminishing share of the dominant export revenues opens a huge budget deficit. As a result, the governments were always resorting to deficit financing to plug the budget deficit deterioration, hence adding to existing DMS, as NBKIs proved insufficient.<sup>605</sup> That expanded DMS relative to the diminished NIR deteriorated the IEIs. The diminished ratio of NIR to expanded DMS pushed the Sudanese pound's ER to face its CC destination.

In this research, it can be seen that Sudan's CC can be defined as the decision event to devalue the prevailing committed ER when NIR/DMS ratio were not sufficient enough to meet the minimum required imports of goods and services. Additional criteria to that ratio, a CC is the central bank's decision event as an inflation rate, which basically pushed domestic aggregate demand beyond the prevailing utilized productive capacity, was accompanied with an opened or widening CAD, equivalent to insufficient NBKIs to meet panicked demand for



foreign currency. unlike other conclusions in the literature, Sudan's CCs, *with the same change of the same above fundamentals can be predictable*. The most critical conclusion lies in the role of the perilous distressing NBKIs during Sudan's CCs. As its akin economies, they didn't support NIR/DM2 ratio during almost all its CCs episodes.

#### 6.4. Conclusion: -

The adopted direct experiment model clarified that the *responses of the Sudan's rigid economic structure, as figure 4.2 showed, to shocks from the exogenous unstable world economy, the different governments' incoherent ideological macroeconomic policies, and the other natural and man-made disasters were actually the same on the victimized different variants of ERRs*. In other lexis, under all the given undeveloped economic structure and its related unstable domestic and international political and financial types of relationships, *the Sudanese pound crashed when the CADs widened, equivalent to NBKIs plus NIR, causing, as been caused by, a simultaneous rapid domestic rise, relative to foreign, inflation, and NIR/DMS ratio depleted* to the Sudan's central bank's defined minimum threshold. They all happened when negative changes in (unsupportive) NBKIs and commodity prices have been *core triggers* behind the CCs, given the unsupportive context of the global economy, prevailing domestic macroeconomic policies, and Sudan's international political relationships.

So, the methodology proved to be very helpful in showing the absurdity basis of the unrealistic optimism that accompanied the several plan's objectives and policies to the actually experienced international, domestic political and economic shocks to the blemished UUE structure. Accordingly, these experiences can be used to establish more realistic assumptions in deciding, and achieving, different objectives and policies under whatever adopted ERR. Those assumptions should be based on the principle of making the Sudanese *"to produce what they consume and consume what they produce."* So, it helped in divulging the clear verity that *most of Sudan's unstable IEIs problems were in the State's failure to increase national income beyond the overall consumption increases, to maximize national saving beyond investment spending, hence export revenues beyond import payments*. Despite *the different adopted ideologies*, the clear crystal *raison d'être* resides in the fact *that*

*it failed to establish an economy that produces what the Sudanese remained consuming or, in other words, make the Sudanese consume what they produce. That is because the Sudanese UUE remained having a “smaller undiversified export, and larger diversified import, base,” that rendered devaluations to become an ineffective policy tool. Such circumstance remained opening the doors for NBKIs through widening CADs as it simultaneously remained pushing domestic, relative to foreign, price levels up.*

*As seen in the last two chapters, Sudan’s CCs were realized under different variants of fixed and floating ERRs and different levels of NIR/DMS ratio supporting NBKIs, despite the different ideologies that ruled Sudan. They were also realized under different political and economic institutional regimes each with its own “normal” and “abnormal” international or national political and financial relationships conditions. In all CCs events, widened CAD were accompanied with rising inflation rates as NIR/DMS ratio deteriorate. The official currency pegs was, therefore, forced, and not opted, to be abandoned as its insufficient NBKIs-dependent NIR dwindled, relative to the expanded DMS, while the enormous EDs, and its arrears, continued ballooning.*

*Despite NBKIs’ sudden stop shocks that helped in leading to them, they were also realized as its NIR-supporting export sector remained suffering from idiosyncratic shocks. Recalling the strong inverse correlation between real interest rate and ERR, their realizations were very weak and slow in process under the conditions which was typified by the revulsion of the foreign capital inflows and the dominancy of the public sector on economic activities. That revulsion resulted, not only in low CADs, and low EDs, as during 1960/72, but also, in limited supportive levels to the buffering ERRs’ NIR/DMS ratio. During the fixed ERRs, real GDP/Capita was higher relative to its later counterparts under the floating ERRs.*

*They were also very rapid and strong in process under the latter conditions which was typified by the allure to the foreign capital inflows and strong encouragement of the private sector. That esteem resulted, not only in large CADs and rapid accumulation of ED and its arrears, as during the after 1960/72 studied periods, but also, in limited supportive levels to*

*the ERRs' buffering NIR/DMS ratio. Furthermore, during the after-1972 devaluation and after-1978 floating ERRs, real GDP/Capita was lower relative to its 1960/72 counterpart under the fixed ERRs. This implies that the expansionary stimulate of a given increase in DMS, relative to NIR, to domestic, relative to foreign, overall prices was always greater when Sudan adopted the floating, or semi-floating, ERRs<sup>606</sup> than it was adopting the fixed rate regime.*

*Except in 1987, the other nine CCs events fell under the rule of Sudan's military political regimes rules, despite the ruling economic ideologies or changed rates of exchanges. Furthermore, they were also achieved mainly after every, direct or indirect, IMF intervention pressure for changing the DMS/NIR ratio, as after 1966 and 1978, rather than without its intervention periods. In the end, it remained the response of UUE's structure of the economy, within the context of its H-STGLP, to the adopted incoherent macroeconomic policies that ended with those CCs. That reflected a sustained severe confidence loss that led to run on the Sudanese pound.*

*As mentioned in the text, post-independent Sudanese governments didn't deliver their economic development and macroeconomic stability promises neither to Sudan's time-citizens nor to the Sudanese future generations. Remained loyal to the colonial development, growth and macroeconomic stabilization paradigms, post-independent Sudanese governments kept Sudan at its initial early stages of socio-economic development. In other words, Sudan's economy's growth became neither self-sustaining nor self-financing. It is still in a dead-need for real and serious industrialized diversification developmental processes of its economy that is based on dynamic, not static, comparative advantage canon. That is, a serious structural change in the UUE that weakens Sudan's H-STGLP with rest of the world for the stabilization of the adopted ERR.*

*Furthermore, recall that, during the fixed ERR of the gold-standard era, the now major advanced ex-colonizing European industrial nations minimized their imports to 10% or less of their GDPs from their (now) colonizing industrial competitor nations.<sup>607</sup> It is important to remember that their deliberate adoption of the gold standard was targeting the support of their*

rapid industrialization and diversification of their home, import-substituting and export promoting, industries during their early and medium stages of their industrial development. The strategy was adopted after the end of WWII when the advanced economies' were destroyed during WWII. They adopted the *Bretton Woods's "fixed, but adjustable, ERR"* for the rehabilitation and reconstruction of their destroyed economies till 1973. Also, Japan and South Korea were transformed into strong industrial economies during the Bretton Woods' "*fixed, but adjustable, ERR.*" The same *fixed* ERR remained to be adopted by today's EU nations and China since WWII to make their economies much larger, stronger, and stable for the life of their citizens to flourish sustainably.

Moreover, as documented in the previous chapter, the strong growth correlation between the advanced and the less developed economies *proved to be insensitive, i.e. neutral, to the adopted ERRs during the past 150 years by now.* It is therefore a very clear message from these historical development episodes of today's very advanced, influential, and flourishing industrial economies.

In Sudan's economic literature, as policymakers' experiments, there has been a tendency to blame exogenous shocks, international economic, inherited unfavorable domestic political, systems for Sudan's economic problems and 'financial crises.' These blames were used to justify for either mass regulation, as during 1970s, or for mass deregulations, as after the 1978, but specifically after the 1990. They were all based on the grounds that this will prevent future financial, but mainly ED and currency, crises. All these justifications proved unrealistic

This research does not support these *ideological regulation or de-regulation* views for the prevention of future financial, but mainly currency, crises. As this research showed, *Sudan remained borrowing foreign, besides domestic, credits under the name of development processes rationales while adopting fixed or floating ERRs.* By doing so, hence, they were triggering higher domestic aggregate demand growth at rates that were higher than domestic aggregate supply capacity can meet it, during any one period of time under different ERRs. They thus, not only overheated the domestic economy, hence worsened the internal

imbalance, but also, worsened the CAD, hence worsened external imbalances, *that led to mounting EDs and its arrears whether under fixed or floating ERR.*

Irrespective of the 1930's and 1957/59's contractionary financial crises, the heavily indebted poor Sudan, after independence in 1956, witnessed **nine major CCs events beside the several non-CCs devaluations, during 1960/2012, as low real interest rates, on average, went from the positive, to the negative, zone, and as the NIR/DMS ratio supporting NBKI went on negative growth path.** Due to the interactions between exogenous factors and domestic macroeconomic policies, they were all been ***self-fulfilling*** by their nature. With the exception of the 1987, to remind, all these CCs fell during the military political rule of the economy. Furthermore, they were achieved mainly after every, direct or indirect, IMF interventional pressures for changing the DMS/NIR ratio, as after 1966 and 1978, relative to its non-intervention periods, as during 1957/59.

That meant they deliberately remained putting higher pressures on the committed fixed ER to depreciate, which lasted by their different levels of (nominal) devaluation rates. According to such governments' domestic macro-policy dynamical manipulations, *the committed fixed ER becomes the "forfeiture lamb" not the cause of the balance of payments' accounts* different problems and crises under ruling economic structure. Those devaluations were achieved to validate the justifications for regaining of investors' fair confidence and competitiveness constructs. The causes will ever remain, even under floating ERRs, in the pressures of the adopted domestic foreign-finance-dependent macroeconomic policy packages and the major AWEs' macroeconomic policies.

So, the Sudanese governments were suffering from domestic macroeconomic mismanagement capacities that led to the Sudanese economy's hard-landings and the accumulation of EDs and CCs under different ruling political ideologies. It is by now well widely recognized that Sudan remained to be very heavily impacted by the volatility of the influential international prices of commodities and by the uncertainties of the unsupportive international financial markets during hard times.

Sudan's financial crises, in one way or another, were then a pure Sudanese government's made crises in the face of unstable world economy and domestic unstable politics. Given the monetary policy rate, NBKIs led to an appreciation, and thus to a contraction in net exports or opening out net imports, as a result of worsening internal imbalances, and hence an increase in the demand for foreign currencies and decrease in real output. Sudan's CCs were practically due fiscal austerity plus hard ERR for nearly all the period under study. That was amid atrocious DMS/NIR ratio that led to worsened external, as internal, imbalances. Fiscal austerity, loss of domestic, relative to foreign, currency's international purchasing power due loose DMS to fading NIR, and hard peg remained a deeply toxic policy mix that failed to at least limit ED stock growth and/or prevent CCs. It was, from a practical point of view, the wrong response to the undeveloped economy's structure amid changing world economy's systems, policies, and structures.

In other words, it was, to a great extent, an over-reliance on the unreliable NBKIs, mainly during hard times. That reliance led to the creation of the black market and its growth since it is a government confession that its exports were not sufficient enough to meet the economy's import needs, despite the annual increases in DMS, which imply the effort of gaining (*unfair*) competitive advantages in international trade.<sup>608</sup> Its sudden contractions were always the source of severe foreign currency scarcities, and as a result, it was an easy natural predictor of CCs. *Failure to deliver a well-developed economy was the core reason.* The generated crises were caused by the sustained dependence on one major commodity's international price and NBKIs, which were supported by the massive DMS stimulus relative to the dwindling NIR buffer in false effort to stabilize the economy's non-inflationary and non-indebted equilibrium. Such justifications may reflect the constraints set by the international economic system on the domestic decision of policy makers to expand the domestic inconvertible currency of the UAE without restraints. Consequently, the Sudanese development planners, therefore, didn't change the development processes rules the Sudanese economy. In other lexis, they didn't transform the Sudanese economy into an advanced self-dependent industrialized diversified economy, at least as the Asian Tigers.

The financial part of the CCs was caused by the failure of consecutive governments to transform the inherited economic structure, from the perspective of dynamic comparative advantages. They seek the drastic structural change of the economy to prevent the governments' future liquidity difficulties to avoid defaults and fall in CCs quagmires. Looking ahead, future crises will be as frequent as ever because they have little to do with financial events as much as with the prudent management of the economy's fundamentals under the pressure of unstable world economy.

However, a new mass of domestic bank regulation must continue to guarantee the balance of payments' components. *It would be better if the central banks looked to the beam in their own eye, rather than examining the motes in the eye of private banks.* They should pay attention to a properly stabilizing monetary policy and scale back the new policies of needed direct regulation during such very early stages of economic development. The unstable markets of the advanced industrial's world economy drivers, in their direct and indirect relationships, with Sudan's inherited structure of the colonial underdeveloped economy remained to be causing destabilization of the latter's macroeconomic policies and limited its financial plans, not the vice versa. Change is the life's rule. Without obeying this nature's rule no real developments will ever be achieved. Changes, therefore, starts with changes in the ever-changing rules of economic life to sustain the strongly needed development processes to do whatever meaningful for the lushness of the Sudanese and their future generations. *Without matching to changes, it is impossible to create a road map to avoid, or at least to manage, any kind of financial, but mainly currency, crisis.* In other lingo, without real and solid path of a stabilizing, but strongly effective, smooth development road-map, Sudan will find it progressively harder to handle future crises via controlling foreseeable problems of macroeconomic imbalances.

What is clear in this context was the fiscal austerity, during 1964/72. The problems is that, fiscal austerity plus hard ERR amid atrocious expansion of currency-depreciating DMS, relative to dwindling NIR, lead to worsened CADs, which equivalent to the demand to importing NBKIs. Consequently, that policy package remained to be the most deeply toxic

policy mix that failed to at least limit ED stock growth and avoid the 1972 CC event. *That implied that fiscal deficit contraction alone cannot deliver any foreign surpluses in the external sector.* Consequently, the internationally committed Sudanese pound's ERR was sustainably hit hard by a fall in the Sudan's overall export and NBKIs. *Austerity, plus hard ERR, while currency-depreciating domestic, relative to foreign, DMS keep expanding, foreign currencies from export revenues and NBKIs were sustainably recessing, hence NIR, is the wrong policy as it deepens the initial economy's overall recession,*<sup>609</sup> *i.e. increasing idle productive capacities, unemployment, and poverty.* In franca lingua, net private capital outflows and dwindling official capital inflows were not supportive and let the economy sink in recession rather than support it to keep it afloat during such hard times for the government in facing the resulting financial, but mainly currency, crisis.

So, yes, the economy should be temporarily remain on the export-oriented path but that should be accompanied by the establishment of import-substitution, mainly for the heavy productivity-increasing capital-producing, industries that can be later transformed into export industries. In addition, the inconvertible domestic currency should gradually be fought to be transformed into internationally convertible currency. In that case, effective macroeconomic policies can be determined and well established to resist the volatilities of the unstable world and domestic economies. *So, it is vitally crucial that professional macroeconomists should be employed to judge on the impact of different socio-economic projects, plans, and programs in realizing the above long-term objectives.* Recent concerns about dependence on NBKIs, as facilitated by foreign-exchange intervention and associated with rapid DMS relative to NIR, proved to draw the economy in EDs.

Based on the dynamic relationship of its fundamental variables that are disclosed in this research, it can be concluded that their interactions were the consequence of: -

1. The long-run neglect of the traditional and the establishment of a strong indigenous advanced productivity-increasing capital producing sectors caused the heavy dependence on the revenues from unmanageable foreign, relative to manageable domestic, markets. *The resultant increasing idle capacities, mass rural and urban*



*unemployment and poverty rates, increasing EDs, and low national productivities, hence low national savings, indicated to sustaining a tenuous/vulnerable, not strong/well-built and resilient economy.* That points to the inaptness of the fulfilled developmental processes and the ineffectiveness of the adopted macroeconomic policies along its long past history;

2. A NBKI and dominant influential export commodity dependent UUE can never promise a macroeconomic stability or avoidance of CCs episodes;
3. *Political ideologies*, rather than the existing underdeveloped structure of the economy, proved to be unhelpful in supporting different government, of different political systems, *to avoid* CCs. Despite these disobliging ideologies, choosing among public or private or mixed economy should depend on the resilience of the economic system in absorbing different kinds of exogenous shocks, as a standard for preventing it from falling in crises, for as much longer period of time as possible, at this early socio-economic development stage. Of course, at later stages that standard can be improved;
4. Post-independent successive governments of the Sudan adopted pro-cyclical liquidation policy when the influential cotton's international prices fall by reducing domestic, relative to foreign, opportunity cost. In other lingo, they expand domestic, relative to foreign, money supply leading to depreciation of the committed ER, as reflected in the black market for foreign currencies;
5. NBKIs proved to be unsupportive to Sudan's capacity for increasing its national productivity beyond the dynamic national poverty line. It also proved to be shrinking in times of need for withering currency run panic and regain investors' confidence. As seen in the text, they actually helped in causing CCs to become self-fulfilling;
6. In contrast to investing external sector's and budget's primary surpluses, austerity plus fixed or floating ERR, in a unindustrialized mono-commodity export dependent economy, while expanding DMS relative to NIR is a real lethal policy blend that will never stop ED stock from mounting nor eliminate its un-sustainability,<sup>610</sup> or protect the Sudanese currency from falling in CCs quagmires;

7. Expansion of DMS, relative to expanding government expenditure, in the case of Sudan produced more price inflation than real GDP almost most of the time since independence. As seen in chapter 5 above, fiscal policies are more effective, more than monetary policies, in determining the speed of real GDP growth;
8. Rising inflation rates remained to be an incentive and a promise for currency speculators as foreign goods importers. That is guaranteed by higher prices for their imported goods and services as implied by definition of inflation as a persistent increase in the overall prices during any period of time. That incentive is not guaranteed for the commodity exporters in the foreign markets at the given volatile international prices of exports of goods at the prevailing domestic ERs. This implies sustained CADs, which is equivalent to sustaining NBKIs, and the resultant drowning in EDs. It is therefore not eccentric to throw the economy in CCs quagmire;
9. Employment of the fiscal sector as a vital economic shock absorber instrument in the face of international real terms of trade fluctuations. In other words, it must be counter-cyclical;
10. Simultaneous, or any, sharp worsening of internal and/or external imbalances led always to CCs, i.e. sharp devaluation that was at or above 13.86%. Inflationary DMS expansion, which worsens the internal imbalance, relative to dwindling NIR, caused real appreciation of the nominal ER, hence, worsened the external imbalances that inflation created in the first place. These can be considered as the most robust and significant predictors of future CCs;
11. Higher NIR relative to DMS, as supported by positive domestic, relative to foreign, real interest rates, is associated with a lower probability of subsequent crises;
12. Servicing public ED plays an important role in increasing the potential or probability for a CC event.
13. Evidence showed that expansionary monetary and fiscal policies remained influencing nominal ERs. That was very clear when the real terms of trade and/or the international prices of the influential dominant export commodities dropped, as when it increased,

sharply. In all cases the former actually remained pro-cyclical, rather than counter-cyclical, policy even when the latter increased.

14. The need to change the colonial foreign-capital dependent development paradigm of the production for, and exportation to, the rest of the world, more than to the Sudanese, on the basis of the static, rather dynamic, comparative advantage canon. This colonial paradigm proved to be a failure in protecting Sudan from falling in financial, but mainly currency, crises. Under the prevailing economic structure, the need for foreign currencies remains to be indispensable. Accordingly, it is time to change such development ideology in favor of a real development that is biased for the production for the Sudanese and exportation of their excess to the rest of the world by the adoption of dynamic, rather than static, comparative advantage;
15. As long as the national currency remains internationally inconvertible, NIR must continue feeding net foreign assets to strategic indispensable levels. That is because it is an indispensable strategic instrument, relative to the shrinking NBKIs, that is needed to be used in times of real need to face any type of financial crisis. The clear example for its crucial indispensable strategic importance was the severe inflationary-contraction of the Sudanese economy after the 2011 “Republic of South Sudan” Cessation Period. Accordingly, accumulation of significant strategic NIR, relative to domestic real interest rate adjusted DMS, more than to just any import-months, remains of crucial indispensable strategic importance. More important, reserve currencies must be backed by indispensable and mounting, if not significant, gold stock or similar backing commodities to pay for governments’ mismanagement mistakes. These NIR are crucially important for the economy, at these early stages of economic development. They are also crucially indispensable for the needed stability for a real rapid structural-change of the economy by establishing an advanced socio-economic structure for the targeted rapid self-financing growth.
16. As has been observed, Sudan was politically isolated by the rest of the world that caused it to lose it as a “*lender of last resort*,” and related accession of foreign financial market,

mainly since mid-1960s to date. It is now high time to learn the lessons from Sudan's past CCs episode. So, it becomes a crucially high time to establish and maintain good strong long-term relationships with the rest of the world. The latter is Sudan's needed "lender of last resort" during hard times and as future foreign market for its ever increasing valued-added exports for increasing GDP growth at levels to reduce needed GDP-deducting imports from it. The long-term goal is the minimization, if not the disappearance, for borrowing NBKIs to reflect the governments capacity in stabilizing its committed ERRs and GDP growth;

17. Different governments, since the colonial times, were allocating part of the domestic factors of productions for large-scale modern export projects that, directly or indirectly, produce goods for foreign markets. The earned foreign currencies continued to be allocated for the modern import projects consumers to supply domestic markets with foreign goods. *This meant that these governments were concentrating the Sudanese people's demand for foreign currencies, rather than the Sudanese and foreign demand for the national currency.* That explains, at least in part, the relative rapid corrosion of the value of the Sudanese, relative to the advanced countries', currency. Avoiding those historical project establishment decisions calls for reliance on alternative projects with positive long-run returns that enjoy with strong dynamic, rather than static, comparative advantages;

18. The slowdown in the world's economic powers, related declining commodity's influential international prices, the growing likelihood of an unfavorable domestic, relative to foreign, real interest-rate, huge current-account deficits, and the resultant slowing of the economy, as indicated by labor immigration outside the country and related growing domestic and international political relations instability, have blended to make the post-independent era a dismal period for Sudan's currency.

Restructuring the economy by the establishment of indigenous advanced heavy productivity-increasing capital-producing industries is the most successful telling verification of development processes in history. It is also the only solution to liberate the country from the

need for foreign capital and help stabilizing the economy's financial macro. It also helps in increasing the government's capacities to support the increases in the society's welfare sustainably.

Simple consistent models may be unable to capture sufficiently the full range of necessary social, political, and environmental factors that can influence the likelihood of a crisis break-out in the near or medium or long term. Nonetheless, the researcher believe that big increases in the crisis probabilities implied by the factors enlightened above should prompt policymakers at least to ask tough questions about the health of country's economic and financial fundamentals, and the need for rapid corrective action.

#### 6.5. Recommendations: -

In almost all periods that witnessed a CC, Sudan's committed fixed ERR was always in a volatile stance with the volatility of the buffering NIR. The latter, in turn, remained dependent on the overall, but mainly the influential cotton's, as on oil's, export revenues, unless stabilized by sufficient, although unreliable, NBKIs. *That in turn reflected the maintenance of the structure of the colonial underdeveloped economy.* This situation points to the fact that there is still a long and abrasive way to go to pave the roads for the real structural changes to transform the Sudanese UUE.

To handle, if not avoiding the route to, financial, but mainly currency, crisis, the macroeconomic policies, as socio-economic plans and programs, *must be adjusted and developed, by specialized professional macroeconomists*, without putting the need for heavy dependence on NBKIs of the past at the center of their financial policies. Among the many important recommendations are the following: -

1. Trade decisions and policies must be based on the long-run *dynamic, rather* than the short-run *static*, comparative advantage canon. This is vital to minimize demand for foreign currency in determining the economy's internal and external equilibrium. On the other hand, it is important to drastically change the inherited (colonial) modern economy by real industrialization and diversification, in all the economy's sectors, not only in the raw-material sector, to increase the demand for local currency. Real

diversified industrialization, hence real sustainable structural changes, will be realized by the dependence on the establishment of purely indigenous productivity-increasing capital-producing industries to reduce the demand for foreign currencies. The core purpose will ever remain in extracting as much value added from the exported raw-materials by the adoption of advanced indigenous technology. *This is a vital necessary step for discarding dependence on NBKIs and related foreign capital goods.* It therefore calls for the *need of sufficient expenditure on research and development by the public and the private sectors.* This implies that import-substitution for capital and consumption goods, and for their exportation at later stages, on the account of their foreign counterparts, is the crux canon for any successful real and effective long-run structural change of the Sudanese underdeveloped economy;

2. Money flows into the Sudan from the rest of the world as payment for Sudan's exports of goods and services, as payment for the use of Sudan's-owned factors of production, and as transfer payments. In all cases, net DMS changes to the extent that affects domestic inflation-adjusted opportunity cost and nominal ER. It's a basic rule of BoPs accounting that the current account and the financial account must sum to zero: , i.e. (Current account (CA) + Financial account (FA) = 0 or CA = -FA). Successful real economic development, as in point 1 above, means that FA's sign will become sustainably positive, as is the Southeast Asian countries case, of which the top now are Japan and China, if not Germany. The main tool will ever remain the DMS, in general, but financing imports from banks, in specific. The weight of need for NBKIs will, for certain, be reduced, and their conditions will favorably change drastically. What is most important, the committed ERR will be controlled and freely be manipulated as the indispensable economy's unstable equilibrium requires.
3. As mentioned above, post-independent successive governments of the Sudan adopted pro-cyclical liquidation policy when the influential cotton's international prices fall by reducing domestic, relative to foreign, opportunity cost. In other lingo, domestic,

relative to foreign, money supply expansion led always to the committed ER depreciation in the black market for foreign currencies.

Sudan's fiscal crises, since the colonial era, have never been at the root-cause of Sudan's currency-crises. It has always been the BoPs crisis that manifested itself, in part, in budget problems, which have then been pushed onto the center of the stage by ideology. In this case, it is recommended to adapt Keynes' famous dictum of "*It is boom, not slump, is the time for austerity*"<sup>611</sup> for the budget to help in cooling-down the overheated economy. That can be adapted by transforming it into: "*It is the influential raw-materials' export prices boom, not their slumps, are the time for domestic austerity and increased opportunity costs for DMS*" to minimize the demand for foreign currencies. The hidden purpose of course is to maximize national saving, relative to investments, in good times for the bad times. The core objective from maximizing national savings during good time, of course, is to sustain growth, smooth domestic absorption, and sustain EDS during bad times;

4. The monetary authorities, in the mean-time, must become much more prudential in designing monetary policies that, ultimately: -
  - i. Uphold as much lower ratio of DMS relative to NIR as possible. That in turn helps in maintaining the committed ER and controlling inflation at internationally competitive levels. The objective is to support exporters to sell at the prevailing competitive international prices of exports and limit the domestic demand for imports to localize import-substitution industries;
  - ii. Maintain domestic IR at safe competitive limits. This is measured by minimizing domestic IR below the opportunity costs for hoarding assets, including foreign currencies, or storing assets. The objective is to make it financially intolerably costly, not profitable, to speculators and asset hoarders. As the speed of rising domestic prices slows down, relative to the prevailing hoarding or storing costs, it can be found that investors' profits will depend more on goods' sales than on financial

speculations. That is, the domestic supply of goods and services rapidly increase at internationally competitive prices at the prevailing ER.

By biasing bank financing for exports than imports, domestic production will be highly protected and the current account balance, everything else remains equal, achieve surpluses. This will help in making the demand for foreign currency to relatively be reduced. So, with lower competitive inflation rates, relative to intolerable costs to money speculators and foreign currency savers, will help the speed-up in the elimination of parallel, in favor of official, foreign currency markets. It will also be putting NBKIs, if resorted to in very harsh times, and related EDS at macro-manageable levels to prevent future, government made, CCs;

5. Sudan's current account balance, in any one year since independence, showed the dominancy of the private sector's share in total imports. As mentioned above, *it becomes the responsibility of the banking sector's import financing in determining the current account balances much more than the fiscal/public sector*. The monetary policy, beside fiscal sector, therefore, should be adjusted incessantly in favor of financing exports more than imports to maintain the maximum surpluses, given the prevailing international prices of the exported and imported goods, services, and commodities. This policy is a strategic alternative to borrowing of NBKIs to smoothen domestic consumption and investment during hard times. It is also a crucial policy for correcting the external imbalances. That would also help in dissolving the existing EDs stocks;
6. Point (4) above implies the critical significance of favorable international economic relationships with the rest of the world which was massively damaged since mid-1960s. At this very early stages of socio-economic development, international trade, and good international financial relationships, mainly for hard times, is indispensable for restructuring Sudan's economy in the long time;



7. Use of any achieved current account surpluses in supporting the NIR, *relative to DMS*, for supporting the committed ERR at the prevailing Sudan's very early stages of economic development;
8. Net borrowing from abroad is equivalent to the country's net import. That is, a NBKI objectively opens/widens, rather than relieves, CAD.<sup>612</sup> Some Sudanese development finance savvy have the cult belief in the importance of net borrowing from abroad, under certain political and economic conditions. NBKIs' role, in different plans, stabilization programs, and reports, is seen as a relief to the CAD to smooth domestic consumption when GDP declined, as figure 4.5A showed. Furthermore, some economists consider it as a crucial instrument for boosting real GDP growth at rates that are higher than without their accessibility.<sup>613</sup> Correction of this much weird and sleazier concept, from macroeconomic perspective, is genuinely required to be changed drastically. The required concept shift should clarify that: -
  - i. *NBKIs role can lead to any nearby type of financial crises. As it became popular by now, Sudan remained suffering from CCs and the accumulation of mounting ED arrears since early 1970s to date;*
  - ii. *In addition, no one nation can go on forever to be living beyond its own means by boosting foreign financed real GDP growth at rates that are higher than without NBKIs. In other words, such a theory didn't say anything clear about when such a foreign-financed nation would become a donor/lender of international funds to other countries as did/do today's rich industrial European and Asian countries.*

In other cases, it justified in the name of development process by the use of foreign technologies under the name of static, not dynamic, comparative advantage thesis, hence discouraging the establishment of indigenously productivity-increasing capital-producing industries. Actually, NBKIs' role is in either opening or widening a CAD by supporting the increase in total import payments at levels that are higher than total exports incomes. Accordingly, it can be said that this misleading understanding NBKIs

make governments, at least in part, responsible for the accumulation of EDs and their arrears.

9. NIR accumulation, relative to an expanding DMS, must be extremely and explicitly considered in any expansionary economic policy maintain a safe buffering stocks that is capable of withering domestic investors' panics and currency speculators' attacks. They are also crucially important to sustain a stabilized ERR for a sustained rapidity in real productivity-increasing and diversifying development processes. The purpose is to neutralize the volatility impact of (insufficient, if not declining) NBKIs, sudden capital outflows, and international financial sanctions, to sustainably maintain the committed ERR;
10. Elimination of foreign currency demanders, in the domestic foreign currency market, not in determining the foreign currency value as a result of shocks to the supply of foreign currency, whether from exports or NBKIs. Their confidence must be increased by the maintaining a reliable domestic currency, as a real store of value. The government must be committed to this target if foreign currency is to be freed for EDS, stabilization, and rapid real socio-economic development process for the whole, not only the modern, economy. The core development strategy must concentrate on the strategic unbalanced growth approach. It must be based on strategic effective forward and backward linkages, among different sectors of the, rural and urban, economy, in the face of the relatively scarce financial resources and financial sanctions, as supported by the indigenous-productivity-increasing capital producing industries;
11. Re-orientation of the monetary and fiscal policies to become more and more biased against imports in favor of more and more export revenues by limiting import financing in favor of export financing. This must include borrowings from abroad and domestic foreigners' borrowing from domestic banking system for export, not import, purposes. That will help in protecting the government's stock of NIR by a well-designed export strategy rather than sustainable devaluations;

12. As economic history documented, *fixed ER was adopted by Europe and the USA while structurally industrializing and diversifying their economies*. That was during: -
- i. The gold and bimetallism standard of their monetary regime, while colonizing other nations!!!!;
  - ii. The post-WWII to pre-1973 BWIs' "*fixed, but adjustable, ER*," i.e. during the post WWII reconstruction and rehabilitation of their destroyed economies, including Japan. All of which suffered least from CCs;
  - iii. The post-WWII BWIs' "*fixed, but adjustable, ER*" to date was adopted by the most rapid growing China, which considers itself to-date as a developing country, and the (now) other industrialized Asian countries, as South Korea. *These latter successfully remained maintaining their internal and external balance while structurally industrializing their economies*.
13. Sudan, as the advanced drivers of the world economy, witnessed a high cost of adopting the "*floating, but managed, ER*" regime, in terms of real GDP/Capita growth rate, relative to the "*fixed, but adjustable, ER*" regime. Based on the world's successful balanced development experiences, it can be concluded that concentration on more rapid real GDP/Capita, via sustainable rapid structural change in the face of increasing the population size while overcoming the insidious hefty poverty, is as much more important as the requirements of internal and external balances for stabilizing the committed exchange regime. Accordingly, it can be concluded that Sudan, objectively, needs real rapid recovery via rapid structural changes more than structural reforms, at this UUE's commodity-dependent stage of economic development.<sup>614</sup> That remains to be crucial even during times of financial stresses that affect the adopted ER negatively. At this early stage of development, Sudan's monetary and fiscal policies should be counter-cyclical to changes in all the influential kinds of exogenous factors. In specific, Sudanese governments should adopt counter-cyclical macroeconomic policies in face of the fluctuations of the commodity's influential international prices and terms of trade to stabilize, if not fix, the nominal ER for a long time.

14. Keynes once advised that countries should take care of the unemployed for the budget to automatically take care of itself, assuming effective and efficient tax system and full-employment expenditure. Of course no one country is immune of any kind of financial crisis. But literature and history proved that there is always a long list of chances to avoid falling in any one kind of these crises. Along these lines, it is better for the ruling governments to concentrate on meeting their labor employment and the economy's growth objectives to meet their fiscal, NIR, and EDS objectives while adopting macro-policies that would minimize macro-trade-offs and that would ultimately sustain a self-fulfilling ER peg.
15. Resisting the marginalization of the dominant position for the indirect tax revenues from foreign trade, as a share of total tax revenues, since the colonial era to date, implicitly implies the significant contribution of the national budget in sustaining higher levels of imports that might contribute in worsening the external sector's imbalances for financing significantly its incomes;
16. The absence of a strong import-substitution and export industries for the production of *final goods* render the committed ER as a self defeating stabilization policy tool for the external imbalance. Remaining as a raw-material producer and exporters calls for a highly stable fixed ER to the minimize, at least, the losses from selling a *raw materials* that are *full of more value-added* at the relatively low international prices. Moreover, the ineffectiveness of real devaluation as stabilization policy does not necessarily imply that the ER should be held constant in the face of domestic inflation;
17. Being extremely/heavily dependent on foreign trade and international capital markets as the source for the roaring, stabilizing, and the growth of the Sudanese economy, calls Sudan to adopt what is similar to "Bimetallic" monetary system. The bimetallic standard (or bimetallism) backs a unit of currency to a fixed ratio of gold and/or silver. The bimetallic standard was first used in the United States in 1792 as a means of controlling the value of money. adequate gold and silver was kept in NIR to back the paper currency while minimizing related costs;

18. The colonial development colonial paradigm must drastically be scrapped in favor of real endogenous socio-economic and stabilization paradigms. For the case of Sudan, shift from export commodity-money to be converted into Sudanese pound at the determined ER, becomes extremely crucial.
19. What remains as the most important is factual link between Equilibrium stabilization and structural changes of the blemished economy. As the CCs events established, it will ever remain the equilibrium stabilization target that determines what kind of development plans should be adopted and not the vice-versa;
20. Future economic management agencies<sup>615</sup> should establish policies that prevent the internal imbalances, as a worse equilibrium position for the economy, mainly that is resulting from diverging external imbalances, as another worse equilibrium position, to prevent the economy from falling in any type of financial, but specifically currency, crisis quagmire. On the top of priorities, fiscal, as monetary, policies will need to focus, by specialized macroeconomists, on reducing the country's heavy reliance on external savings when the influential export-commodity's revenue collapses;
21. Sudan's colonial economy was founded on the basis of the famous *static*, not *dynamic*, *international division of labor and specialization tenet*. Under the pressure of the ruling H-STGLP with rest of the world, *they showed clearly that when the internal and/or the external imbalances diverge from each other a CC becomes inevitable, i.e. not a policy option*. It becomes critical by now that the adopted past developmental and stabilization policy must be corrected for the minimization of ruling H-STGLP with rest of the world under whatever ERR.
22. Sudan's economy's experiences to different old shocks can be used to establish real assumptions in deciding different real plans' and programs' objectives and policies;
23. Minimizing, if not purging, NBKIs, which is equivalent to CADs, imply minimization of international liabilities and strengthen the country's international trade competitive powers, via slowing the rise of domestic, relative to foreign, price levels;

24. As mentioned in the text, in normal times, the peer of a *CAD* is borrowed NBKIs, which *reduce nominal and real interest rates, hence the depreciation of the committed ER*. Borrowing under the name development processes therefore is a self-defeating policy by deteriorating the committed ER buffering DMS/NIR ratio. Avoiding or sterilizing borrowing, therefore, must be a policy target to maintain non-inflationary full-employment generating internal and external stabilized balances.

25. The inherited Sudanese economic structure remains to be totally as incomplete as immature whether before, at, or after independence. The Sudan's 1930 financial crisis, as the ones that followed it, must have had been highly prioritized among the most top priority objectives in the different post-independence issued development plans and programs. As seen, Sudan's experiences with its CCs remained to be *a no guide experience* for almost all the privileged Sudanese leaders in the post-independence era. The meant lesson here is about how to eliminate the influence of the one commodity income on the overall performance of the Sudanese economy to avoid a well-experienced sudden financial collapse, as during the 1930s' Great Depression. The resultant consequence was the fall in a severe and intolerable financial crisis with increased vulnerability to CC. The futile suffering of the Sudanese economy from the European two-year recession was at a relatively high socio-economic cost. Among them were the diminished direct and indirect tax revenues base, political instability, loss of NIR, reduction in the export income, and the increase in borrowing, at an interest cost, from the rest of the world. This is an important lesson that must be considered by any future policy-makers. It should be considered in future macroeconomic warning studies and in-advance problems or crisis re-resolution plans by an independent advisory specialized monitoring bodies

History showed that the influential commodity's international price-booms are usually associated with rising incomes, stronger fiscal positions, improved real terms of trade, *appreciating, if not fixed, ER, declining borrowing costs, and larger capital inflows*. During downturns, these trends are reversed. Unless today's ruling *H-STGLP and old colonial*

*economic development paradigm principles* are drastically changed and amended, the inherited NBKI-dependent UUE, under whatever ruling political, and ER, regimes, *will, and can, never be drastically transformed* for a prosperous Sudanese population.

In other patois, future governments must have the *firm real political will to establish a new economy that can offset the decline of foreign commodity demand and foreign funds* to maintain their own committed ERR. The core feature of such an economy must prove its capacity to prevent it from falling in crisis and its aftermath recession. The central gauging objective must be centered in the degree of protecting the non-ED rise in the Sudanese people's living standards, hence in avoiding its destruction by maintaining such colonial development paradigm.

Transforming the Sudanese pound into reliable, trusted, and competitive currency, as of the USA or the UK, will remain the governments' future major challenging objective for the future Sudanese governments and private sector. The researcher suggests the following rule of thumb to be adopted for the roaring, development, growth, and stability of the Sudanese economy at its early development stages. This rule of thumb states that the growth of export revenues, relative to import payments, must grow at rates that are higher than DMS, relative to NIR, growth rates for an internationally competitive economy, i.e. via competitive ERR under the prevailing competitive fundamentals, and strong financial position. In formal form, this rule of thumb can be expressed as follows: -

$$[\Delta(\text{export/import}) > \Delta(\text{NIR/DMS})] \{ 1 \}$$

This rule of thumb should be adopted in the short and medium, while instituting import-substituting and export-oriented industries that are progressively becoming stronger on the basis of: -

- i. Dynamic, not static, comparative advantages. It must be considered in the formulation of the macroeconomic frameworks of the annual programs and long-term plans;*
- ii. Establishment of an improving advanced indigenous productivity-increasing capital- producing industrial sector.*

The overall purpose is to weaken negative strength of generated inflation, via rapid expansion of DMS,<sup>616</sup> and low productivity, for example, to control the stagflation and the

related IEs that the Sudanese economy remained suffering from them for a very long time. That needs effective management of the monetary sector, in firm coordination with the related sectors, to control what is controllable fundamentals without necessarily neglecting the uncontrolled external sector's variables and exogenous shocks.

Equation {1} above implies that its variable components on its right-hand depends crucially on higher productivity growth and related faster growth in the per capita variable for any major acceleration in the non-indebted and non-inflationary real GDP growth, via real developmental socio-economic structural changes. Equally important concerning equation {1} above is that: unless its products are strengthened sufficiently enough and in the face of the negative domestic powers of inflation and EDS, the result will be like a person who is emptying water from a hole inside the ocean. That is, whatever positive achievements of equation {1} variables, they will not help in stabilizing neither the committed nor the adopted ERR or the domestic overall prices. Politically chosen policies should be biased towards changing, positively, the macroeconomic structure, via changing the UUE productive-base structure, of the Sudanese economy. As observed by Sir Arthur Lewis, *international trade dependent-industrialization and diversification of the, post WWII, least developing economies, at their early stages of development, in terms of GDP/Capita, were speeded for their own domestic market more than foreign markets.*<sup>617</sup> This is important to minimize, if not to avoid, unfavorable real international terms of trade.

Several lessons can be learned from the AWEs. For example, the USA Fed, as a super monetary power, is based on the fact that it controls the world's main reserve currency and many emerging and developing markets are, formally or informally, pegged to dollar. Therefore, its monetary policy is exported across the globe via changing the international commodity's prices<sup>618</sup> and international fund markets. It also makes the other two monetary powers, the ECB and Japan, mindful of U.S. monetary policy, lest their currencies become too expensive relative to the dollar. As result, the Fed's monetary policy also exported to some degree to Japan and the Euro but fully to the developing and emerging economies.



So, it must always be important to alert in remembering that the main problem, for the case of Sudan, as akin countries, is not “*how long the pain will last*” when the influential commodity’s international prices plummet. The challenging problem is “*when its/their prices will rebound.*” Despite its power in stoking domestic inflation, currency *depreciation/devaluation* even if it could make Sudan’s exports more *competitive*, *low* commodity’s international *prices* can be *offsetting* those competitive gains. It will remain forever the indigenous capital-producing based industrialization of the economy at whatever prices for a well-establishment international favorable/competitive advantage. Sudan will never attain its true [potential] by simply allowing the importation of everything as the colonials dreamt while their own histories tell that they never allowed that for their now well developed economies. Their import shares from the rest of the world were 10% of GDP, if not less. So, it is important to note that any drastic fall in Sudan’s imports/GDP ratio would be only a modest hit to Sudanese spending on its rich trade-partners’ exports/GDP ratio. But translation of these ratios into absolute figures will say that import-savings would be greater relative to its rich trade-partners’ loss of export revenues from Sudan.

Under-developing Sudan, as akin countries, with their yet under-developing socio-economic structures and international trade relationships, remained, as they will remain, facing the complex challenges of neutralizing the negative shocks of the advanced countries’ manipulation of their financial capacities. In specific, there is a strong need for rapid improvement of Sudan’s domestic macro-management of the increasing volatilities arising from the increasing interconnections with the world economy for the time being. The goal will ever remain in the efforts to disconnect with the advanced countries macroeconomic policies’ impact, via the (unchanged) H-STGLP, on their economies, via unbridled indigenous-dependent industrialization and diversifications processes, for real rapid real GDP/Capita growth.

## Footnotes: –

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<sup>1</sup> The years 1989 – 1992 saw remarkable developments in the political sphere that set the stage for almost equal momentous events in the international and national economic spheres. As after the WWII, the world witnessed new independent nations with their new currencies, a revolution that is splintered into seven parts (Mundell: 1995): -

- I. the collapse of communism in Eastern Europe and the Soviet Union;
- II. the evacuation of Soviet armies from Eastern Europe;
- III. the unification East to West Germany;
- IV. the split of the Soviet Union and the formation of the Common Wealth of Independent States, composed of the former Soviet Union except the Baltic countries;
- V. the dissolution of Yugoslavia and the creation of the successor States of Slovenia, Croatia, Bosnia and Herzegovina, Serbia-Montenegro, and former Yugoslavia Republic of Macedonia;
- VI. the “velvet divorce” of Czechs and Slovak Republics;
- VII. Termination of the Cold War and its replacement with globalization.

There also important political events that improved economic relationships with the rest of the world, like the removal of the “apartheid system” in South Africa, but there are also worsening international economic relationships due to Israeli remains conquering the Arab lands of Palestine and its intolerable tough and inhuman treatment to the Palestinians and Arab World, which of course reduced doing business with the its allied “Western World” in favor of the newly industrialized economies in Southern East Asia. This last kind of relationships definitely must have reduced, with the support of Israeli’s Allies, the quantity of international economic trade and financial relations in the world that would otherwise have been much larger larger.

<sup>2</sup> The meaning of the term rapid will be defined later in the relevant chapter.

<sup>3</sup> In comparison to the late 1940s Marshal Plan of the USA.

<sup>4</sup> It is very important to note that rapid economic and social development was the broad justification, beside BoPs pressures, for seeking international capital inflows to support those low levels of domestic savings.

<sup>5</sup> The ruling elites of the time believed that the resort to foreign financing will help in, not only in speeding-up the social and economic transformation processes but also, in increasing the capacities for debt-servicing in the future without the need to reduce private consumption levels, which was aimed to increase to improve and raise people's living standard and reduce poverty, and increase the country's capacity to import advanced productivity-increasing technologies for the improvements and expansion of existing, and newly established, development (industrializing) projects, under the public sector leadership, not necessarily its dominance on economic activities, of course, as happened in the Sudan.

<sup>6</sup> As it will be documented later, for the case of Sudan, almost all the plans and programs, since the ten year plan, dreamt about this BoPs position.

<sup>7</sup> The IMF and the WB functioned much as expected in occasional balance-of-payments (BoPs) crises among *developed industrial countries which were the main and large borrowing customers of BWIs’ till 1977*, such as the pound devaluations of 1949, 1967 and the German 1960 deutschmark appreciation. However, *most of the IMF activities were with under-developing countries even in the initial decades*. For more details, see: Anne Krueger (2005).

<sup>8</sup> See Anne Krueger (2005) for more details.

<sup>9</sup> Of course, relative to the following decades, official and private, non-portfolio, capital mobility was very low to the extent that they didn’t influence the functioning of domestic policies, although they were not to the expectations levels that were envisioned

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by the rapidity of different economic development plans. It is important to mention here that most advanced countries prohibited all forms of capital inflows except for FDI's till mid 1970s. Portfolio capital flows was a characteristic of the 1990s.

<sup>10</sup> This was based on the "World Churches Council" recommendation of 1% of the Advanced Countries gross domestic products (GDP) in 1958. The United Nations adopted this in 1960, at the time when there was no differentiation between capital and assistances which were used interchangeably. By 1969, the "Pearson Commission" recommended that 1% of the advanced countries GDP for all kinds of resources flows to under-developing countries and 0.7% of the advanced countries GDP as a target of for "Official Development Assistances" to speed-up the economic development. Since 2000, the issue has re-emerged with recent calls for a shift from even concessional loans to grants, under the pressure of the unresolved ED of many countries, mainly in Africa. In addition, the United states has proposed converting a major share of international development assistance (IDA) lending to grants and called the WB and other multilateral development banks to provide up-to 50 percent of their funds to under-developing countries in this form. In a separate imitative, the U.S. administration announced in 2002 that it would provide US\$ 5 billion in additional foreign aid annually by 2006, in the form of grants through a new Millennium Challenge Account for selected countries (Sanjeev and et.al. 2004). The same ratio was recommitted in the 2006 G8 Summit in Canada, beside the debt relief promises, although they remain just intentions in reality. As it can be observed that the international community assured that under-developing countries development processes can be speeded-up and sustained without the of international capital inflows. Despite these, important Official Development Assistances (ODA) from the rich advanced countries played important role in poor under-developing countries' economic and social development and in helping in the stabilization of the main macroeconomic fundamentals after their independence, despite being below the above commitments.

<sup>11</sup> But this never meant that NIR were stable on average. Actually they were suffering from severe volatility that raised tough debates in these countries.

<sup>12</sup> Inflation rates were lower than an average of 3% in the two decades between the Korean war and the move to the floating ERRs of the international convertible reserve currencies in 1973 (Mundell, 2006).

<sup>13</sup> Occasional balance-of-payments (BoPs) crises were realized among developed countries. They led, for example, to the sterling pound devaluations in 1949 and in 1967, and the German 1960 and 1968 deutschmark appreciation.

<sup>14</sup> These liberalizations was seen as a result of the "... dramatic evolution of the world capital market". For more details see: Maurice Obstfeld and Kenneth Rogoff (1995, p. 5)

<sup>15</sup> The simple "Phillips Curve" has not survived the passage, and hence the test, of time and has been subject to both statistical and theoretical attack and reformulation, ... and can no longer be regarded as a serious piece of (even) econometrics (Johnston and Dinardo, 2002). The phenomenon became dominant in the 1970s.

<sup>16</sup> This same year, Sudan pegged its currency to the dollar after it decided to take it off the sterling pound, after its devaluation by 15% in 1971, (Bank of Sudan, 1972).

<sup>17</sup> For more details, see the interesting International Monetary analysis in Mundell (2006).

<sup>18</sup> At the international monetary arena, it is worth-noting that with the breakdown of BWIs' system in 1971, DMS became more elastic, accommodating not only to inflationary wage developments but also monopolistic pricing of internationally traded commodities. Each time the price of oil was raised in the 1970s, the Euro-dollar market expanded to finance the deficits of the oil-importing widening current accounts, which complicated the adaptation of policies that were used at those times. The money lent to these countries exploded, for example, from deposits of US\$223 billion in 1971, for financing their CADs, to explode to US\$2,351 billion in 1982 (IMF, IMF International Statistics Yearbook, 1988, p. 355).

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<sup>19</sup> See: Krugman, 2009, p. 126. But, it has to be observed and remembered here, that not all under-developing countries abandoned their fixed ER at the same time, and ending the post-war boom, but continued as funds to many under-developing countries had been transferred through higher oil prices, as it'll clear later.

<sup>20</sup> This was the result of under-developing countries' greediness and irrationalities that led them into the "debt trap/crisis" in the following decades.

<sup>21</sup> See the "World Economic Outlook, Sep. 2007.

<sup>22</sup> This is despite of the disagreement on the degree of international capital markets integration.

<sup>23</sup> This was for both, high prices of imported and subsidized goods and services under the dominance of the public sector philosophy, also beside commodity export prices that led to declining NIR, which made domestic prices uncontrollable.

<sup>24</sup> The 1970's decade was dubbed by the Federal Reserve of the US as the "Great Inflation" in contrast to the "Great Depression" of the 1930s. Besides it witnessed two major recessions.

<sup>25</sup> The 1970s witnessed two recessions before the coming of the 1980s decade.

<sup>26</sup> For example, the explosion of the 1982 under-developing countries crises, the 1992 European ER Mechanism, the 1994-95 Mexican crises, the 1997-98 East Asian Financial crises, the 1998 Russia's Crises, the 1999-00 Brazilian Fiscal Crises, the 2000-03 Turkish Crises, and the 2001-02 Argentina's Crises, all of which led to devaluation of the domestic currencies.

<sup>27</sup> For more details, see Frankel 1997.

<sup>28</sup> Such programs were dubbed by Rudiger Dornbusch (1986) as "Strategy of Forced External Debt Servicing". Maybe, this is because of the Default Punishment Literature. Accordingly it was used as tool to be implemented by two mechanisms to guarantee the results in favor of the advanced countries, although this was mentioned to be for the USA current crises, on the contrary they call for cooperation not punishment if the USA defaulted, and actually they want to do it in advance of the expected hard landing and its default.

<sup>29</sup> This is available at the IMF Bulletins. But let it be remembered that such policy package was based on a first phase of policy response to the Mexican debt servicing crisis, during the period 1982-84. It constituted three elements to save the private banks in the USA and Europe, which were the dominant creditors to Latin American zone. The three elements of the medicine were: -

1. IMF assistance for problem debtors, conditioned on policies to strengthen the balance of payments;
2. Multi-year rescheduling agreements to defer interest and amortization until the most serious difficulties had passed;
3. Concerted or "involuntary" lending (a polite label for the practice of lending just enough money to prevent the debtor from falling into arrears).

The background official diagnosis for this policy medicine was that borrowers were illiquid but not insolvent; with adequate adjustment and liquidity support, they would be able to quickly normalize their finances and regain market access. The Baker Plan combined this old prescription with greater emphasis on structural reform, which was included in 1985 and 1987 adjusted policy prescription of what became the IMF conditionalities. By its failure, debtors countries accumulation of arrears and increased poverty situation globally, it has been cancelled by 1999 and been replaced by the "Poverty Reduction and Growth Facility" after the former failure to deliver its main objectives in most countries, mainly in Africa (Eichengreen 2004, pp. 42-43 and WB 1999, p.). but let it be kept in mind that before the 1985 SAPs and 1986 ESAPs, consultants do their own policy prescriptions as the Nashashibi's one for the Sudan in 1984 paper (See Mohsin Khan et. al., 1988).

<sup>30</sup> For more details, see IMF 1995 Bulletins.

<sup>31</sup> This will be referenced later.

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<sup>32</sup> This is clear as points (1) and (2) prescribing, i.e. through aligning domestic prices to international prices, taking into consideration the dynamics in the country's trade-partners in specific, and in the rest of the world, in general.

<sup>33</sup> This is from the "inter-temporal budget constraint" approach.

<sup>34</sup> It is to be observed here that the policy prescription does not mention anything about how much high will be that growth rate or at what speed is rapid economic development, but concentrated more on the distortions in the allocations of scarce resources.

<sup>35</sup> As it is very clear, and contrary to the advanced countries policy area priority and interests, the concentration of the above-mentioned policy medicine concentration for under-developing countries is on the external sector under the pressure of globalization, rather than domestic problem, to solve, actually import, the creditors' problems before their falling into financial and CCs, as usual. As put by Paul Krugman (1999, 2000, p. 78):

*"It ... seems plausible to argue that the scope of active stabilization policies has been curtailed, because countries need to worry more about their balance of payments or the opinion of financial markets"*

For case of the USA problem now, (ironically), its external sector was left for the under-developing countries to the USA in sharing their economic growth to avoid the world great depression (IMF 2007 website). The reason for this very important observation will be clarified in the research text.

<sup>36</sup> The Economist, at: [http://www.economist.com/content/global\\_debt\\_clock](http://www.economist.com/content/global_debt_clock).

<sup>37</sup> Bank of Sudan, at: <http://www.cbos.gov.sd/en/currency/price/1>.

<sup>38</sup> This assumption, as can be seen, does not differentiate between advanced or under-developing economies, a criticism to start with in the text.

<sup>39</sup> ED increased from US\$ 5.6 million in 1980 to US\$ 28.6 2006, with 53% of it form the arrears component in it. Also, poverty head-count ratio is estimated to have increased from 46% in 1968 to more than 70% of the population (Ali, 2005), despite the conceived *rapid economic development* that consecutive governments since political independence declared as their strategy.

<sup>40</sup> As will be discussed later in the text of the research, there is an overlapping between devaluation and crises.

<sup>41</sup> Since WWII, Sudan relied increasingly on capital inflows for achieving its conceived rapid economic and social development that relied heavily on import – substitution industrialization strategy for saving in the use of foreign currencies and leaving the exercise of earning foreign currencies to the inelastically demanded and supplied agricultural sector, which is characterized by the long-run decline in its terms of trade.

<sup>42</sup> Literature available couldn't be able to define neither the reasons nor the time of hard landing.

<sup>43</sup> It is well-known that no one plan ever implemented 100% in its determined period of achievement of its objectives. The percentage differs from one country to another and for the same country in different period, due to different cultural and domestic and international circumstances, that were not calculated or calculated inaccurately.

<sup>44</sup> This is in addition to the believe in high IR as one of the national seminars stated for the purpose of rapid economic development. For more details, see the researcher's MSc. Thesis (Wail, 2000), that this assumption is sarcastic and practically proved a fallacy, mainly during the first 1990s.

<sup>45</sup> In this context, some of the poverty analysts showed that poverty head-count ratio was increasing in Sudan since 1968 (Ali, 2006), as also the more recent Health Household Budget Survey (HHBS). This means that Sudanese people do not extra funds to save from their incomes.

<sup>46</sup> See Ali A. Gadir Ali (2005) for this justification.

<sup>47</sup> So, what is dependent on exogenous factors must be itself exogenous. Accordingly, government expenditure is the only controllable dependent variable'

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<sup>48</sup> Real variables will forever remain targets of different economic entities at different levels in different sectors by manipulating nominal variables. You cannot build a house with managing the nominal incomes and nominal expenditures of your budget effectively to live in your own house in due time. This research will see how nominal variables were manipulated to cause CCs in Sudan. That is because CC is defined as a sharp fall, defined by a threshold, in the nominal ER. To see that event, it never be understood with seeing how related nominal variable were worked out to achieve it. That is not different from so many empirical surveys related to this subject.

<sup>49</sup> Or the ruling government will play the political-game with real income distribution in favor of the tradable agents through managing, or devaluation, of ER. This policy is always adopted for small and weak economies and societies.

<sup>50</sup> This means that the Sudanese residence are paying, not only to the development process but also, to the rest of the world in the form of taxes that be transformed into foreign currencies to service the ED.

<sup>51</sup> As it is well-known, the rapidity with which any economy is growing, with low saving rates, needs to be supplemented by NBKIs. But the higher is the development rapidity the more complex it becomes to manage and adapt the economy with looser monetary policy relative to fading NIR while adopting hard peg. This lethal domestic policy implies that they must be adjusting rapidly to maintain investors and consumers confidence to ensure the sustenance of that growth while the ER is deteriorating in the parallel market.

<sup>52</sup> Note that “model” and “theory” are two different names for the same thing: the former is simply less ostentatious. In addition, a model cannot explain everything, only a subset of everything; usually a model explains only a small subset of everything.

<sup>53</sup> Paul Krugman, “Making and Using Models,” *The New York Times*, January 2<sup>nd</sup>, 2016, at: [http://krugman.blogs.nytimes.com/2016/01/02/making-and-using-models/?\\_r=0](http://krugman.blogs.nytimes.com/2016/01/02/making-and-using-models/?_r=0).

<sup>54</sup> Robert A. Mundell, April 1991, p.: 1. As he put it: -

*“It also important to note here that different variable entries in any kind of models are defined as ex ante or planned magnitudes that amounts to zero are **equilibrium conditions**. If they are defined as ex post or realized magnitudes that amounts to zero are **identities**. **Historical macroeconomic data, therefore, must add-up to zero in any serious model.**”* [Emphasis added]

In this research, historical macroeconomic data are analyzed.

<sup>55</sup> Narayana Kocherlakota, “The Trouble With Predictions,” *Bloomberg View*, March 28, 2016, at: <http://www.bloombergvew.com/articles/2016-03-28/the-trouble-with-predictions>.

<sup>56</sup> Paul Krugman, “In Defense of Funny Diagrams (Wonkish),” *The New York Times*, Feb. 6<sup>th</sup>, 2016, at: <http://krugman.blogs.nytimes.com/2016/02/06/in-defense-of-funny-diagrams-wonkish/>.

<sup>57</sup> Sam Ouliaris, “What Are Economic Models?” *Finance & Development*, June 2011, Vol. 48, No. 2, at: <http://www.imf.org/external/pubs/ft/fandd/2011/06/basics.htm#author>.

<sup>58</sup> Saul H. Hymans, “Forecasting and Econometric Models,” *The Concise Encyclopedia of Economics*, at: <http://www.econlib.org/cgi-bin/printcee.pl>.

<sup>59</sup> Wikipedia, “Macroeconomic Model,” *The Free Encyclopedia*, at: [https://en.wikipedia.org/wiki/Macroeconomic\\_model](https://en.wikipedia.org/wiki/Macroeconomic_model).

<sup>60</sup> This is an important criticism to the use of econometric modeling as they are applied in non-industrialized countries. For more details, see Adam, Christopher (2000). Also, other kinds of models like “Computable General Equilibrium and Optimality Models” needs more and detailed reliable data that might not be available which can be compensated for by different proxies and dummies allowed by econometric modeling methodologies, which will be used in this research as others.

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- <sup>61</sup> Alwyn Young, “Channelling Fisher: Randomization Tests and the Statistical Insignificance of Seemingly Significant Experimental Results,” *London School of Economics*, October 2015, at: <http://personal.lse.ac.uk/YoungA/ChannellingFisher.pdf>.
- <sup>62</sup> Ibid. Conclusion.
- <sup>63</sup> This quote is found in Marc F. Bellemare, “Metrics Monday: Hypothesis Testing in Theory and in Practice,” *Agriculture, Development, and Food Policy*, September 7, 2015, at: <http://marcfbellemare.com/wordpress/11290>.
- <sup>64</sup> Although the research is not intending to determine the maximum level, which does not necessarily mean the largest quantity, of capital inflows into the country or using whatever policy tools for its management, mainly in the case of the Sudan.
- <sup>65</sup> Actually there are more studies in many related fields, and they non-specific studies from the perspective of this field.
- <sup>66</sup> As for example the now 2008 smoothly exploding USA economic crisis, since mid-1970s, and its threat to the world economy, of course will harm many countries around the world, mainly the poor non-industrialized countries.
- <sup>67</sup> It is important to note that fixed ERRs is considered, by most economists, as the most proper system for a steady and balanced economic development, as will be seen in the text below. Regarding this point, the thesis will be concerned mainly with the causes of, and not the determination of the timing of, the fixed ER collapse. This is because “*the study of economic crises in general is relatively undeveloped, mostly because crises are difficult to model formally*” (Krugman, 1991). The same thing is applied to warning systems that were structured in the 1990s and which failed to help governments and international financial institutions (IFIs) to avoid such catastrophes whether in the 1990s or during the first decade of the 2000s.
- <sup>68</sup> The researcher is inclined to use under-developing, rather than under-developed, countries, simply because no country in the world is not dynamic and changing its economy’s structure or not growing. Therefore, the difference lies in the speed of technological improvements and structural transformation. So, every country in the world is developing and changing as historical long-term development indicators show.
- <sup>69</sup> For very detailed exploration, see: I.M.D. Little, Richard N. Cooper, W. Max Corden, And Sarath Rajapatirana, 1996.
- <sup>70</sup> Here is one of the weak parts of the economic development theories, as it concentrated on the establishment of high productivity enterprises, rather than improving the low-productivity enterprises in the traditional sectors which are intended to eradicate their rampant poverty.
- <sup>71</sup> From: [www.aw-bc.com/info/todaro\\_smith/Chapter4.pdf](http://www.aw-bc.com/info/todaro_smith/Chapter4.pdf), p. 110.
- <sup>72</sup> This is not considered as a criterion in the literature, as productivity is not measured against the income poverty line directly in economic development literature. So, it is the researcher's analysis and conclusion from these theories.
- <sup>73</sup> It is worth-noting that there is no general agreement on any-one universal definition for this branch of the literature as a result of the countries' different problems, climate, culture, and political stage-conditions that are treated in different, and the same, studies. Besides, the assumptions on which these theories were based do not necessarily fit all countries during the same periods or for the same country in different periods of times. (Revise, for example, the following website: <http://www-personal.umich.edu/~alandear/glossary/c.html>). In this research, it is important to note that Arthur Lewis’s (1954) theory is adopted as the most effective conceptual approach and framework for economic development, not only because it stood the test of time, but also because it is adopted by the advanced countries. Also, it is very important to state that although his theory is concerned mainly with those countries of unlimited supply of unskilled labor which suffer shortages in natural resources, advanced productive physical capital and technological mix for these available factors of production to maximize outputs with the least wastes, it is clear from this context that Sudan is only different in its abundance of (untapped) natural resources that make its treatment somehow a little different. In other words, Sudan will not need to buy these natural resources as Japan or Egypt who

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suffer from the scarcity of such resources, for example, but have them as a free gift from nature itself that makes it comparatively advantageous and competitive in the world markets if they are efficiently utilized. For more details see Arthur Lewis's Seminal Reference Essay (1954) and Ranis Gustav (2004).

<sup>74</sup> As it will clear below, the basic important goals of economic development, is that: If higher incomes and faster growth support higher savings, then it will become possible to finance higher levels of investment out of domestic resources, i.e. diminishing dependence on foreign finance. For more details, convey (Eichengreen, 2008, p. 2), and also (Ramzi Zaki, op. cit. p. 121).

<sup>75</sup> Of course, this can be extended to other sectors, mainly those that have backward and forward linkages with the traditional agricultural sector of the domestic economy in its relation to international markets. This implies that related ministries and institutions must concentrate their activities and policies around the improvement of the least marginally producing sector and to them to the advanced sectors of the economy.

<sup>76</sup> On the basis of this productivity-application definition, under-developing stage can be characterized by that level of productivity/income that is below an exact/imagined (dynamic) income poverty-line due to the traditional sector's low production function productivity. Accordingly, an economic development index can be constructed by showing that an index as: -

1. below one: meaning that there is an economic corrosion or living standard and distribution of income is stagnant;
2. equal to one: indicating that there is no economic development, and;
3. above one: indicating that there is an economic development being achieved, and the magnitude of index is determining the speed with which poverty is being reduced, conditioning the macroeconomic equilibrium.

Therefore, economic development in the traditional sector is **growth plus structural changes** that is reflected in both economic productivity and the Gini coefficient to see how the economic and social transformation processes that led to a sustainable eradication of poverty, within a sustainable healthy and productive environment in the long-run.

<sup>77</sup> This criterion is crucially important as the literature proved. Besides, it measures the ultimate goal of all other economic development processes and criterions. Of course, this criterion is considered as a contribution by the writer of this research to economic development in a workshop for public expenditure and poverty development in Sudan.

<sup>78</sup> See for example: The WB, 2005, mainly chapter: 1 and The United Nations' Website MDGs: [www.un.org](http://www.un.org).

<sup>79</sup> The usual arguments for this development strategy rely on economies of scale, so that productivity and profitability of individual firms may depend on its market size.

<sup>80</sup> Irma Adelman, 1999, p. 6.

<sup>81</sup> For more details, see: for example, Rosenstein-Rodan, 1943 and Ragnar Nurkse 1956. These are the father of the Big-Push or Balanced Growth developmental theory.

<sup>82</sup> Balanced growth has at least two different meanings in economics. In macroeconomics, balanced growth occurs when output and the capital stock, as well as other major macroeconomic variables, grow at the same rate. This growth path can rationalize the long-run stability of real interest rates, hence real ER, but its existence requires strong assumptions, in order to be capable to refer to the different classes of equilibrium growth paths. In development economics, balanced growth refers to the simultaneous, coordinated expansion of several sectors.

<sup>83</sup> Although, and from a practical point of view, "Unbalanced Approach" is actually adopted on ground, due to the insufficiency of available domestic savings and the quantity of NBKIs accessed during any period of time. It is disregarded in most analyses policy centers because, as it became well-known at the practical level, governments didn't try to miss any single available opportunity to bring in foreign money into the country under different justifications and names. In other words, it is the "**Big-Push**", **rapid economic development, approach that is equivalent to [booming stage in macroeconomic business cycle](#)**



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**phenomenon**, that actually guided and remains guiding development planners in maximizing their best efforts to bring into the country the maximum amount of foreign savings, without considering the macroeconomic consequences of this approach in creating vulnerabilities due to the increasing macroeconomic imbalances to a (potential) financial crisis, in general, and CC, in specific, as history evidenced. As stated by Bradford, (1997), "*Even a casual glance at numbers and growth rates reveals that growth and recovery after World War II was astonishingly rapid*". Also, there exists a strong belief in a strong relationship between foreign finance and domestic growth rate, through Harrod-Domar above model, maybe because so many outputs' inputs for the advanced sector are imported due to the absence of their production facilities domestically, which in turn feeds into this belief, in a country with relatively low growing export revenues. This is why the researcher is adopting this approach, as the ruling development planners, who are raised by such traditional way of thinking, perceive the achievement of economic and social development in most developing countries from such perspective.

<sup>84</sup> This, of course, is justified by the role of state/government intervention in speeding-up development processes and in controlling inflation rate, supported by unlimited supply of unskilled labor relative to the demand for them, at early stages of economic development, despite investment expansion's impacts and the nature of expectations of future raw materials prices as well as finished products, which will help in increasing their competitiveness and in lifting an economy from a depression position. See, for example: Rosenstien-Rodan, 1943 and Ohlin, 1977).

<sup>85</sup> Justifications were based on the assumption of firm-infancy in its complementarities with other firms in other sectors including the financial sector. This, in turn, justified for planning and protectionism in the 1950s until late 1970s, and under the pressures of ED crises, it turned out to the libéralisme triomphant of the 1980s, and to markets/state complementarities in the 1990s.

<sup>86</sup> This assumption is very appealing if the firms' external market helps in expanding domestic markets, as can be indicated by increased productivity, i.e. real wages, at full-employment stage, or reduced unemployment rate and stabilized long run real interest rate for other firms in other sectors on increasing returns to scale principle.

<sup>87</sup> According to the literature, the resort to international savings, i.e. foreign borrowing, has two potential benefits for a developing country. It supports low levels of domestic savings relative to investments, if efficiently allocated to promote growth, and it can help an economy to adjust to internal and/or external shocks. Recent experience has illustrated that borrowing also has potential disadvantages. It can be wasted on inefficient investment. It can allow a government to delay essential economic reforms and the accumulation of debt can make an economy more vulnerable to financial pressures from the world economy.

<sup>88</sup> Walt Rostow (1960), stating this as the 3rd stage in the development process, where savings equals investment, hence external equilibrium. This states the importance of exports and NBKIs in the pre-take-off stages and their impacts on macroeconomic equilibrium.

<sup>89</sup> See: Guillermo Calvo and Eduardo Fernandez-Arias, 2000, p. 23.

<sup>90</sup> This is Rostow's third stage of development at which domestic savings will be equal to the desired level of national investments, before which it is a large, but assumed to be a diminishing, gap. That is reflected in the external sector according to the following national accounting identity:  $Y = C + I + (X - M)$ , where Y is the low domestic gross product, C is the low aggregate consumption, I is the large targeted investment, and  $(X - M)$  is exports minus imports, expressing the widening foreign gap that needs to be covered by the NBKIs. Much of debate of the period centered on how to raise the national savings rates beyond the threshold level of 15%, and investments above 5% [for more details see: Rostow 1960, also revise Shinji Takagi, 1995].

<sup>91</sup> As it is well-known, these stages are known to be the extent of under-developing country to become financially self-dependency. The third "Debt Reducer" stage consist of Rising trade surplus, Diminishing net outflow of interest payments, NBKOs, and Falling net foreign debt. The fourth "Young Creditor" stage consist of decreasing trade surplus, then deficit, Net outflow of

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interest payments, then inflow, Outflow of capital at decreasing rate, and Net accumulation of foreign assets. For more details, see: World Development Report, 1985.

But it is important to note that Rostow's and Debt Cycle Hypotheses were obviously generated from Keynesian Employment Expansion Model, and hence Output, that was stated, for the purposes of reaching an investment self-financing stage and beyond, given a certain propensity to consume, that an increase in the volume of investment would bring for an increase in the national income until it reaches a size which makes people willing to save an amount equal to, and above, the value of the investment. The change in the gross national income is the variable which has to reach a magnitude that is compatible with equality between savings and investment. Also, and obviously, they were generated from the Stockholm Model which stated that the expansion of the national income will lead to an indirect and endogenous increase in investment. And this secondary investment would bring about a further growth of income and savings, (Ohlin, 1977). By implications, if incomes increase more, due to additional investments, the economy, start getting relieved from domestic and EDs headaches.

<sup>92</sup> See: UNCTAD Report, 2006, Box: 2, p. 31, (Italics are the researcher's).

<sup>93</sup> For more details see: Kindleberger (1958, p. 417) and WDR: 1985.

<sup>94</sup> Unfortunately, "In the 1990s, however, an excess of confidence in the repayment of international debts was no longer the rule." These were the cases of most under-developing nations around the world. For summary survey, see: Daniel Cohen, Sep. 2004.

<sup>95</sup> See: WDR: 1983.

<sup>96</sup> But, as it might correctly concluded, high pressures of massive amount of investment must be reflected in the domestic currency real value. If this is to be maintained by whatever policies, it will be transmitted to the real ER and hence to export competitiveness, which in turn aggravate the real exchange overvaluation problem till it collapse. This is like blowing air into a balloon that explodes when its walls reaches its limits of extension. Beside, the widening of the CAD of the BoPs will create a permanent demand for foreign loans, grants, foreign direct investments (FDI), ... etc., which needed domestically and welcomed by the international financial community who might suffer from their savings glut to relieve their economies from their negative monetary impacts.

<sup>97</sup> As can be observed nothing was mentioned about the role of nominal ERR in acting as an anchor for absorbing the inflationary pressure, in the form of over-valued real ER that exacerbate the current account balance, hence is opening the doors, later, for accumulating unserviceable ED.

<sup>98</sup> For more details, see: Domar (1958), William Easterly (2003), Hussien and Thirlwal (2004).

<sup>99</sup> Regardless of different criticisms to this model, even by one of its creator, it is still used by many countries and the WB until recently.

<sup>100</sup> Many countries, including Sudan, beside the WB remain using it till now.

<sup>101</sup> That difference will be clarified in chapter 4.

<sup>102</sup> where: -

$g$  = real economic growth of the GDP;

$s$  = gross domestic savings ratio to GDP;

$ds$  = debt servicing of domestic and foreign borrowed capital = compulsory taxes;

$\mu$  = any kind of domestic or foreign exogenous shock(s);

$b$  = value of required quantity of NBKIs to produce one unit of the GDP during a specific period of time;

$k$  = (imports - exports)/GDP = net import ratio to GDP which is needed to be financed by NBKIs, i.e. by deducting all reasons for EDS. As it can be observed, it is at same time reflects the degree of the economy's openness to the rest of the world.

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- <sup>103</sup> The justification for active government interventions for planned foreign-finance dependent long-term economic development processes can be found, for example, in Rosenstien-Rodan, 1943, p. 204.
- <sup>104</sup> For how budget deficit, for example, can affect the real ER see: Frenkel and Razin, May 1986 paper. Also, see: IMF Report, 2003. These literatures also stressed that opening a deficit in the current account, equivalent for NBKIs; appreciate the nominal ER, which overvalue the real ER and aggravates the competitiveness problems and builds speculation expectations and attacks.
- <sup>105</sup> See: Dornbusch, 1991, p. 80.
- <sup>106</sup> As international finance history proved that there is no one country that relied, for a long-time, on foreign financing, of all structures, didn't devalue its currency in its future course. Also, by sharp devaluation, international finance literature, meant to be a "CC," as will be clear below.
- <sup>107</sup> Refer to the Arab IMF.
- <sup>108</sup> This is referred to a very scientific debate between Keynes (1929) and Ohlin (1929).
- <sup>109</sup> See: Keynes historic article, 1929, p. 2.
- <sup>110</sup> This will become very clear in the next chapter when analyzing Sudan's case, whose main trade-partners, since independence, were the European Nations at till mid-1990s.
- <sup>111</sup> This can be summarized as follows: the main reasons for continuing need from the first stages of economic development and afterwards, are repeated difficulties in exporting manufactures and thus achieving successive increases in the value-added of total exports, due to low price elasticities of demand for primary products, and the tendency to be ever-increasing growth of imports due to the low level of complementarities between domestic production and/or the demand for imports of goods located "further back" in the production chain, as a result of low level of vertical integration. These implications of specialization, regarding the behavior of exports and imports, lie of course at the root of the persistent tendency of the peripheral (underdeveloping) countries to register trade deficits, which are repeatedly observed during the process of spontaneous industrialization. This tendency is also responsible for the fact that NBKIs can only make a limited and supplementary contribution to the development of the periphery. A further factor which causes average incomes to be lower is the deterioration in the terms of trade, due to the long-run declining trend in the relative prices of the peripheral countries' exports, meaning that in the sectors producing those goods the workers' income, which might be lower than a perceived dynamic poverty-line, increases less than the productivity of labor. These two factors mean, in their turn, that the peripheral economies are weak in terms of their capacity to achieve and maintain high rates of accumulation. For an enjoyable summary of Prebisch's theories about the role of underdevelopment and sustenance of NBKIs to underdeveloped countries, see: Rodriguiz Octavio, 2001, mainly p. 42.
- <sup>112</sup> Here, the researcher, consider black marketers in foreign currency, are representative of speculators in the case of Sudan for example.
- <sup>113</sup> See: Dornbusch, 1991, p. 80.
- <sup>114</sup> This will be seen below in the cases of the ERM of the European Union CC and the American Sup-prime and GFC.
- <sup>115</sup> See: Jeffery Frankel, 1997, p.: 14 – 15.
- <sup>116</sup> From: Rudiger Dornbusch, June/2001, p. 2.
- <sup>117</sup> See: Arthur Lewis's seminal paper, 1954, and Rozenwurcel, Guillermo, 2006, research paper.
- <sup>118</sup> For a summary details see: the WB, 1996, Box: 1.3, p. 11.
- <sup>119</sup> Also, after the 1982 Mexican crisis that launched the so-called international debt crisis period, enemies of government intervention immediately concluded that the crisis was due to the failure of import substitution strategy that needs to be

resolved, replaced, and with better recommendations, to be supported, by export-led growth strategy and the aggressive trade-liberalization and de-regulation ideological philosophy. This conclusion wedged for many years, and it still does, as few bothered to question it. Of course, in the run of the after-debt-crisis date, developing countries suffered from increasing EDs and many severe CCs. See: Guillermo, 1996.

<sup>120</sup> This reminds everyone with John M. Keynes' learnt by heart dictum who stated that:

*“But this long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past [and] the ocean is flat again.”*

<sup>121</sup> Of course, this doesn't necessarily mean the need for the dominance of the public sector, but the maintenance of the economy's competitiveness at its full-employment equilibrium GDP. See: Krugman, 2000, p. 1.

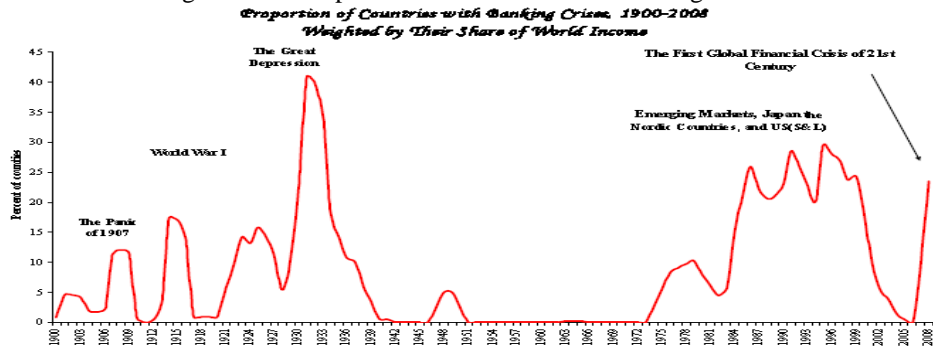
<sup>122</sup> Of course, development expansionary policy will be multiplied under pressures of sanction, to compensate for lower international demand and NBKIs, on one hand, and civil wars, to force increased domestic security expenditure within the country to expand domestic supply-side productive base, on the other hand.

<sup>123</sup> In such an unstable world where the frequencies of major CCs can occur at a rate of one every 19 months on average has the implication that the world is not very secure for economic policymakers, investors, laborers, and consumers. For more details and case studies of the impact of CC and government responses, see: Paul Krugman et. al. (1991), Lawrence Summers et. al, 1991, and Stanley Fischer 2001, Aghion, Bacchetta, and Banerjee, 2000, 2001, 2004.

<sup>124</sup> Of course, it is not totally exclusive to the libertarian economic systems, but frequencies and severity are much attached to this kind of regime rather than others. See footnote 64 below.

<sup>125</sup> For more details, see: Kindleberger, 2005, Introduction; Eichengreen, 2004, Chapter 2; and حسين العشري, 1987. For a recent example, Carmen Reinhart and Kenneth Rogoff (8/2008) summarized the financial crises history since 1900s to 2008. As figure 2.6 below shows, the dominance of liberal rules games during 1900 – 1940 witnessed so many crises, of increasing severity, that ended with WWII, while during the dominance of the government intervention and public sector's rules' game, since the onset of WWII till 1973, witnessed no significant financial crisis. Financial crises became much more dominant or even an unacceptable natural feature during the liberalization and globalization era, in 1973, till its blast in the 17<sup>th</sup> September 2008 in the USA and the World.

Figure 2.6: Comparison of Countries with Banking Crises



From: Carmen Reinhart and Kenneth Rogoff, 8/2008, p. 6.

<sup>126</sup> These justifications are normally heard from different economists and policy-makers in the under-developing countries. But they will remain just fabrication as will be seen later.

<sup>127</sup> As Paul Krugman put it:

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*“The macroeconomics of currency crises is fairly straightforward in practice, but rather messy in theory. That is, in practice currency crises typically lead to recessions, i.e. diminished effective demand, in the affected countries. In standard theoretical models, however, it is easy to get the reverse result, an expansionary effect from a speculative attack on a currency.”*

In this last case, it must be imaginary that can be utilized by politicians for only political propaganda to serve the demanded incentives for the liberalized private sector. See: Krugman, 1991, p. 96.

<sup>128</sup> As history proved in the cases of open economies, there is a spiral relationship between devaluation/depreciation of the ER, under the name of increasing competitiveness, and changes in the general price levels which harms the long-run growth rates. This is because of the belief that devaluation increases exports' competitiveness in the short-run. But at the same time, it increases import and non-tradable prices, in domestic currency, mainly in countries with weak or non-existence of import-substitution sector, like Sudan, that harms domestic long-run GDP growth rates and, hence, harms exports themselves; otherwise it can be reflected in increasing poverty trends. That is why it is excluded from real ER competitiveness definition. As “The Global Competitiveness Report (2007-2008)” put it: -

*“The problem with using this as a measure of actual competitiveness is that, when it comes to the value of money, there are two sides to each coin: when the exchange rate is low, exports are cheaper but imports are more expensive. The implication is that firms that need to import capital goods from abroad will find it very expensive to work in that environment. Thus one can easily argue that the economy with an undervalued exchange rate is less, not more, competitive because the cost of doing business is higher. ... Another reason for not including the RER is that it is very hard to measure in practice.”*

It considered the stability and favorability of the macro-economy as the main source for overall competitiveness not the real ER which is in turn a crucial element for the macroeconomic stability. For more details see the report's chapter one, Box: 2, p. 11.

<sup>129</sup> See: Demaestri, Edgardo and Pietro Masci, (Editors), Introduction, 2003).

<sup>130</sup> See: Krugman, 2009, Introduction to the Paperback Edition, p. x.

<sup>131</sup> For details of the financial crisis of this period, see: Michael D. Bordo and Christopher M. Meissner, 2005.

<sup>132</sup> For this brief introduction, see: Summers, 2000, p. 1.

<sup>133</sup> Of course the rise in nominal interest rate reflects liquidity crisis due the increase in the demand for money during bank-runs relative to DMS. It can also reflect the immediate response of the monetary authorities, despite any effect on the supply of money, to cool down the panic, i.e. run for liquidation, of depositors, on the one hand, and to attract more NBKIs to support the monetary policies credibility. In this context Kindleberger (2005), in reiterating the famous David Humes' paradigm of the BoPs crisis, stated that: -

*“Tight money in a given financial crisis can serve either to attract funds or to repel them, depending on the expectations that a rise in interest rates generates. With inelastic expectations, no fear of crisis or of currency depreciation, an increase in the discount rate attracts funds from abroad, helps provide the cash needed to ensure liquidity; with elastic expectations of change – of falling prices, bankruptcies, or exchange rate depreciation – raising the discount rate may suggest to foreigners the need to take more funds out rather than in.”*

So, there might exist a drying-up of NBKIs during this time of need.

<sup>134</sup> See: Krugman and Obstfeld, 2003, p. 504.

<sup>135</sup> For a very recent analogy, revise the policy responses to confront the worst world's economic crisis since the Second World War as decided by the leaders of the G20 in the 2<sup>nd</sup> of April, 2009, to overcome the impacts of the 'Crisis', which originated in the USA. For example, they stated that, among others: -

*“Interest rates have been cut aggressively in most countries, and G20 central banks will maintain expansionary policies as long as needed, using the full range of monetary policy instruments, including unconventional policy instruments, consistent with price stability.”*

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See website: <http://www.londonsummit.gov.uk/en/summit-aims/communique-explanation>.

<sup>136</sup> The main debate regarding the optimal conduct of monetary policy in the aftermath of a financial/CC could be broadly summarized as follows: while higher domestic nominal interest rates should generally lead to a stronger ER and therefore improve the finances of domestic firms which have debts denominated in foreign currencies, higher domestic interest rates will also tend to increase the current debt burden of domestic firms, thereby reducing their ability to make further investments (or simply avoid bankruptcy) whenever firms are credit constrained; this, in turn, may feed back negatively on the real GDP growth and the ERs.

<sup>137</sup> In 1985, Brazil attempted a reversal of the contractionary policies it had imposed in response to the debt crisis. The initial results seemed to show that the contractionary effects of the financial crisis were not inevitable: growth accelerated. The Brazilian trade surplus began to shrink rapidly, however, and eventually an accelerated rate of currency depreciation spilled over into a rapid acceleration of domestic inflation; the experiment in expansionary policies was then checked. See: NBER Session on CC in Brazil, Background Materials, 1997.

<sup>138</sup> Generally, it has been suggested that the decisive response of fiscal and monetary authorities supported by a generous financial package of billions of dollars announced in March 9, 1995, were crucial for the rapid recovery of lost investor confidence, rather than only practicing austerity policies. Experiences with the 1980s and 90s supported this policy rather than just austerity policies which reduces aggregate demand, hence discouraging private investments.

<sup>139</sup> It is worth-noting that as Mises, as will be shown below, wrote his theory in post WWI, Paul Krugman is considered the first economist, in post-WWII, to write in a specialized and formal manner about CCs, although he didn't create the thing itself, but published the first paper in the modern academic literature on the subject, back in 1979. For more details, see: <http://krugman.blogs.nytimes.com/2008/10/26/the-mother-of-all-currency-crises/>. Also, his theory, as simplified by Flood and Garber (1984), ruled the intellectual framework for thinking about CCs and policy-makers till mid 1990s, but many of its important insights remained as a genuine building-block for the following CC theories, despite of its incapability to illuminate the causes of CC after the 1970s and the 1980s (Jeanne, 2000, p. 1 - 2).

<sup>140</sup> Most definitions described the results and the shape of CC after they happened, not before they happen, since they are not easily predictable, which led to no standard definition, (Krugman, 2000, p. 1). Before, as well as after, the 1997-1998 Asian crisis, many empirical methodologies were used to predict CCs in the future, including warning systems, but all failed to predict the 2008 September USA Sub-prime Financial Crisis and the depreciation of its Dollar, despite some writers' warning papers. See for example: Barry Eichengreen (1996), Jeffery Frankel et, al. (1995), and Krugman (2007).

<sup>141</sup> Reuven Glick and Michael Hutchison, September 15, 2011, abstract.

<sup>142</sup> See the following website: <http://www.MmdCEE.com>.

<sup>143</sup> See its website at: <http://www-personal.umich.edu/~alandear/glossary/c.html>.

<sup>144</sup> See its website at: [http://highered.mcgraw-hill.com/sites/0072973714/student\\_view0/glossary.html](http://highered.mcgraw-hill.com/sites/0072973714/student_view0/glossary.html).

<sup>145</sup> See: Krugman 1991, p. 92.

<sup>146</sup> See: Premia-chandra Athukorala, 2002, p. 33.

<sup>147</sup> For more details, see: Goldsmith, 1982.

<sup>148</sup> Also, he identified common elements that were found in most international financial crises. According to Lawrence (May 2000, p. 4 - 5) these were:

“... *dramatic swing in current account, a large real depreciation, and a significant decline in real output.*”

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Based on the economic downturn during the 1980s on a scale comparable to the 1930s, Lawrence paid attentions to the illusive beliefs that were embarrassed and forced to be broken by such crises, by mentioning that:

*“It is used to be said that a repeat of the depression of the 1930s was inconceivable now that governments better understand how to manage their economies.”* (Lawrence, 1991, p. 135).

<sup>149</sup> See Barry Eichengreen, Andrew Rose, and Charles Wyplosz, in Barry Eichengreen 2004, p. 100 – 101.

<sup>150</sup> See Abbigail J. Chiodo and Michael T. Owyang 2002, p. 7.

<sup>151</sup> See: Brent Radcliffe at: <http://www.investopedia.com/articles/economics/08/currency-crises.asp>

<sup>152</sup> See, for example: Jim Saxton (R-NJ), Chairman, Joint Economic Committee, United States Congress, January 2002, p.2.

<sup>153</sup> A very recent historical traditional example of fleeing deteriorating domestic currencies is the case of melted-down Icelandic economy during 2008 GFC, despite the effectiveness or ineffectiveness of tightening the monetary policy. Willem Buiter described the case when Iceland’s banking system and currency collapsed last 2008 September by mentioning that:

*“The foreign exchange markets had seized up. There was no level of domestic interest rates the Central Bank of Iceland (which had zero credibility at this stage) could set that would induce domestic and foreign investors to hold on to their Icelandic kroner rather than converting them into euro, US dollars, sterling or any other serious convertible currency.”*

To compensate for the failure of the interest rate policy, a key component of the emergency package that was introduced under the auspices of the IMF were (**the return to**) controls on NBKOs, implemented through rigorous foreign exchange controls. This made sense, because the Icelandic currency was in free fall. As it can be observed, in the past, it must be remembered, that capital controls, under the IMF 1980s and 1990s Crisis Management and Stabilization Policy Package was totally forbidden, mainly for under-developing and developing countries. See his article in China Confidential Magazine at: <http://blogs.ft.com/maverecon/2009/02/the-return-of-capital-controls/>.

<sup>154</sup> As it will become clearer later, crisis-breeding reasons might take longer time, which all agree upon, but triggers of the crisis remain different and unknown or of un-evidenced probability for future CCs.

<sup>155</sup> Of course such expectations may lead, and actually led, to the creation and establishment of, "**warning systems**", and macro-econometric models to forecast, CC which all failed till now to help in correcting what were going wrong to prevent the fall into CC. The 2008 USA financial crisis was a real examination for these models and early warning systems, which didn't help for correction or to predict it. This is very logic, as crises come on unexpected sudden, from one hand, and might come about very fast or with short delay. This is because it depends mainly and completely on investors’ and savers’ confidence and degrees of panic for withdrawal from crisis afflicted currency.

<sup>156</sup> See: Dornbucsh, 2001 and 2003, for deep analysis of CCs during pre-1973 and during post-1973, after-which international convertible currencies were floated. He differentiated between the mid-second half of late1960s to late 1970s when most countries were at the **stimulant and early booming stages, under the dominance of public sector on productive and financial activities**, during-which currency-crises were of the slow-motion nature, fluctuations of the ER were of slow to medium mature, and controlled. Since 1980s-onward, when the international world economy entered the **last booming stage**, fluctuations in the ER became swiftly and, to a great extent, uncontrollable, **so that devaluation becomes the general policy**. Such sufferings were witnessed by advanced, as well as under-developing, countries that experienced the nature of fast-motion currency-crises. For such example, see: the 1995 EU Commission Report.

<sup>157</sup> See: Mises, op. cit., p. 163.

<sup>158</sup> See footnote about Lawrence definition 83 above.

<sup>159</sup> See: Krugman, Footnote 76 above.

<sup>160</sup> See Jiklin's March 2008, p. 1.

<sup>161</sup> See: Philippe Aghion, Philippe Bacchetta, and Abhijit Banerjee, 2004, p. 7.

<sup>162</sup> See, Schuler, 1998, p. 1 at: [www.econ.chula.ac.th/about/member/sohitorn/currency.doc](http://www.econ.chula.ac.th/about/member/sohitorn/currency.doc).

<sup>163</sup> See, Dani Rodrik, 1998, p. 58.

<sup>164</sup> See: Krugman, 1998, memo.

<sup>165</sup> See: Krugman, 2000, p. 1.

<sup>166</sup> So many economists, like Kaminisky and Reinhart (1996), and institutions, like the IMF, tried to tailor *probabilistic forecasting* warning systems that never helped in *predicting, hence in preventing*, any one currency or financial crisis, including the 2008 financial crisis of the USA, mainly after their creation in mid-1990s. The IMF (1998) adds that:

***“In fact, it is highly unlikely that a set of indicators could be identified that could detect future crises sufficiently early and with a high degree of certainty, while not giving false signals. Indeed, if such indicators could be identified they would likely lose their usefulness because they would change behavior: Markets would take them into account and, by anticipating crises, precipitate them earlier, or policymakers would take actions to prevent crises from occurring. Consequently, the indicators would lose their ability to predict crises. But even though the search for reliable crisis predictors would seem a hopeless task, it nevertheless seems useful to investigate whether there are variables that have systematically been associated with vulnerability to crises. Such indicators of vulnerability could be used to identify situations in which an economy faces the risk of a financial crisis being triggered by changes in world economic conditions, spillovers from crises in other countries, or other forces that are liable to cause a sudden shift in market sentiment if imbalances go unaddressed.”*** [Emphasis Added]

See: IMF, WEO, (May 1998, p. 88). Also, Knedlik and Scheufele (Dec. 2007, p. 5) mentioned that “*Forecasting currency crises is a difficult, if not impossible task.*” Actually, predicting a currency of financial crisis is like forecasting hundreds of car-crashes, that never happened, in the street to daily work-places. On this basis, this research will not discuss these warning systems, although they are needed badly, but the problem depends on answering the following question: What is the standard theory that can be used to build a warning system? As mentioned in the text above, there is no universal theory.

<sup>167</sup> This system have been afflicted by such crises even before the ‘1636 Dutch Tulip Bulb Bubble’, which its contagion was transmitted to other countries, regions and the whole globe. For more details, see: Kindleberger, 2005, p. 9.

<sup>168</sup> This is because nothing in history was found to be exactly of equal intervals. This is simply because it depends on investors and speculators expectations with the government responses in the mean time. It can be seen that when financial distress is followed by a panic or collapse, there is no standard intervals. It may take weeks, months, or years. (Kindleberger, 2005, pp. 97 -100).

<sup>169</sup> أنظر في هذا المجال: د. العشري حسين درويش، 1985، ص ص: 144 – 147.

<sup>170</sup> This is the case of the 2008 USA financial crisis, after its government tried to stimulate the American economy. What was found is that: “... *economic histories ... recount situations in which the Fed's rate cutting ceases to have traction -- and the United States found itself in just that position in the fall of 2008, as Wall Street's implosion led to a credit crisis that failed to ease even as the Fed reduced its rates to virtually zero.*” This is due to investors and speculators loss of confidence and uncertainties surrounding the government economic policies to avoid the economy from falling into recession and long-run depression. See: The New York Times' website: [http://topics.nytimes.com/topics/reference/timestopics/subjects/u/united\\_states\\_economy/economic\\_stimulus/index.html](http://topics.nytimes.com/topics/reference/timestopics/subjects/u/united_states_economy/economic_stimulus/index.html).

<sup>171</sup> Kindleberger extended Minsky's closed economy to the global by adding: -



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*“Internationally traded commodities and assets that go up in price in one market will rise in others through arbitrage. The foreign-trade multiplier communicates income changes in a given country to others through increased or decreased imports. Capital flows constitute a third link. Money flows of gold, silver (under gold standard or bimetallism), or foreign exchange are a fourth.”*

See his 2000 book on p. 16.

<sup>172</sup> The developed model by Hyman Minsky is used to interpret the financial crisis as being a result of the pro-cyclical changes in the supply of credit, in the USA, Great Britain, and other market economies. Simply, pro-cyclicality in the supply of credit meant that it increases as a result of investors' optimism, when the economy was booming, and decreases during economic slowdowns, as a result of investors' pessimism. This pro-cyclicality in the supply of credit points to financial fragility in the financial arrangements and increased the likelihood of financial crisis. For more details, See: Hyman P. Minsky, April 1991, Working Paper No. 51 and C. Kindleberger, 2005, p. 25.

<sup>173</sup> Although Kindleberger didn't concern himself with the analysis of business cycles, his book remains an important start, despite his disagreement with the rationality assumption of the speculators in other CC theories. See: Charles Kindleberger, 2005, and for a summary, refer to the following website: <http://www.cyclesman.com/kindleberger.htm>

<sup>174</sup> Hyman Minsky is one of the economic leaders who linked the financial sector's instability to a financial crisis in a closed economy model, as mentioned above. His supporters tried to apply such model at the global level. See: Peter Mehrling, 1999, for more details.

<sup>175</sup> Although displacements can be positive or negative, its list is non-exhaustive. They can be natural or man-made, such as the widespread adoption of an invention with pervasive effects - canals, railroads, the automobile, political events, political economic development plans and programs, outbreak or end of a war, crop failure, extra-large harvest, and policy change, discovery of natural resources, unexpected financial success or debt conversion that precipitously lowers interest rates. Also, an unanticipated change of monetary policy might constitute such a displacement and some economists who think markets have it right and governments' wrong blame "policy-switching" for some financial instability.

<sup>176</sup> See: Krugman, 1995, Foreign Affairs.

<sup>177</sup> Modern literature on CC does not refer to this very important theory that was published in January 1923, i.e. more than eight months before the breakdown of German Mark. (See: Mises, 2006, footnote, p. 1). Therefore, it can be said that it is the first theory about CC since post-WWI, and contrary to what is thought about considering the 1979 Paul Krugman theory to be the first theory of CC in this area of the macroeconomic literature, as it will be seen and believed below.

<sup>178</sup> The original manuscript for this theory was completed and submitted by the author to the printer in January 1923, after Germany stopped payments of its enforced reparation to the allied countries during the 1920 - 1922 recessions in Europe after the actual reduction of the broad indices of money wage rate after WWI, and more than eight months before the final breakdown of the German mark. Mises is a "Libertarian" economist, who is ideologized/blinded against the benefits of any government interventions. As it is well-known, libertarian's main macroeconomic analytical tool remained money supply. For example, he considered that government interventions to regulate international monetary movements for liquidity purposes for the domestic economy were unnecessary, since it will be in the benefits of the borrowers, mainly when interest rates are reduced or increased during high inflationary environment. For more detailed for operation of the dynamics of his story is shown in his book referred below in the references.

<sup>179</sup> For more details and statistics, see: Robert Triffin, 1964, chapter 2.

<sup>180</sup> For very detailed analysis of the Versailles Agreement on Germany, see: John Maynard Keynes, 1920, mainly chapter 5. Also, for a brief history for the war and its reasons, refer to: د. رمزي زكي، التاريخ النقدي للتخلف، الفصل الثالث، ص: 86 – 140.

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<sup>181</sup> Mises, as other people of time, have become convinced that the restoration of domestic peace within nations and the revival of international economic relations are impossible without a sound monetary system (See Mises: 2006, p. 2). This conviction is clear in the following quote: *“If we had a pure gold standard, therefore, the government need not be in the least concerned about the balance of payments. It could safely relinquish to the market the responsibility for maintaining a sufficient quantity of gold within the country.”* This conviction was clearly based on the 1922-23 German intolerable severe hyper-inflation and the allies’ imposition of reparations payments and the resulting loss of confidence in the related policies. See, for example, such an analysis for liberals: Mises, op. cit., p. 49 and 68 respectively.

<sup>182</sup> See: Mises, op. cit., p. 163. By fiduciary media he means banknotes and/or checking deposits not covered 100 percent by gold. By using modern financial language, they are the derivatives and credit creation.

<sup>183</sup> Due to the gradual deterioration of the domestic currency’s purchasing power before such catastrophe happens, Mises mentioned that trade will gradually shift to using foreign money and actual gold instead of domestic notes. Individuals no longer invest in domestic notes but begin to put a part of their reserves in foreign money and gold that help in delaying or softening the financial crisis. How this can come about, Mises explains as follows: as a result of the growing demand for foreign money, various kinds of foreign exchange are imported. Gradually, there is accumulation foreign money within the country. This substantially softens the effects of the final breakdown of the domestic paper standard. Then, if foreign exchange is demanded even in small transactions, if, as a result, even wages must be paid in foreign exchange, at first in part and then in full, if finally even the government recognizes that it must do the same when levying taxes and paying its officials, then the sums of foreign money needed for these purposes are, for the most part, already available within the country. Foreign money from various sources then performs the service of money, even if somewhat unsatisfactorily. See: Mises, *ibid.*, pp. 5 and 10 -11.

<sup>184</sup> Mises, op. cit., p. 26.

<sup>185</sup> After WWI, and to meet the difficult conditions of the Versailles Treatment, German government resorted to the printing press mainly to pay the reparations imposed by the allies (Mises, 2006). Such difficulties are analyzed in J. M. Keynes’ very historic seminal article about ability of Germany’s “Transfer Problem” concerning the Germany’s capacity to pay the reparations imposed by Allied Powers, at Germany’s undeveloped stage of development. See: J. M. Keynes, 1929, p. 2.

<sup>186</sup> Mises. op. cit., p. 109 - 110.

<sup>187</sup> Mises. op. cit., p. 162.

<sup>188</sup> Mises, op. cit., p. 15.

<sup>189</sup> Mises, op. cit., p. 141.

<sup>190</sup> See: Mises, op. cit., p. 162. But it is worth-noting here that it is not only confidence in, hence credibility of, government economic policies, but it can also be ignorance, of course, of even the meaning of simplest economic terminologies, like inflation rates, used by official departments of the government, such as the case of the Sudanese Ministry of Finance and National Economy test during the 2<sup>nd</sup> half of the 1990s, and after-which its program stopped. In such a case, it can be delayed for a very long period, or pass-by without people panic. Another example, was the expectation by western economists for a CC episode in Middle East Rich Oil Nations who enjoyed capital influx from oil high prices since the 1970s. For example, Dornbusch mentioned that: -

*“If the financial structure is vulnerable, then yes, it could happen anytime, and it also might happen never. Everybody has predicted for the last 30 years that the Middle East will blow, and one day it will but it hasn’t happened yet.”* (See: Dornbusch, 2002, p. 12).

<sup>191</sup> Mises, op. cit., p. 67.

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<sup>192</sup> Of course Mises is considering the impact of lowering the interest below its international parity, mainly if there is no international agreement, which will force: -

“... individual banks, fearing a large outflow of capital, took care in setting their interest rates not to lag far below the rates of the banks of other countries.” (Mises, op. cit., p. 141).

This point of view prevailed generally among politicians, business people, the press and public opinion for maintaining a stable purchasing power of the domestic currency. The same point of view is expressed for reducing the interest rates below those developed by market conditions to become a worthy goal for economic policy, and that the simplest way to reach this goal is through expanding bank credit. Of course, at times of high IR, bidding up of the prices of certain raw materials, capital goods, and wage rates, for which the borrowers spent their newly acquired credit has led some writers on the subject to believe that all such loans went into the lengthening of the production period and high growth rate. Some did and remains do, of course, but Mises recognized that the lower interest rates attracted all producers who could use borrowed funds. Consequently all the resulting mal-investment does not result in longer processes. The effects depend on just who the borrowers are and how they spend their new credit in markets. This means that such public opinion can push the ruling government to adopt highly contradicting policy packages which contradicts with their own interests in the long-run (Mises, op. cit., p. 151 and p. 161).

<sup>193</sup> See: Mises, op. cit., p. 23.

<sup>194</sup> See: Mises, op. cit., p. 45.

<sup>195</sup> See: Mises, op. cit., p. 2.

<sup>196</sup> Researcher's own drawing.

<sup>197</sup> Mises, op. cit., pp. 3 – 4.

<sup>198</sup> Keynes meant the unavailability of foreign currencies to be exchanged by domestic currency for servicing EDs and reparations. For more details, see: Keynes, 1929, p. 2.

<sup>199</sup> As noted in previous work, at the most general level, policymakers face what Obstfeld and Taylor (1998) termed a trilemma. Typically they are confronted with three desirable, yet contradictory, objectives:

1. to fix the ER, for relative price stabilization purposes, for example;
2. to have free NBKIs, for efficiency and flexibility purposes;
3. to engage in activist monetary policy, for output and employment rates stabilization purposes, for example.

The fact that only two out of the three policies can be mutually consistent leaves policymakers having to decide which one they wish to give up: this is the trilemma.

<sup>200</sup> See: Obstfeld and Rogoff, 1996a, p. 560.

<sup>201</sup> The process of Gresham's Law involves a panicky reputation inherent in the operation that speeds up with the beginning of the useless DMS to be increasingly divorced from domestic trade. Also, Obstfeld (1986) outlined a multiple equilibrium model in which a CC is brought about when government policy (liquidating the deficit through seignorage, for example) causes agents to expect a crisis and start pushing the economy to a bad equilibrium.

<sup>202</sup> This theory is an advanced version of Keynes' theory about the Great Depression during the 1929 – 1933. Actually, Keynes (1929) has had a preceding theory of financial crisis, which was hotly debated by Bertil Ohlin (1929). It seemed that Keynes' theory found ground in the following currency and financial crisis, mainly in the Asian 1997-1998 Crisis. He presumed that the effects of transfer problem or crisis, defined by the difficulty to transform domestic into foreign currency, by the German 1920s Governments for the reparations, i.e. NBKOs, should produce an evidential deterioration of the terms of trade, exacerbating what was already a severe economic crash. For more details: See: Kugman and Obstfel, 2003. P. 108 – 109.

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<sup>203</sup> These were collected from innumerable different sources.

<sup>204</sup> By 1929, the top 10% of the nation's population received 40% of the nation's disposable income.

<sup>205</sup> See: Keynes, 1961 Reprint, p. 315.

<sup>206</sup> Alvin Hansen, 1953, p. 211, and رفعت المحجوب ، ص: 217، 1980م.

<sup>207</sup> Revise: J. M. Keynes, 1961 Reprint, p. 314. (Emphasis added). This important conclusion makes a great difference between Keynes and the Classics by defining that the sources of savings for investments, in a social, not a Robinson Crusoe's, context is consumption demand, not wage reduction to increase profits, and hence savings for investments. Hence, a consistent consumption growth with capital stock's growth will help in stabilizing and immunizing the employment rate against crisis.

<sup>208</sup> Modigliani, a Nobel Prize Winner, consideration of (increased) thrift posed on the labor-force via low wages and income is actually a form of (increasing) poverty, which likely threatens the macroeconomic equilibrium via a "reduced ... component of demand, consumption, without systematically and automatically giving rise to an offsetting expansion in investment. It might thus cause "inadequate" demand - and, hence, output and employment lower than the capacity of the economy." But at same time, if foreign demand for exports remained fixed or reduced, and not been offset by increased marginal consumption of the private sector, via increased investment, the contracted domestic private consumption demand will potentially discourage aggregate investment and employment, opening the doors, of course, for an uninvited financial and CC to come in. For more details, see Modigliani's Nobel Prize Lecture, 1985, p. 150.

<sup>209</sup> This very important conclusion can't be easily found in the Keynesian economic literature, although time-test proved how it is right as can be seen from the graph in footnote (63) above.

<sup>210</sup> Currency devaluation, for closing external gaps, is a (natural) policy-recommendation by the libertarians.

<sup>211</sup> See: Krugman 1979 as refined by Flood and Garber 1984; and Blanco and Garber 1986.

<sup>212</sup> Like the October 1973 War between the Arabs and Israel and the 1973 and 1979 Oil hikes shocks.

<sup>213</sup> See: Obstfeld and Rogoff, 1999, pp. 558 – 59.

<sup>214</sup> Academic economists have expended much effort on developing mathematical models of devaluations of pegged ERs for more than two decades. Such efforts, which in retrospect, ruled the economic thinking in this area, and have been termed the first-generation models, which focused, unlike Mises and Keynes above, on showing the **mechanics** for the **timing**, rather than the **causes**, of CCs. See: Jim Saxton, op. cit., p.4.

<sup>215</sup> See: Krugman, 1979, p. 313.

<sup>216</sup> See: Krugman, 1998, p. 4.

<sup>217</sup> Actually, this shadow price of foreign currencies can be proxied by parallel market prices before the CC event, implying that DMS growth is higher than the supply of foreign currencies, causing foreign currencies to be much more attractive and safer than holding domestic currency. This is clear, mainly in under-developing countries, as the price of foreign exchange starts to rise gradually until a sudden sharp devaluation.

<sup>218</sup> Where:

R = Foreign Reserves;

E = Nominal ER;

L = Demand for Money;

M = Domestic Money Supply;

$\pi$  = Domestic IR = Rate of Nominal ER Depreciation by the assumption that foreign price index = 1.

For more details, see: Krugman, NBER Annual, 1996, p. 348 - 349.

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<sup>219</sup> Where:

T = time of attack;

$\mu$  = domestic-currency interest rate;

$r_0$  = international reserves.

For more details, see: Krugman, NBER Annual, 1996, p. 348 - 349.

<sup>220</sup> From: Maurice Obstfeld, 1994, NBER Working Paper #: 4640, p. 14a.

<sup>221</sup> This critical level differs from one country to another. It can be the level at which the central bank stops intervention in the foreign exchange currencies markets, to finance the necessary imports. Also, it might be a level that might seem large enough to finance years of payments deficits

<sup>222</sup> Obstfeld (1986) outlined a multiple equilibrium model in which a CC is brought about when government policy (liquidating the deficit through seignorage, for example) causes agents to expect a crisis and start pushing the economy to a bad equilibrium.

<sup>223</sup> This conclusion is very serious. Because what it actually says is that: there must be a limit for the economic boom by the foreign-finance dependent economic development, for example, in order for the government to maintain its fixed ERR and to avoid future CCs. In other words, macroeconomic policies must achieve macroeconomic fundamental that must be competitive to the economy's trade-partners', or at least in-line with theirs, to maximize the returns from the country's export comparative advantages.

<sup>224</sup> See: Krugman, Chicago, 1999, p. 424.

<sup>225</sup> See: Obstfeld and Rogoff, 1996, p. 86.

<sup>226</sup> "Trilemma" is a term of art for logicians since the 17th century, according to the Oxford English Dictionary, and it describes a situation in which someone faces a choice among three options, each of which comes with some inevitable problems. See: N. GREGORY MANKIWI, " The Trilemma of International Finance," July 10, 2010, at: [http://www.nytimes.com/2010/07/11/business/economy/11view.html?\\_r=1&ref=currency&pagewanted=print](http://www.nytimes.com/2010/07/11/business/economy/11view.html?_r=1&ref=currency&pagewanted=print).

<sup>227</sup> Of course such policy mix, if managed dexterously, will help maintain real ER, but of course, also, it will help hurting other trade-partners and competitors to control on their real ER.

<sup>228</sup> For very excellent sectoral analysis, see: Communication from the Commission Report, 1995.

<sup>229</sup> For more details, see: George J. Bratsiotis and Wayne Robinson, 2002, p. 1.

<sup>230</sup> Maurice Obstfeld, 1994, NBER Working Paper #: 4640, p. 4.

<sup>231</sup> See: Cohen, 2004, p. 25.

<sup>232</sup> See: Obstfeld, 1996, p. 1038.

<sup>233</sup> See: Obstfeld, 1984, p.1.

<sup>234</sup> See: Obstfeld's Comment, 1996, NBER Annual, p. 394.

<sup>235</sup> See: Nancy Marion, p. 3 – 4, in Isard et. al., 1999.

<sup>236</sup> Where: -

L: social loss function;

$\theta$ : relative weight attached to price changes;

$\delta$ : rate of currency depreciation;

$E\delta$ : expected rate of currency depreciation;

$\mu$ : zero-mean shock with variance  $\delta^2$ ;

$\kappa$ : measure of distortion.

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<sup>237</sup> See: Robert Flood and Nancy Marion, 1997, p.1. In this context, it is observed from the literature that pro-floating ERRs describe the fixed ERR as “**fragile**,” while, at the same time, floating or, more general, flexible exchange rate has been attacked as the EMS regime, which is very hard to be distinguished from a floating ERR (Maurice Obstfeld and Kenneth Rogoff, 1995, p. 73) or the 2008 USA CC, under pressure of its domestic subprime financial and banking crisis. This means that the problem is not yet known as empirical tests for the monetary model of exchange-rate determination proved its failure in predicting future ER movements and its exact reasons for movement in anyone country, whether advanced or under-developing, despite the type of regime adopted. For more details revise, Kenneth Rogoff (2006). Accordingly, it is not straightforward or simple to affirm which ERR is “**fragile**,” but, with the failure of ER determination models (Kenneth Rogoff, 2006), it is easy to say that the literature is not advanced yet in this area.

<sup>238</sup> Eichengreen analysis concluded that: “The failure of governments to adapt policy in a manner consistent with their stated ER targets is, not surprisingly, at heart of many CCs. This points to the need to study political constraints on economic policy formulation.” See: His book, 2004, p. 102.

<sup>239</sup> From: Michael R. Rosenberg, 1998, p. 13 - 14.

<sup>240</sup> See: Krugman and Obstfeld, 2003, p. 108.

<sup>241</sup> See: Guillermo Calvo and Eduardo Fernandez-Arias, 2000, p. 13.

<sup>242</sup> For example, see: Brad Setser, Oct., 2005, p. 4.

<sup>243</sup> Krugman, 1999, 40.

<sup>244</sup> See: Radelet and Sachs, 1998, memo.

<sup>245</sup> The classical liberalization and deregulation policies adopted heavily by the South East Asian Economies forcing them to open their financial and goods market doors, as recommended, as usual, by the international financial community. As stated in a WB Publication, for Asia, in 1996, p. 10: -

*“Where significant gains are to be made, capital controls can be evaded and usually are ... Inevitably, countries will continue to open their capital accounts and capital markets to private international capital flows. As they do, they will experience some loss of policy independence and face more risks from external shocks. It is therefore important to ensure that increased capital flows, greater mobility of capital, and greater international portfolio diversification produce the expected benefits to compensate for the increased risks. Evidence suggests that the potential gains can far outweigh the risks but that success depends on appropriate domestic policy and its effective implementation. Prudent macroeconomic management is essential if capital inflows are to be effectively absorbed and efficiently allocated to complement domestic resources. As capital markets become more open, policy management becomes more complex. Because some forms of capital flows are highly mobile, there is now less scope for deviation from international levels of key variables. Greater weight needs to be put on achieving the right policy mix.”*

<sup>246</sup> The main theories that emerged to explain the 1997-98 Asian CCs and the 1994-95 Latin American crises can be found in the valuable NBER book that had been edited by Paul Krugman in 2000. These controversial theories have not been resolved; but clearly also they deepened the understanding of the issues, and considerable movement in the views of the main leading view.

<sup>247</sup> See: Philippe Aghion et al. (1999) and Krugman (1999) for formal models of such balance-sheet effects. These effects may also help to explain why CCs are often associated with financial/banking crises, a phenomenon referred to as “twin crises.” Indeed, in five out of the six international financial crises considered in this paper, CCs were associated with banking crises. However, the interaction between currency and banking crises is complex, despite simplifications by Guillermo and Fernandez-Arias (2000), and Kindleberger (2005). While balance-sheet effects may explain why CCs lead to banking crises, evidence also suggests that, at times, banking crises precede CCs and are an early warning signal of future CCs. The analytical and empirical

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complex interactions between banking and CCs have been recently studied by a number of authors, including Barry Eichengreen and Andy Rose (1998), Ilan Goldfajin and Rodrigo O. Valdes (1998), Corsetti et al. (1999), Goldstein et al. (1999), and Graciella Kaminsky and Carmen Reinhart (1999).

<sup>248</sup> See: Krugman, oct. 2008, at: [www.princeton.edu/~pkrugman/finmult.pdf](http://www.princeton.edu/~pkrugman/finmult.pdf).

<sup>249</sup> See: Krugman, 1999, p. 35.

<sup>250</sup> This model is considered as quite raw, with several ends dangling. It based its analysis on three facts that were considered to be included in a new model that should probably be addressed, and which some or all of the existing models did not seem to capture. These are **i: contagion**: that helped in settling a long-running dispute about CCs in general: the dispute between “fundamentalists” and “self-fulfillers,” as it assumes the existence of multiple equilibria, with countries vulnerable to self-validating collapses in confidence, collapses that could be set off by events in faraway economies that somehow served as a trigger for self-fulfilling pessimism. It follows that any useful model of the crisis must involve some mechanism that produces these multiple-equilibria - a criterion met by the financial fragility models, but not by the moral hazard approach. **ii: The transfer problem**: as the heart of the Asian Crisis and its severe violence that the pull off has been realized partly by means of mammoth real depreciations and devaluations, that partly weakened firms balance sheets, for the reversal of NBKIs and partly by means of severe recession that produces a compression of imports. **iii: Balance sheet problems**: Finally, the deterioration of balance sheets played a key role in the crisis itself - notably, through the explosion in the domestic currency value of dollar debt with its destructive effects on firms which weakened their financial position and caused their balancing capital, in many cases, to be wiped out as a result of the combination of declining sales, high interest rates, and a depreciated currency, which in turn caused the non-performing loans crisis at banks and in financially weakened companies, an issue that has been neglected in the CC literature. For more details, See: Krugman, 1999, p. 3.

<sup>251</sup> Of course the vice versa is true for relieving weak or low balancing capital balanced sheets of firms and countries. In this case, the NBKIs guaranteeing government, by tax-payers’ money, is actually aggravating, not solving, the problem. For more precise details, see: Krugman, 1999.

<sup>252</sup> This conclusion has been reached by Krugman. But it is important to observe that this same conclusion has been reached by Keynes, as can be seen from closed-economy investment relationship to the (static) expected deterioration of MEC rather than poor firms’ balance sheets in an open-economy.

<sup>253</sup> Where: -

$I_f$  = financeable level of investment;

$\lambda$  = a limit on leverage: entrepreneurs can borrow at most  $\lambda$  times their initial wealth;

$\mu$  = share of both consumption and investment spending on imports, hence  $(1 - \mu)$  = spending is domestic spending;

$\chi$  = the vlue of domestic exports in terms of foreign goods: foreign elasticity of substitution.

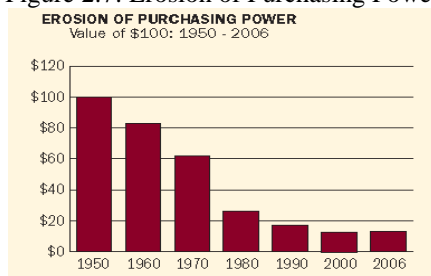
<sup>254</sup> See: footnote 175 above.

<sup>255</sup> See: Olivier Blanchard, 2009, p.3.

<sup>256</sup> In a draft Statement on the Sep. 2008 financial crisis, the IMF Executive Committee in Geneva, Switzerland, during 18 -19 Nov., 2008, concluded that the USA financial crisis “was predictable and should not have come as a surprise. The IMF and the whole labor movement have been sounding the alarm for a long time, warning of the dangers of financial liberalization and market fundamentalism.” See the above mentioned draft at: [www.imfmetal.org/main/files/08111918025084/IMF%20statement%20on%20global%20financial%20crisis.pdf](http://www.imfmetal.org/main/files/08111918025084/IMF%20statement%20on%20global%20financial%20crisis.pdf). Maybe it was right, but "**WHY DID IT HAPPEN?**". Assuming they are right also, it has to be remembered that the IMF, and the legend labor

movement's, ideology remained the liberalization policies, not only in financial sector, but including every aspect of the economic life, except improving, hence freezing, and practically encouraging governments' heavy downward pressures on, the real wages of the labor force in the advanced and, mainly in, the least developed countries around the world for a very long time. This governments' heavy downward pressure was one of critical elements that triggered the financial Sup-prime crisis in the USA, as the purchasing power of the dollar reached its minimum trough by 2006 relative to 1950, as recent graph from the USA labor census showed in the chart below. So, what they are telling is extremely different from what they are recommending, and finance-conditioning, at the countries' field level. In other words, even if they were right they both actually lacked the confidence in their recommendations as their long history with failed stabilization programs of the 1980s and 1990s, as well as their failure in the management of financial crisis, mainly in the developing world starting with the 1982 international debt crisis. Without this devastating contradiction, the IMF and the international world labor movement would have helped much in avoiding the now GFC.

Figure 2.7: Erosion of Purchasing Power



Source: Thomson Financial Co., 1/07

<sup>257</sup> See: The WB, 2009, p. 56 and 44, respectively. But it is worth-noting here that such kind of crises always ends in world wars, because of different political interest and the impacts of same policies on different economies' goal and objectives.

<sup>258</sup> See: IMF, April 2009 WEO, Summary Version. Box: 1.4, p. 34 – 38.

<sup>259</sup> See that meeting at the following website: <http://www.londonsummit.gov.uk/en/summit-aims/communique-explanation/>

<sup>260</sup> For more details, see: Hamid Faruquee and Douglas Laxton, 2005.

<sup>261</sup> See: Krugman, The Conscience of a Liberal, 2009, p. xiv.

<sup>262</sup> See: Martin Wolf Article. Available at: [http://www.ft.com/cms/s/0/c6c5bd36-0c0c-11de-b87d-0000779fd2ac.dwp\\_uuid=ae1104cc-f82e-11dd-aae8-000077b07658.html](http://www.ft.com/cms/s/0/c6c5bd36-0c0c-11de-b87d-0000779fd2ac.dwp_uuid=ae1104cc-f82e-11dd-aae8-000077b07658.html).

<sup>263</sup> See: Krugman, 2009, the return of depression economics, p. 24.

<sup>264</sup> For a very brief history of financial crisis in the USA and others, see: Desjardens Economic Studies, p. 2.

<sup>265</sup> For more details: Refer to the following website: <http://www.mises.org/story/280427>.

<sup>266</sup> See: WB Research Digest, Winter/2009, p.3.

<sup>267</sup> Although remains stick to the same believe and ideology about the (blind) free market forces, such as the USA Government, which stated that “The existence of financial crises does not change our assessment that, on balance, financial development and globalization are good for poverty reduction in the longer-term. However, this positive long-run relationship can coexist with a negative short-run relationship through financial fragility. This can reflect fundamental distortions that build up for a long time, largely hidden from view, before a macro shock reveals the underlying vulnerabilities.” But financial crises can also strike economies with relatively sound institutions and generally good policies. For more details, see: Development Research Group, November 2008, introduction and p. 3.

<sup>268</sup> See: Ricardo J. Caballero, Emmanuel Farhi, and Pierre-Olivier Gourinchas, March, 2008, pp. 358 – 360.



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- <sup>269</sup> In fact, this act by itself validates the investors' anticipation. For more details, see: Guillermo Calvo and Eduardo Fernandez-Arias, 2000, p. 25.
- <sup>270</sup> This is what the G20 considered in resolving financial crisis in their meetings in the April 2nd, 2009 London Meeting, which has deepened since their meeting in Washington on Sep. 15th, 2008.
- <sup>271</sup> For more details, see: Guillermo Calvo and Eduardo Fernandez-Arias, Ibid.
- <sup>272</sup> See: Paul Krugman's definition of "Exchange Rate" in the "[The Concise Encyclopedia of Economics](http://www.econlib.org/LIBRARY/Enc/ExchangeRates.html)" for "The Library of Economics and Liberty" website at: <http://www.econlib.org/LIBRARY/Enc/ExchangeRates.html>. See also: See: Dornbusch, in Dornbusch and Helmers, 1991, p. 104 and Maurice Obstfeld and Kenneth Rogoff, op. cit.
- <sup>273</sup> See: Guillermo Calvo and Eduardo Fernandez-Arias, 2000, p. 27 - 28.
- <sup>274</sup> For comprehensive details, see: Dornbusch, 1991, mainly chapter 5. The other ways are, of course, the use of tariffs, taxes, quotas ... etc. But that does not mean that self-fulfilling crises will not happen in the case of fundamental imbalances. Also, it can be added that the arguments concerning rigidities in the economy can be broken when improved technologies that reduce costs of production are used to increase profits, without necessarily increasing, but actually leads to decreasing, prices and reduce poverty. The use of such improved technologies without necessarily reducing wages is the main criterion for achieving economic growth through technical structural transformation, i.e. realized economic development goals.
- <sup>275</sup> The following quotations are from Krugman, "The Return of Depression Economics and the Crisis of 2008," 2009, mainly chapter 1.
- <sup>276</sup> For more details, see: Obstfeld, Maurice, Jay C. Shambaugh, and Alan M. Taylor, 2008, NBER Working Paper No.: 14217.
- <sup>277</sup> See: Guillermo Calvo and Eduardo Fernandez-Arias, 2000, p. 24 - 25.
- <sup>278</sup> In this link, it is mentioned, that the Asian governments avoided foreign borrowing that had made them vulnerable to a cut-off of overseas funding, which are associated with large depreciations/devaluations and major financial disruptions, leading to significantly lower rates of return, investment and growth, to protect them against a repeat of the 1997-1998 financial crisis. See: Krugman, 1999/2009, p. 176, mainly the part concerned with "Mother of all Currency Crises".
- <sup>279</sup> See: Guillermo Calvo and Fernandez-Arias, 2000, p. 28.
- <sup>280</sup> It is important to mention, before answering this question in advance, that as CCs frequency increased around the world, mainly at the continental, regional, global levels, after each continent and regions introduced its own currency, "the awkwardness of one size-fits-all monetary policy was gone." See: Kugman, 1999/2009, p. 104.
- <sup>281</sup> It was mentioned by one USA Official that: "For developing countries, there are no small devaluations." This quote is taken from: Krugman, op. cit., 1999/2009, p. 112.
- <sup>282</sup> See: Guillermo Calvo and Fernandez-Arias, 2000, p. 25.
- <sup>283</sup> As it can be seen from all the above currency-crisis models, in describing the different mechanics leading to those crises, actually criticized the booming foreign-financed dependent economic development processes recommended by the economic development theorizers, as they are inconsistent with all macroeconomic policy-tools, like the fixed ERR that almost all countries are stuck to it, and by not allowing even a floating ERR to pass a specific upper limit, for a sustained path of economic development that raise the level of productivity over and above a conceived dynamic poverty line. Accordingly, they implicitly advice the wise management of economic development processes in order to raise the citizens living standards. In direct words, untamed booming economic development processes are the problems, not the solution, for under-developing under-development stance and processes, i.e. for sustainable rising living standards by raising average and marginal productivities, mainly in the

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traditional agricultural sector, above its presumed local dynamic poverty line and the main cause for accumulating EDs and, in some other countries, arrears.

<sup>284</sup> During an official visit to the London School of Economics (LSE) in November 2008, the Queen of Great Britain asked a professor why economists had failed to predict the Aug. 2008 financial crash, by describing it as the most dramatic event in recent economic history. A year later, after a British Academy seminar, eminent economists answered by blaming "a failure of the collective imagination of many bright people, both in this country and internationally, to understand the risks to the system as a whole". The main excuse was that they missed not because of a lack of intelligence or failure of imagination, but because in their first course in economics the professor never said that the invisible hand only works for markets where buyers have access to all the useful, relevant information in an appropriate, timely manner. In the end of the seminar, they were asked to understand that transparency is needed for properly functioning markets and that opacity is at the top of the list of market imperfections. See: Richard Field, "**The Queen's Question: Why did economists fail to predict the financial crash?**," *Trust Your Instincts*, 15<sup>th</sup> Dec., 2011, at: <http://tyillc.blogspot.com/2011/12/queens-question-why-did-economists-fail.html>.

But it is important to note here that the researcher decided to specialize in this complicated area before the fall of the 2008 GFC as documented by the date of delivery to the University Of Sudan for Phd degree as can be seen by the date of proposal and the date of delivery at the university. The idea of the current research came before 2007 for the preparation for Phd degree to understand in a proper manner what is wrong with the Sudanese currency that has been changed for 3 times in less than 3 decades. As it became well-known, that crisis started in the USA in the 3<sup>rd</sup> quarter of 2008, when Lehman-Brothers declared its bankruptcy position.

<sup>285</sup> This paradigm was adopted, since late 1970s, by many developing and under-developing countries, as it continued to be enforced, mainly in the latter case, whether directly or indirectly, by the IMF-WB institutions.

<sup>286</sup> That analysis, which was strongly supported and cited by the conservatives, was of: Reinhart, C. M. and Rogoff, K. S, "**Growth in a Time of Debt**," *American Economic Review: Papers & Proceedings*, (2010), 100.

<sup>287</sup> See the interview made with the discoverer, Robert Pollin, who found the unforgivable errors in of the statistical background of the Reinhart and Rogoff 2010 thesis, mentioned in footnote (21) above, thesis that misled the decision-makers of the conservatives party in the USA, UK, and the EU. [For more details, See: Robert Pollin, "**Beyond Debt and Growth: An Interview with Robert Pollin**," *Back to Full Employment*, July 19<sup>th</sup>, 2013, at: <http://backtofullemployment.org/2013/07/19/beyond-debt-and-growth-an-interview-with-robert-pollin/>].

<sup>288</sup> It's supposed to push interest rates down when the economy is depressed and inflation is low. This implies the autonomous depreciation of the exchange in order to correct the CAD by exporting the domestic recession gap in the economy. [See: Paul Krugman, "**This Age of Bubbles**," *The New York Times*, August 22<sup>nd</sup>, 2013, at: <http://www.nytimes.com/2013/08/23/opinion/krugman-this-age-of-bubbles.html?partner=rssnyt&emc=rss&r=0>]. But it also imply the use of deliberate expansionary fiscal policies to short-cut or dissolve the financial crisis to avoid the long-run erosion of the economy's productive capacity. Or to put in a familiar way, to avoid the death of the national economy and our lives in the long run as Keynes once shouted in the face of the classical.

<sup>289</sup> Although the aftermath irresistible recession remained till the writing of this research, it is important to mention that during the four years after the GFC, the USA, as the BWIs, was pressing current account surplus countries, such as China, to appreciate its currency. In the case of the Euro, Germany was pressed to increase its IR relative to the depressed economies in the periphery countries. In both cases, The USA pressures aimed at reducing the two countries' surpluses by increasing domestic aggregate

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demand. Since part of the increase in aggregate demand will fall on imports, the USA government, therefore, was targeting an increased demand for its American goods and services to reduce its external deficits.

<sup>290</sup> See the interview with the Nobel Winner: Joseph Stiglitz by Martin Eiermann, “Politics Is at the Root of the Problem,” *The European*, April 23<sup>rd</sup>, 2012, at: <http://www.theeuropean-magazine.com/joseph-stiglitz--2/634-austerity-and-a-new-recession#>

<sup>291</sup> Thomas Herndon, Michael Ash, and Robert Pollin of the University of Massachusetts, Amherst produced a study that destructively challenged the Reinhart and Rogoff (RR)’s overall thesis in their “Growth in a Time of Debt” 2010 paper, about the impact of debt on the national economic growth that implied the need for the adoption of austerity. [See: Thomas Herndon, Michael Ash, and Robert Pollin’s working paper, April 15, 2013].

<sup>292</sup> Janet L. Yellen and George A. Akerlof, July 1, 2004, p.: 33.

<sup>293</sup> Relative to its preceding meetings during the aftermath 2008 GFC, See the clear shift in thinking in: G20, “Meeting of Finance Ministers and Central Bank Governors,” *Communiqué*, (Moscow, 19-20 July 2013).

<sup>294</sup> Yen Kyun Wang, July 6-7, 2004, p.: 14.

<sup>295</sup> At least relative to Sudan’s trade partners.

<sup>296</sup> This is at least till now. As it can be seen, ED and its arrears jumped from US\$ 3 billion in 1978 to US\$ 42 billion in 2012. See: Central Bank of Sudan various reports.

<sup>297</sup> The 1978 – 2012 witnessed sustained implementation of the “Neo Liberal/Classical Paradigm” as a formal policy that was adopted by the successive Sudanese governments during this very long period.

<sup>298</sup> See the famous justifications for floating ER in: Friedman, Milton, 1953, “Essays in Positive Economics.”

<sup>299</sup> Mundell, Robert A., 1961.

<sup>300</sup> John M. Fleming, 1962.

<sup>301</sup> For more details, mainly concerning floating ER to EDs, see: Pascal Towbin and Sebastian Weber, February 2011, p.: 4.

<sup>302</sup> The overcoming of the 2008 GFC in the advanced countries by the quantitative easing measurements is expecting to lead to currency wars, although G20 assured that won’t happen [See such strong shift in thinking, relative to what were mentioned in their preceding meetings during the aftermath 2008 GFC, in: G20, “Meeting of Finance Ministers and Central Bank Governors,” *Communiqué*, (Moscow, 19 – 20 July 2013), p: 2.] This assurance confirms that even believers in floating regimes resist, from practical historical point of view, pure floating ERRs.

In this meeting, they stated explicitly that they: -

*“... will refrain from competitive devaluation and will not target our exchange rates for competitive purposes.”*

Although they remained reiterating their commitments: -

*“... to move more rapidly toward more market-determined exchange rate systems and exchange rate flexibility to reflect underlying fundamentals, and avoid persistent exchange rate misalignments.”*

Despite these commitments, it seems who are meant by them are the advanced countries. Now, India, since April 2013 till at least Sep. 2013, is suffering, as Indonesia and other developing countries, from rapid sliding ER [See: *The York Times*, *The Financial Times*, *The Washington Post* in addition to many personal website around the period mentioned above.]

<sup>303</sup> It is clear that the three principal parties, i.e. Great Britain, France, and the United States, who signed this agreement, reflected the actual dissatisfaction with the high costs of sustained devaluations, as a form of crawling float of the ERR, before WWII. It is important to note that this agreement, it can be said, although with improved articles, the 1944 global Bretton Woods’ one. For more details, see: Wikipedia, Currency war, at: [http://en.wikipedia.org/wiki/Currency\\_war](http://en.wikipedia.org/wiki/Currency_war).

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- <sup>304</sup> On actual basis, and from historical experiences, there was no such a rigid fixed ERR. BWIs' "fixed, *but adjustable*, ERR" was a reflection of conditional approval flexibility regime by the IMF.
- <sup>305</sup> It is important to note here that Hitler, who imposed on the world the choice between famous cry of "Export or War," was the reason for the second 1939 – 1944 WWII. As an excellent historical reference for such episodes, see: Read thoroughly Kindleberger's 2005 excellent book.
- <sup>306</sup> See: Joseph E. Stiglitz, 1999, p.: 5.
- <sup>307</sup> Maurice Obstfeld, 2013, p: 145. Financial repression, as summarized by Krugman, was:  
"... used to be common for the third world governments to impose sharply negative real interest rates on savers year after year, driving saving down or pushing saving into unproductive channels."  
[See: Paul Krugman, "Financial Repression," *The New York Times*, June 2<sup>nd</sup>, 2011, at: [http://krugman.blogs.nytimes.com/2011/06/02/financial-repression/.](http://krugman.blogs.nytimes.com/2011/06/02/financial-repression/)]
- <sup>308</sup> But relative to post 1973, when managed floating ERRs dominated the international financial system, crises were comparatively rare in the postwar period through to the early 1970s, a period of widespread financial repression and capital control. [See: Obstfeld, 2013, 145].
- <sup>309</sup> Now a generation of theories is gathering its power as will be seen below.
- <sup>310</sup> After the war, all the four belligerents went to the IMF for a financial support. But there were no CCs, as the crisis was more political. It only led to domestic economic hardship in all the belligerent nations. [See: James M. Boughton, July 1997, p.: 10 – 11]. It is important to note here that the USA's, due to its unwillingness to provide financial support, as a financial pressure, mainly on the Britain, forced the latter, which was facing a speculative attack in the midst of the Suez crisis, to resort to the IMF. Furthermore, US President Dwight Eisenhower went so far as to use America's clout within the IMF to force Prime Minister Eden of Britain to withdraw British troops from Egypt in exchange for the loan [See: Robert Skidelsky, "Misconceiving British Austerity," Project Syndicate, Oct. 21<sup>st</sup>, 2013, at: <http://www.project-syndicate.org/print/takes-on-kenneth-rogooff-s-defense-of-britain-s-austerity-policy-by-robert-skidelsky>].
- <sup>311</sup> As it is well known, the economic structures of the ex-colonized countries were of a dependent structure nature and were strongly linked to the colonizing country. As a result, and despite the Third World Countries' adopted kinds of economic policy regimes during the 1950s and 1960s, their financial crises were, practically, a reflection of the financial crisis in the advanced countries.
- <sup>312</sup> Oliver, M., Bordo, M. D., & Mc Donald, R., (2010), pp. 437-459.
- <sup>313</sup> For example, during the 1960s decade, the Sudanese currency was mainly pegged to the sterling pound. As it might had been noted or not, one the mega flaws of Bretton Woods' principle, of "fixed, but, adjustable, ERR," was that the devaluing countries enforce, of course with the IMF's consent, automatically their trade-partners' currencies to appreciate. At the same time Britain, by devaluing its currency, did export, i.e. withered, its crises and recession to its trade-partners. This meant that the appreciation of foreign countries' currencies was enforced politically, and automatically imposed, on its trade-partners who imported the crises and recessions from the devaluing country. Of course, this caused their exports to lose their price competitiveness. Under the Bretton Woods' principle of "fixed, but adjustable, ERR," the IMF didn't ask the related to the devaluing country's trade-partners, it seems, to protect their economies against the importation of its crisis and recession. Therefore, the devaluation of the sterling pound led to the automatic appreciation of the Sudanese pound and loss of the Sudanese export price-competitiveness.

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<sup>314</sup> Despite its undesirable negative impacts, devaluation, generally, remained to be used to reduce or eliminate a recessionary gap in the devaluing country via its exportation to the non-devaluing trade-partners' countries. [See: Krugman et. al., 2012, p.: 439]. On that basis, it can be seen that Britain's devaluation of its currency, automatically, caused an appreciation of the British trade-partners' fixed ER, which were fixed in terms of gold at that time, Sudan, whose pound was pegged to the sterling pound, included. In other words, Britain exported its recession to its tramped trade-partners. As it can be seen, floating ERR can export domestic recession automatically, i.e. without central bank decision, when it depreciates against the trade-partners' ERR, unless they react by devaluation too, igniting currency wars.

Such an event must lead to relative lower exports of the Britain's trade-partners because of their uncompetitive price attractiveness. This must have created domestic recessionary-gap in their economies that normally opens the doors for the need for the NBKIs, hence increased debt obligations, or forced to otherwise to close their widened external gap by the aggressive contractionary policies, as will be seen in the case of Sudan during the period 1966 – 1972, due to the sudden stop of assistances after eviction of the American Ambassador in support to Egypt in the June 1967 War with Israel.

<sup>315</sup> The objective was the government's need to scale-back its purchases of goods and services, which had risen dramatically because of the Vietnam War in the face of speculative attack on USA gold stock. For more details, see: Krugman, Wells, and Graddy, 2011, p.: 433.

<sup>316</sup> It is important to remember that the fixed ERR remained a dream for many developed and under-developing countries around the globe. In Europe, however, many policy makers were unhappy with floating ERRs, which they believed created too much uncertainty for business. From the late 1970s onward they tried several times to create a system of more or less fixed ERRs in Europe, culminating in an arrangement known as the ER Mechanism, which became effective in 1987. And in 1991 they agreed to move to the ultimate in fixed ERRs: a common European currency, the euro. By 1999 the ERR among the now 17 member countries of the Euro-zone, of today, were "locked"—no further fluctuations were allowed as the countries prepared to switch their national currencies to Euros. At the end of 2001, the European national currencies ceased to exist. The euro now floats against other currencies, such as the dollar, and the European Central Bank (ECB) is obliged to maintain price stability rather than convertibility into other currencies or gold, as was the case of the USA Federal Reserve during the pre-1973 BWIs' Rules, for example. But for the 17 states that now share the single currency, it represents a new gold standard in that their ERRs with each other are fixed. In other words, the Euro-zone is the closest equivalent to the classical gold standard in the modern world, which puts European countries back under more or less the same constraints they faced when gold ruled in the pre-WWI era. [See: Krugman et. al., 2012, p.: 438.]

<sup>317</sup> M. Ayhan Kose and Ezgi O. Ozturk, September 2014, Box: 2, p.: 8.

<sup>318</sup> This is the year which was marked as the beginning of the "Third World Debt Crisis" of the 1980's, the sustained field for CCs. It started in August of 1982, when the Mexican government announced a 90-day suspension of payments of principle on its loans from foreign banks. In the advanced countries, policy-makers considered that this developing-country's debt crisis, which erupted in 1982, could have wiped out the capital of the biggest US banks. On that basis, it was contained through a concerted lending strategy orchestrated under the pressure of official agencies, notably the Fed and the IMF. [See: Obstfeld, 2013, 146]. Both actually imposed what became known as the "IMF Policy Prescription," or a better terminology is "IMF Policy Orchestrate," which is based on the mythical "Neo-Liberal Supply-Side Economics."

<sup>319</sup> Krugman et. al., 2012, p.: 196.

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<sup>320</sup> It is important to note that after the mid-1970s, there was an unstated consensus that was developed stating that financial crises were mainly emerging-market affairs due to the sudden oil-price hikes of the 1970s. [See: Gourinchas and Obstfeld, 2012, p.: 227.]

<sup>321</sup> See: Boughton, 2001, p.: 138.

<sup>322</sup> These are the October 1973 Egyptian – Israeli war and the September 1980 - August 1988 Iraqi – Iranian war, also known as the First Persian Gulf War.

<sup>323</sup> See the footnote for the details of the devaluation in: Nashashibi, 1983, p.: ---.

<sup>324</sup> This is an overlapping period when developing countries joined the advanced countries to take their suffering shares from crisis in the form of finding difficulties in servicing their intolerable EDs. The overlap crisis period ended in August of 1982, when the Mexican government announced a 90-day suspension of payments of principle on its loans from foreign banks. This crisis continued to hit the developing world till the 1992 ERM's CC.

<sup>325</sup> Harold James and Domenico Lombardi, "What Enabled Bretton Woods?," *Project Syndicate*, July 8<sup>th</sup>, 2014, at: <http://www.project-syndicate.org/print/harold-james-and-domenico-lombardi-consider-the-factors-that-enabled-the-remaking-of-the-international-monetary-system>.

<sup>326</sup> As implied above, the financial instability that characterizes the advanced capitalistic system remained the major source for macroeconomic complications in the small open economies of the developing world, despite the effectiveness degrees of their macroeconomic policies. As advanced economies opened their monetary spigots to boost ailing economies, emerging-market complaints grew louder. Exactly as emerging-market finance ministers complain, the global financial cycle is influenced by rich-world monetary policy. The NBKIs are containers that contain the recession that the sending countries or institutions export to other countries. This means that free capital flows, that might ignite a domestic boom that feeds on itself as credit growth lifts asset prices, may inevitably mean a loss of monetary-policy independence in the receiving (developing and under-developing) countries. [See: The Economist, "Horns of a Trilemma: How Can Emerging Economies Protect Themselves From The Rich World's Monetary Policy?," *The Economist*, 31<sup>st</sup> Aug, 2013, at: <http://www.economist.com/news/finance-and-economics/21584351-how-can-emerging-economies-protect-themselves-rich-worlds-monetary>]

<sup>327</sup> Timothy Heritage, "World Leaders Pressure Obama over Syria at G20 Summit," *Reuters*, Sep 6<sup>th</sup>, at: <http://uk.reuters.com/assets/print?aid=UKBRE9840B120130905>.

<sup>328</sup> Maurice Obstfeld, 2013, p: 151.

<sup>329</sup> For a brief summary, see: iMFdirect, "Monetary Policy Will Never Be the Same," *IMF*, November 19<sup>th</sup>, 2013, at: <http://blog-imfdirect.imf.org/2013/11/19/monetary-policy-will-never-be-the-same/>. It can be said that the IMF changed its mind. That is, of course, in support of what is concluded above, concerning the majority of countries, despite their different stages of development, to return always to the fixed and/or semi-fixed ERRs and away from the very liberal ER determination system, i.e. the pure floating ERR. This was achieved mainly by emerging countries through controlling the inflows of capital with the right macroprudential policies. Olivier Blanchard, IMF's Research Head, concluded, as a response to the criticisms to the depreciation of the ER in relation to the NBKIs, that: -

*"... large movements in the exchange rate may lead to disruptions, both in the real economy and in financial markets. ... However the ... argument remains relevant. And this is why central banks in emerging market countries have not moved to full float, but to "managed float," that is the joint use of the policy rate, foreign exchange intervention, macroprudential measures, and capital controls. This has allowed them to reduce the old dilemma that arises when the only instrument used is the policy rate: an increase in the policy rate may avoid the overheating associated with capital inflows, but at the same time, it may make it even more*

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attractive for foreign investors to come in. Foreign exchange intervention, capital controls, and macro prudential tools can, at least in principle, limit movements in exchange rates, and disruptions in the financial system without recourse to the policy rate.

Countries have used all of these tools in this crisis. Some have relied more on capital controls, some more on foreign exchange intervention. And the evidence, both from the conference, but also from work at the IMF, suggests that these tools have worked, if not perfectly. Looking forward, the clear (and quite formidable) challenge is to understand how best to combine them. ... In short, monetary policy will never be the same after the crisis.”

<sup>330</sup> Blanchard, Olivier, G Della'Arricia and Paolo Mauro, "Rethinking Macroeconomic Policy," *IMF Staff Position Note*, Feb 10, 2010.

<sup>331</sup> It is important to be reminded that the ED crises of the third world countries, as started by Mexico in 1982, was a result of tightening of monetary policy to halt inflation of the 1970s. The advanced countries' monetary tightening policy resulted the worst recession relative to the 1930s'. The (deliberate) recession, in turn, slowed growth in the industrialized economies from 1.2% in 1980 to 1.4% in 1981 to 0.4% in 1982. Moreover, world trade was also hit badly, expanding by only 1.7% in 1980 to 0.8% in 1981, and contracting by 2.3% in 1982. [Martin Feldstien, Harvey DeCamry, et. al., 1987, p.: 75]. Also, it can added, the recent trial of the advanced to solve their post 2008 GFC recession is a very good recent example in creating CCs in the emerging, developing, and under-developing countries. This is specifically during the period under which the IMF's enforcement of **Capital Account Liberalization since 1997**. As mentioned by the Economist: -

*“From 2008 it became widespread, propelled by the financial crisis and then by quantitative easing (QE), the practice of buying bonds with newly created money. Rich countries, desperate to rekindle growth, made their monetary policy ever more expansive. In 2010, when the Fed started its second round of QE, inflows into emerging-market bonds surged and their currencies climbed. Last summer, when emerging markets had started to slow, the Fed hinted that QE would stop—and money flowed in the opposite direction. In September, when the Fed failed to stop, flows promptly changed direction again.”*

[See: From the Economist Print Edition, "Capital Controls Are Back As Part Of Many Countries' Financial Armoury," *The Economist*, 12<sup>th</sup> Oct., 2013, at: <http://www.economist.com/news/special-report/21587383-capital-controls-are-back-part-many-countries-financial-armoury-just-case>.]

<sup>332</sup> In the third world, full-employment cannot be achieved due to the inflexible supply of jobs that constrained by the massive poverty in these nations. Full employment can be considered as the maximum utilization of the available advanced capacities for production the major part of the national income.

<sup>333</sup> Competitive devaluation has been rare through most of history as countries have generally preferred to maintain a high value for their currency. See: Wikipedia, **Currency war**, at: [http://en.wikipedia.org/wiki/Currency\\_war](http://en.wikipedia.org/wiki/Currency_war).

<sup>334</sup> Ibid.

<sup>335</sup> For more detailed history, see: The Economist, "The Global Monetary System: Not Floating, But Flailing," *Finance and Economics*, Jul 5<sup>th</sup>, 2014, at: <http://www.economist.com/node/21606322/print>.

<sup>336</sup> The Economist, "The Global Monetary System: Injured reserve," *Finance and Economics*, Jul 15<sup>th</sup>, 2014, at: <http://www.economist.com/node/21607395/print>.

<sup>337</sup> Paul Krugman, Maurice Obstfeld, and Marc Melitz, 2012, p.: 465

<sup>338</sup> It is questionable whether a truly clean float has ever existed in reality. Most government policies affect ER, and governments rarely undertake policies without considering the policies' ER implications.

<sup>339</sup> Paul Krugman, Maurice Obstfeld, and Marc Melitz, 2012, p.: 465

<sup>340</sup> See: James M. Boughton, July 1997, p.: 13.

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- <sup>341</sup> The aim behind the IMF establishment was to sustain confidence, as a lender of last resort, to member countries against speculators by using its resources in the form of short-term credit, to overcome capital outflow pressures, to prevent financial crisis.
- <sup>342</sup> In practice, the IMF found itself helping countries to cope with, after they fall in, crisis [See: Boughton, 1997, abstract].
- <sup>343</sup> This implies, as Boughton's [July 1997] paper mentioned, governments that seek the explicit IMF technical and financial support declare, implicitly, their failure in managing their macro-economies by themselves, unless proved otherwise.
- <sup>344</sup> The black market agents know this very well. As result they are afraid of losses as much as they sure of gaining in the end.
- <sup>345</sup> Congressional Budget Office, August 1989, p. 22.
- <sup>346</sup> International competitiveness is dependent on labors' productivity, i.e. reduction of the costs of production with higher quality, rather than their market prices. Productivity is the means for achieving economic development goals and international competitiveness. With low productivities, the dominance of lower standards of living, in the poor third world countries, are more worsened by internal devaluation of factors of production and ER devaluation to improve the international price competitiveness of tradable goods and services. Foreign-finance dependent economic development processes are, therefore, a self-defeating strategy, by meeting all the generated obligations, in the long-run.
- <sup>347</sup> Congressional Budget Office, August 1989, op. cit.
- <sup>348</sup> Paul Krugman, "[“Currency Wars” and the Impossible Trinity \(Wonkish\)](http://krugman.blogs.nytimes.com/2011/05/09/currency-wars-and-the-impossible-trinity-wonkish/),” *The New York Times*, May 9<sup>th</sup>, 2011, at: <http://krugman.blogs.nytimes.com/2011/05/09/currency-wars-and-the-impossible-trinity-wonkish/>.
- <sup>349</sup> For example, the overall domestic price index contains within its structure the structure of import prices. This means that any IR tells, partially, about the effect of the international price dimension.
- <sup>350</sup> The problem with the debt overhang is perhaps viewed as a tension between two goals. On the one hand, creditors view the current level of debt as risky because it is too large relative to the debtor countries' ability to service it. They therefore want to see debtor countries reduce their debt burdens as rapidly as possible. On the hand, the debtor countries want to maintain economic growth, which depend on investment and improved productivity, and rising living standards, which depends on the quantity and quality of consumption. This implies that, in order to reduce debt burden and increase economic growth, consumption must be pressed down. Among the available tools for reducing consumption is the ER devaluation that reduces the living standards. These goals are therefore in direct conflict with the majority. so the problem is one of striking a balance acceptable to both sides.
- <sup>351</sup> Generally, it is the ruling government that must become responsible for opening, or widening an existing, CAD, everything else remains normal, mainly in the third world. This simply because it guarantees almost most all the NBKIs either via the budget or via different legislations that, not only encourages investments but, guarantees the full repayments of capital.
- <sup>352</sup> Money in itself is unique. Its only function within any economy is to buy only, including foreign currencies. If the domestic currency is redeemable internationally, its function remains buying domestically and internationally. It cannot be sold. It can only be exchanged for other goods and services for a number of units of the related currency. That is clear from its function as a “medium of exchange.” As it is well established in monetary economics, the demand for a currency/money is a derived demand for goods and services today or in the future. This strong assumption opens the doors wide for using money itself as a policy tool. From a macro-policy perspective, expanding or contracting DMS, directly or indirectly via overall prices, increases or decreases the aggregate demand for goods and services in the economy. It is therefore a crucial and an indispensable policy tool.
- <sup>353</sup> See: Paul Krugman, et. al., 2012, p.: 421.



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- <sup>354</sup> As will be seen in the next chapter, the governments of the 1960s were stressing the crucial importance of increasing the country's NIR [see the budget speeches of the different Sudan's Ministers of Finance to the parliament]. Unfortunately they neutralized the forces of the increase in the DMS by determining the prices of different goods and services. The pressure of the repressed inflation, mainly after 1964, was reflected in strengthened black market for foreign currencies, and brokers in other assets, as domestic overall price level parity misaligned. The result was actually a shrinking CAD. As will be seen graphically, the reason lied more in increasing net domestic credit, more than declining NBKIs and the deterioration of export revenues, that led to a declining, rather than accumulating, NIR as a result of repressing domestic overall inflation rates. Volatile growth of GDP of the 1960s were driven more by aggregate consumption.
- <sup>355</sup> From a theoretical identity perspective, capital account and the current account of the balance of payment have to sum to zero. But actually this fact is not the natural truism. Both accounts are actually lopsided.
- <sup>356</sup> From the use of hidden or declared capital control policy perspective this can include autonomous NBKIs.
- <sup>357</sup> It is important to note, in advance, that ERRs are not affected alone by capital flows, which is equivalent to the CADs, whether positively or negatively, but also by the sharp movements in the export prices of dominant commodities for under-developing countries, as will be seen in the text and the next chapter. Both share the common feature of being addition to, or deduction from, the financial capacity that can be used to increase the capacity to import goods and services above what normal export revenues can allow. This assumes the absence of abnormal expenditure of foreign currencies, due to a war for example. In the absence uneconomic shocks, (+/-) net capital flows affect the prevailing ER by affecting positively or negatively the country's buffering NIR that are very strongly linked to the international price of the dominant export commodity of the UUEs, such as the Sudanese one, as will be seen in the next chapter.
- <sup>358</sup> Jens Nordvig, "Currency wars and the euro," *Vox*, November 25<sup>th</sup>, 2013, at: [www.voxeu.org/article/currency-wars-and-euro](http://www.voxeu.org/article/currency-wars-and-euro).
- <sup>359</sup> Paul Krugman, "Years of Tragic Waste," *The New York Times*, September 5<sup>th</sup>, 2013, at: [http://www.nytimes.com/2013/09/06/opinion/krugman-years-of-tragic-waste.html?partner=rssnyt&emc=rss&\\_r=0](http://www.nytimes.com/2013/09/06/opinion/krugman-years-of-tragic-waste.html?partner=rssnyt&emc=rss&_r=0)
- <sup>360</sup> As mentioned by Obstfeld and Rogoff thesis as mentioned in the previous chapter for the second generation models, see also: Barry Eichengreen et. al., 1995, p.: 249 and 254.
- <sup>361</sup> Such variables include, among others, the depletion of the NIR and revenue losses, due mainly to international prices of export commodities or relatively overshooting imported goods and services. Any, in other words, of which causes a relative shortage, i.e. negative shift in the relative supply, of foreign currencies in the foreign exchange markets. That was almost, relative to incomes and NIR, the result of the unsustainable increase in government expenditure, money – supply, increased unemployment rates, increased wages and profits and related inflation rates relative to the import/export capacity ratio, mainly in the under-developing countries, ... etc.
- <sup>362</sup> Barry Eichengreen et. al., 1995, p.: 258 and 276.
- <sup>363</sup> Funds tend to flow out of, and NBKIs slows-down into, a country whose currency is seen by investors as overvalued and vice-versa. [See: Krugman, 27<sup>th</sup> October 2013, p.: 11].
- <sup>364</sup> See: Paul Krugman, "A Dark Age of macroeconomics (wonkish)," *The New York Times*, Jan. 27<sup>th</sup>, 2009, at: <http://krugman.blogs.nytimes.com/2009/01/27/a-dark-age-of-macroeconomics-wonkish/>.
- <sup>365</sup> It seems that, after 5-years from the fall of the 2008 GFC, and the hypothesis presented in this research, Paul Krugman revised his first and third generation of CCs models mentioned in the previous chapter, in considering, of course at very low NIR/DMS ratio, that: -

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“... the best predictor of crisis is large inflows of foreign money: in all but a couple of the cases I just mentioned, the foundation for crisis was laid by a rush of foreign investors into a country, followed by a sudden rush out.”

[See: Paul Krugman, “**Hot Money Blues**,” *The New York Times*, March 24<sup>th</sup>, 2013, at: <http://www.nytimes.com/2013/03/25/opinion/krugman-hot-money-blues.html>.] He also stated that explicitly by saying: -

“Now, it’s possible that I and everyone else who tried to understand what happened in the 90s has the wrong model. But given what we know, I’m relatively though not totally calm.”

[See: Paul Krugman, “**Asian Vulnerability, Then and Now**,” *The New York Times*, August 29<sup>th</sup>, 2013, at: <http://www.nytimes.com/2013/03/25/opinion/krugman-hot-money-blues.html>.]

This last statement clearly states that there is a 4<sup>th</sup> coming generations of CC models on the road due to the 2008 GFC.

But it is important to note here that the researcher has the honor to present this NBKIs impact on the ER hypothesis four years before this Krugman’s conclusion. This implied that the researcher was, as still remains, dissatisfied with those old theories/hypotheses/models, which pushed the researcher of this thesis to choose this difficult and complicated branch of economic science. To only remind, Paul Krugman started the study of CCs as a result of the mismanagement of the fiscal sector of the economy that led to the expansion of DMS, via the printing press that caused lower interest rates to fall and the depreciation of the currency’s value relative to foreign ones.

<sup>366</sup> Ha-Joon Chang, “**Another Financial Crisis Looms If Rich Countries Can’t Kick Their Addiction To Cash Injection**,” *The Guardian*, Aug 30<sup>th</sup>, 2013, at: <http://www.theguardian.com/commentisfree/2013/aug/30/financial-crisis-looms-addiction-cash-injection>.

<sup>367</sup> Maurice Obstfeld, 2013, 146.

<sup>368</sup> It seems that Maurice Obstfeld revised his second currency model mentioned in the previous chapter. He agrees with krugman, as in footnote (53) above, that explosive foreign capital flows into or outside the country raises its vulnerability to a financial crisis and contagion [See: Maurice Obstfeld, 2013, 146]. This allows the researcher to state that there is a 4<sup>th</sup> generations of CC models due to the 2008 GFC. [See: Maurice Obstfeld, 2013, 146 – 147.] Researchers, therefore, need a longer view about CCs to analyze in order to build better theory about them [Moritz Schularick and Alan M. Taylor, November 2009, p.: 29].

<sup>369</sup> Luis A. V. Catão and Gian Maria Milesi-Ferretti, May 2013, p.: 27. Of course net ED is the accumulation of capital flows, which is equivalent to current account imbalance, gave rise to sizeable changes in the country’s net foreign asset (NFA) positions during past periods of time. It is important to note here that it is not net ED as per se that cause CC. It is its servicing burden that increases the vulnerability of a country to a CC.

<sup>370</sup> David Humes’ theory “On Trade” remains the greatest important reference for readers of who wants to specialize in this kind of field.

<sup>371</sup> China, Russia, Germany, Japan, and the other industrialized Asian countries, are the example cases, mainly after the 1997 – 1998 CCs. Each of their economy’s size is small relative to the USA’s and/or the Europe’s ones whose economic sizes affect the world economy when they are destabilized.

<sup>372</sup> R. A., “**Monetary Policy: An Unfinished Revolution**,” *The Economist*, Aug 9<sup>th</sup>, 2013, at: <http://www.economist.com/blogs/freeexchange/2013/08/monetary-policy-0>.

<sup>373</sup> The threshold for CC is the deliberate devaluation of Sudan’s ER by 13.86% or more. It is taken from its experimented history of devaluation as will be seen below.

<sup>374</sup> This thesis deals only the long, not short term, sharp devaluations, i.e. CCs, of the Sudanese currency.

<sup>375</sup> As implied previously in chapter 3.

<sup>376</sup> For example, United States of America, Japan, Germany, France, United Kingdom, Italy, Spain, and Canada contributed by 49.8% of the world GDP in 2012. If China, Brazil, Russian Federation, India, and Australia are added, it be seen that they contributed 70% of the world GDP in 2012 [For more details, see: The WB at: <http://data.worldbank.org/data-catalog/GDP-ranking-table>]. So, it can be seen how these weight can affect the small contributors to the World GDP.

<sup>377</sup> In this context it is important to mention that the April 2014 IMF Report (pp.: 113 – 115) finds that: -

*“External factors have contributed as much as or more than other, mostly internal, factors in explaining emerging markets’ growth deviations from the estimated average growth over the past 15 years—although there is considerable heterogeneity across time and across economies.” “... external factors induce significant fluctuations in emerging market economies’ growth, **explaining about half the variance in their growth rates. The payoffs from positive demand shocks are greater for economies that have strong trade ties with advanced economies and lesser for economies that are financially open. Adverse external financing shocks hit economies that are financially open, as well as those with limited policy space.**” That is, “... changes in external conditions have important effects on emerging market economies’ growth. Specifically, an unexpected 1 percentage point increase in U.S. growth raises emerging markets’ growth by 0.3 percentage point on impact, and the cumulated effects remain positive beyond the short term (more than one to two years).”*

*... “Similarly, stronger euro area growth boosts emerging market economies’ growth. Conversely, growth is hurt by tighter external financing conditions: a 100 basis point increase in the composite emerging market global sovereign yield reduces growth by ¼ percentage point on impact. On average, in the medium term, external shocks – stemming from external demand, financing costs, and terms of trade—explain about half of the variance in emerging market economies’ growth rates.” ... “Similarly, the adverse effects of global financing shocks are higher for emerging market economies that are typically more prone to capital flow volatility or have relatively higher current account deficits and public debt.” [Emphasis added]*

<sup>378</sup> It important to note, in advance, that this chapter does not distinguish between structural growth and cyclical growth. It relates the above issue to when changes in external conditions can trigger a financial and CC or not.

<sup>379</sup> The Economist, *“The Twilight of The Resource Curse?: Africa’s Growth Is Being Powered By Things Other Than Commodities,” African economic growth*, Jan 10<sup>th</sup>, 2015, at: <http://www.economist.com/node/21638141/print>.

<sup>380</sup> The IMF, October 2013, p.: 2.

<sup>381</sup> Célestin Monga, op. cit., p.: 3 – 4. [N.B.: The fact must have considered the historical evidence that even countries with a diversified export basket were dependent on both the state of the world economy and the country’s international political relationships. Despite the prevailing international trade’s rules of the game, such as the adopted (void) comparative advantage canon dogma, mainly in Sudan, any under-developing country’s development and growth rapidity and its financial position meant that it was limited by the quantity of net export revenues, if not capital inflows, that the world economy can allow during any period of time.]

<sup>382</sup> Brent Radcliffe, *“What Causes A Currency Crisis?” Investopedia*, July 09, 2013, at: <http://www.investopedia.com/articles/economics/08/currency-crises.asp>.

<sup>383</sup> The IMF, *“IMF Crisis Lending,” Fact Sheet*, at: <https://www.imf.org/external/np/exr/facts/pdf/crislend.pdf>.

<sup>384</sup> That is equivalent to a surge in NBKIs.

<sup>385</sup> Robert Skidelsky, *“Post-Crash Economics,” Project Syndicate*, Jun 18, 2014, at: <http://www.project-syndicate.org/print/robert-skidelsky-knocks-the-scientific-halo-off-mainstream-economists--teaching-and-research>.

<sup>386</sup> The chapter will not consider the confidence dimensions because there are indices for this variable in the case of Sudan.

<sup>387</sup> Tim Nibloc, op. cit., p.: 208. As it is well-known, depending on static cult believes and dynamic processes cannot easily be resolved. The latter must be controlled by the former and the development processes rapidity must be limited by the imposed static limits on the latter.

<sup>388</sup> This was Wingate Pasha, the Governor General, who repeated Cromer's 1907, program in his 1907 annual report (p.: 34), by stating that: -

*"The task which the Sudan Government has set itself to perform is primarily to confer the benefits of civilisation on the inhabitants by rendering secure, as far as is possible, their persons and their property; by improving communication across those wide stretches of desert or wilderness which intervene between the main centres of population and yields; by adding to the fertility of the naturally rich soil by means of artificial irrigation suitable to the varying conditions over so large and extent of a country; and finally by providing, in addition to the great Nile waterway and railway which bind Sudan to Egypt, a good port and harbor on the Red Sea, within easy access of the interior, whereby the inhabitants may be more furnished with their requirements from abroad, and may find outside markets for their natural products." [Emphasis Added]*

<sup>389</sup> Mohamed Hassan Fadlalla, "Short History of Sudan," p. 4, at: [https://books.google.com/books?id=dymO\\_3uCQagC&pg=PA5&lpg=PA5&dq=sudan%27s+1992+devaluation&source=bl&ots=bNHFSIELJI&sig=WQ3Lfqu6u4yd\\_qp5y5L6ShDrZ3PQ&hl=en&sa=X&ei=NwBvVZnsNomu7AaOnYOoBg&ved=0CEAQ6AEwBw#v=onepage&q=sudan's%201992%20devaluation&f=false](https://books.google.com/books?id=dymO_3uCQagC&pg=PA5&lpg=PA5&dq=sudan%27s+1992+devaluation&source=bl&ots=bNHFSIELJI&sig=WQ3Lfqu6u4yd_qp5y5L6ShDrZ3PQ&hl=en&sa=X&ei=NwBvVZnsNomu7AaOnYOoBg&ved=0CEAQ6AEwBw#v=onepage&q=sudan's%201992%20devaluation&f=false).

<sup>390</sup> Abdel Rahim Mirghani, op. cit., p.: 59.

<sup>391</sup> Similar countries as Sudan's case are so many around the world. For example, beside now Russia, Venezuela, and Gulf countries, Nigeria was a prominent case during the oil plummet since late 2014. For more details, see: The Economist Magazine, "The Nigerian economy Well below par: Over-Reliance On Oil Spells Trouble For Nigeria." *From The Print Edition*, Nov 29<sup>th</sup>, 2014, at: <http://www.economist.com/node/21635051/print>

<sup>392</sup> As will be seen in the next chapter, there are, of course, other than the price factor that can affect the receipts from such kinds of commodity stuff and end with the same result of somersaulting the country's ER and razing the central bank's shedding foreign-exchange NIR in its salvaging that ends with weak international financial position.

<sup>393</sup> This factual observation is supported by Dr. Ahmed ElSheikh M. Ahmed by stating that: -

*"Production of investment goods is almost negligible in developing economy of the Sudanese type. Consequently, realization of large proportion of gross domestic capital formation had always been inextricably linked to the importation of these investment goods."*

[For more details, see: Dr. Ahmed ElSheikh M. Ahmed, "An Import Demand Function for The Sudan Economy." 1990, p.: 9., at: - [http://jeas.cbe.uaeu.ac.ae/jeas1990\\_may/4.pdf](http://jeas.cbe.uaeu.ac.ae/jeas1990_may/4.pdf)].

<sup>394</sup> The latter sector was abandoned by the very old comparative advantage theory. This approach does not contradict Ricardo's dynamic competitive comparative advantage canon for the industrialization of, rather than dependence on the competitive natural features to approve, the static comparative advantage criteria. According to David Ricardo [1984, pp.: 81 – 84]: -

*"Under a system of perfectly free commerce, each country naturally devotes its capital and labour to such employment as most beneficial to each. This pursuit of individual advantage is admirably connected with the universal good of the whole. By stimulating industry, by rewarding ingenuity, and by using most officiously the peculiar powers bestowed by nature, it distributes labour most effectively and most economically. While increasing the general mass of production, it diffuses the general benefits, and bind together, by a common tie of interest and intercourse, the universal society of nations throughout the civilized world. It is this principle which determines that wine shall be made in France and Portugal, that corn shall be grown in America and Poland, and that hardware and other goods shall be manufactured in England" ... "Now suppose England to discover a process for making wine, so that it should become her interest to grow it than import, she would naturally divert a portion of her capital from foreign trade to home trade, she cease to manufacture cloth for exportation and grow wine for herself." ... "If the improvement making wine were of a very important description, it might become profitable for the two countries to exchange employment; for England to make all the wine, and Portugal all the cloth consumed by them; but this could be effected only by new distribution of the precious metal, which raise the price of cloth in England and lower it in*

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Portugal. ***The relative price of wine would fall in England in consequence of the real advantage from the improvement of its manufacture; that is to say, its natural price would fall, the relative price of cloth would rise there from the accumulation of money.***

(Emphasis added)

<sup>395</sup> Of course, this counterbalance influence of the industrial import-substitution sector is explicitly explained in Ricardo's theory in the "Foreign Trade" [See: David Ricardo, 1984, pp.: 81 – 84]. The existence of this sector in the Ricardo's foreign trade theory made the researcher to dub it the "dynamic comparative advantage theory."

<sup>396</sup> Ibid., p.: 2.

<sup>397</sup> But having own currency is also owning a financial strength. This is because it means that Sudan's government can't run out of money and that it can bail out its own domestic enterprises in different sectors during crises and recessions, if necessary.

<sup>398</sup> It is well-documented the domestic aggregate demand for money increases or decreases proportionally with the domestic price level. [For more details, see: Paul R. Krugman, Maurice Obstfeld, and Marc J. Melitz, 2012, p.: 358 – 359].

<sup>399</sup> Modified "Gresham's Law" states that: "*Bad money drives out good if their exchange rate is set by law.*" That is, the artificially overvalued money tends to drive an artificially undervalued money out of circulation due price control [See: [https://www.princeton.edu/~achaney/tmve/wiki100k/docs/Gresham\\_s\\_law.html](https://www.princeton.edu/~achaney/tmve/wiki100k/docs/Gresham_s_law.html)]. Accordingly, it can be restated in the context of this research's ER crisis that the government's debased "*bad domestic money drives foreign good money out of circulation.*" For good application to recent times see: The Free Encyclopedia (Wikipedia), at: [http://en.wikipedia.org/wiki/Gresham's\\_law#Examples](http://en.wikipedia.org/wiki/Gresham's_law#Examples).

<sup>400</sup> See: pp: 1 – 3 and 6.

<sup>401</sup> The Sudanese participants at the "Development Conference," which was held by the University of Khartoum in 2013, concluded that: -

***"Sudan has not been able to transform its economic structure in the last five decades."*** [Emphasis added]

لمزيد من التفاصيل يمكن الرجوع إلى: جامعة الخرطوم ووزارة المالية والاقتصاد الوطني والبنك الدولي، الخرطوم، 30 – 31 يناير ٢٠١٣ م، ص: 4.

This research will adopt this fact as its real assumption

<sup>402</sup> See: Medani M. Ahmed, 2009, p.: 16.

<sup>403</sup> Fortunately enough, UNCTAD, in its 2013 Trade and Development Report, that export oriented strategies alone are not viable and reliable for sustained growth and prosperity in the long-run. It assumes that economies will perform better with more balanced strategies. As a result, it now recommends for a shift of focus towards "Domestic-Demand Driven Development Strategy" instead. Of course, UNCTAD's call for shifting the focus of development strategies to domestic markets does not mean minimizing the importance of the role of exports. Exports could actually expand further if several trade partners were to achieve higher economic growth at the same time [For more details, see: UNCTAD Press Release, 12 September 2013, at: <http://www.unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=147>].

<sup>404</sup> The second graph can be found in: <http://www.economist.com/blogs/buttonwood/2014/11/deflation-and-markets>.

<sup>405</sup> As set by Wikipedia: -

***"Current GDP per capita of Sudan grew 46% in the Sixties reaching a peak growth of 170% in the Seventies. But this proved unsustainable and growth consequently scaled back to 34% in the Eighties. Finally, it shrank by 26% in the Nineties."***

[For more historical summary details, see: Wikipedia, "**Sudan Economy**," at: [https://en.wikipedia.org/wiki/Economy\\_of\\_Sudan](https://en.wikipedia.org/wiki/Economy_of_Sudan).]

<sup>406</sup> According to Ben S. Bernanke, DMS expansion is a *declaration of a currency war*. He defined a currency war as the case:

***"... when a country eases monetary policy specifically to depreciate its currency, with the ultimate objective of cheapening its exports and gaining unfair competitive advantage in international trade."*** [Emphasis Added]

See: Ben S. Bernanke, "What did you do in the currency war, Daddy?," *Brookings Institution*, January 5, 2016, at: <http://www.brookings.edu/blogs/benbernanke/posts/2016/01/05currencywardaddy?rssid=Ben+Bernanke>.

<sup>407</sup> Paul Krugman and Robin Wells, 2009, p.: 753.

<sup>408</sup> The relationship between the annual changes in both, the GDP per-capita and the real national effective ER, is also inverse. It will become clearer in the following chapter when the impact of ER is linked to the GDP per-capita by partial periods.

<sup>409</sup> Anne Krueger, "Argentina's Sovereign Bondage," *Project Syndicate*, July 9<sup>th</sup>, 2014, at: <http://www.project-syndicate.org/print/anne-krueger-examines-the-fallout-from-the-us-supreme-court-s-recent-ruling-in-favor-of-bondholders>.

<sup>410</sup> Yes, 60%, on average are in local currency. But the problem lies in the foreign goods and services that government purchases from the market. In case of foreign currency shortages, to feed domestic markets with foreign goods and services, the governments always crowd-out private consumption.

<sup>411</sup> A rapid augmentation in debt in a terse time-gap has historically been a *good predictor* of financial turmoil, although *there is no height that mechanically triggers crises*. [See: Finance and economics, "Deleveraging Delayed: Credit Growth Is Still Outstripping Economic Growth," *The Economist*, Oct 24th, 2015, at: <http://www.economist.com/node/21676837/print>]

<sup>412</sup> Unfortunately, this field of CC experiences and knowledge is very rare in Sudan to the extent that they everybody seems to feel that they are non-existent. Capacity building in this area of specialization and knowledge is extremely in dead-need.

<sup>413</sup> This period is brought here as resemblance for the nature of financial crises in Sudan as it happened during the 1930s Great Depression [To avoid duplication, pls. see: G. N. Sanderson, 1985, pp.: 111 – 150 and Prof. M. Omer Beshir, 1974, p.: 149 - 152 (In Arabic)]. It seemed, to great extent, to resemble all financial crises that followed during the period under study. It also aims at proving that the colonial paradigm, as replicated, after independence, replicates to the same kind of the financial crises by the same forces. It says that there is no significant economic development being achieved.

<sup>414</sup> Paul Krugman and Robin Wells, 2009, p.: 760.

<sup>415</sup> The WB, Development Report, 1985, p.: 70.

<sup>416</sup> Kindleberger et. al., op. cit.

<sup>417</sup> محمد المكاوي مصطفى، 2004م، ص: 76. ويعتبر الجدول رقم: 4.4 بالملحق نموذجاً لإعتماد ما سمي بالتنمية الإقتصادية والإجتماعية في السودان العهد الإستعماري. أيضاً، لمزيد من التفاصيل في تمويل مشاريع التنمية الاساسية في العهد الاستعماري للسودان حتي تاريخ الإستقلال، يمكن الرجوع الى: وائل فهمي بدوي محمد، 2000م، الفصل الثالث.

<sup>418</sup> د. محمد عمر بشير، 1987م، ص: 149.

<sup>419</sup> Sidgi Awad Mohanmdali Kabbalo, June 1994, p.: 44.

<sup>420</sup> Prof. Mohamed Omer Bashir, 1974, pp.: 191 – 192. Of course that must have had their negative impact on the modern sector's GDP's growth rate under the ruling public sector.

<sup>421</sup> وزارة المالية والإقتصاد، ميزانيات السودان، المجلد الأول، مرجع سبق ذكره، ص: 36.

<sup>422</sup> Cotton has played a major role in these developments. According to a recently completed national income study, the production of cotton and cotton seed amounted in 1955-56 to only 13% of GNP [IBED, 1960, p.: 1]. That is more than one fifth of the gross national income.

<sup>423</sup> Ibid.

<sup>424</sup> انظر، على سبيل المثال: محمد المكاوي مصطفى، 2004م، ص: 76.

<sup>425</sup> انظر، على سبيل المثال: د. محمد عمر بشير، 1987م، ص: 149.

<sup>426</sup> يقول السيد/ وزير المالية والإقتصاد في خطاب ميزانيته للعام التالي: 1959/1958م، بان الموازنة في ذلك العام شهدت عجزاً لأول مرة منذ عام 1932م. [راجع: وزارة المالية والإقتصاد، ميزانيات السودان، 1956/1955 – 1965/1964، ص: 79].

<sup>427</sup> Wile E. Coyote was the famous Warner Brothers character ever in pursuit of Road Runner. One regular bit of shtick was having him run off high mountain cliffs and proceeds quite away in thin air, falling only when he looked down and saw the gulf or rocks' sharpened heads below him.

<sup>428</sup> IBRD, June 6 1960, p.: i. As mentioned before, cotton revenues dominated about 70% of total exports and about 40% of the Budget revenues [IBRD, June 5, 1961, p.: 1]. This implies that any fall of the income from export revenues, everything else remains equal, must have an amplified negative impact on the external and internal balances.

<sup>429</sup> The first democratic government was successful in paying back the entire Egyptian colonial debts on Sudan in 1957. What remained in 1957 was the US\$ 11.4 million owed to the British who didn't urge the ruling Sudanese government of the time to immediately, as they did with the Egyptian, to repay it in full [Abdel Rahim Mirghani, op. cit., p.: 12]. It was actually fully paid by 1969 [أنظر د. محمد خير أحمد الزبير، 2009م، ص: 45].

<sup>430</sup> Economic Survey, 1958, p.: 33. Besides, the UK lent Sudan 5 million sterling pounds to alleviate the difficulties of foreign currency after March 1957.

<sup>431</sup> High-debt countries that borrow in foreign currencies must face high borrowing costs during hard times. To avoid aftermath bankruptcy, debtors must pay according to the scheduled table for debt servicing regardless of economic and financial conditions [See: Money, Banking and Financial Markets, "**Debt, Great Recession and the Awful Recovery**," July, 18<sup>th</sup>, 2014, at: <http://www.moneyandbanking.com/commentary/2014/7/17/debt-great-recession-and-the-awful-recovery>].

<sup>432</sup> وزارة المالية والإقتصاد، ميزانيات السودان: 1955/56 – 1964/65م، مرجع سبق ذكره، ص: 79.

<sup>433</sup> د. محمد عمر بشير، مرجع سبق ذكره، ص: 266.

<sup>434</sup> What actually remained after the repayment of the majority of the colonial debt in 1957 were only US 4 million. For more details, see: Abdel Rahim Mirghani, op. cit., p.: 12.

<sup>435</sup> Sudan's Economic Survey, 1959, p.: 38.

<sup>436</sup> IBRD, June 6, 1960, Summary and Conclusion, p: i.

<sup>437</sup> Cotton prices decline, accompanied with a poor cotton output in 1957/58 and selling failure of the 1956/57 and 1957/58 production, were enough to create a crisis for Sudan undiversified unindustrialized commodity export-oriented economy. The cotton output of 1957/58 was 1061,000 kantars, less than half the output of 1956/57 and about 60% of the average cotton output for the years 1951/52-1955/56. In addition by the beginning of 1958 there were 494,000 bales of cotton unsold and only 231,000 bales of that had been sold by November 1958, (Ministry of Finance and National Economy, Economic Survey, Different Issues).

<sup>438</sup> It seems that Europe's recession surprised Sudan after the repayments of significant portion of the colonial debts at the beginning of 1957 to complement the realized political independence with an economic independence.

<sup>439</sup> Of course, it is fully right to suppose that any real development plan must take have had taken into consideration the disentanglement of this unfavorable link, between the foreign and budget sectors, on the overall national aggregate demand, as the main sources of incomes to citizens and the national budget, for sustaining the stabilization of the economy's own-powers for sustained growth of production and welfare in the long run. It is well known, for example, that the contribution of the USA's external sector on its nation economy is the least.

<sup>440</sup> There are no annual percentage rates that show how much gap did the fall in the export revenues created in the budget revenues. At the same time, it is not clear by how much increased tax rates or borrowing from the banking and the central banks helped in filling that gap. As a result, it will be considered that the budget deficit is a proxy that was filled by both.

<sup>441</sup> IBRD, June 5, 1961, p.: 1. By late 1958/59, the new military government borrowed from the WB for development investments and broke the system of minimum export ("reserve") prices for Sudanese cotton. As can be seen from the figures above, the

economy was stimulated and led to rapid recovery to all the macroeconomic sectors. In addition, reducing the cotton minimum prices, as a form of international price-devaluation of the dominant commodity in the export sector, increased the export revenues and recovered the NIR. As can be seen from Table (1) above, those policy actions led to an impressive improvements in the NIR that saved the committed “fixed, but adjustable ERR” from falling into crisis. Of course that helped in avoiding the inherited undeveloped economy and its currency from the full freefall into further crisis.

<sup>442</sup> IBRD, 1958, Summary and Conclusion, p: i.

<sup>443</sup> Sudan’s Economic Survey, 1959, p.: 38.

<sup>444</sup> See: G. N. Sanderson, 1985 paper.

<sup>445</sup> لمزيد من تفاصيل تمويل مشاريع التنمية برؤوس الأموال الأجنبية، أنظر: د. محمد خير الزبير، 2009م، بالفصل الثالث. ويحتوي ذلك الفصل على توثيقاً جيداً لكل مشاريع التنمية الاقتصادية والاجتماعية خلال 1956 – 2006م لما بعد الإستقلال السياسي للسودان في عام 1956م. بالإضافة إلى ذلك، يمكن الرجوع، فيما يتعلق بإنشاء وتأسيس مشاريع الإنتاج الصناعية الممولة من الخارج لإحلال الواردات خلال السبعينيات، على سبيل المثال، إلى: Bedour Osman Abu 156 - 154. وقد وثقت أيضاً للفترة الأستعمارية وعقد الستينيات العديد من المشاريع التي اعتمدت في إنشائها على التمويل الأجنبي. Affan, 1985, pp.:

<sup>446</sup> It is important to note here that the ideological “Washington [neoliberal] Consensus” was stopped to be dealt with since late 1990, due to the tough criticisms from the USA, the BWIs, other Western and 3<sup>rd</sup> World economists [Refer to:

1. وكالات، "مديرة صندوق النقد الدولي تنبأ من سياسات الإصلاح الهيكلي" صحيفة حريات، 14 ابريل، 2014م، بالموقع التالي:

[www.hurriyatsudan.com/?p=149325](http://www.hurriyatsudan.com/?p=149325)

2. John Williamson, September 2003, pp.: 10 – 13].

In this context, it is important to stress the fact that the researcher has nothing to do with whatever adopted economic ideologies by anyone ruling party. Moreover, the researcher has never thought to have any kind, or even a degree, of membership in anyone of the available Sudanese party. The concentration of the researcher is only on the laws of the Sudanese economy that direct the market forces, whether under liberalism or otherwise, to realize whatever positive or negative the macroeconomic equilibrium.]

<sup>447</sup> The WB Report, 2009, p.: 7.

<sup>448</sup> Richard Baldwin, “The Great Trade Collapse: What Caused It And What Does It Mean?,” *VOX Website*, 27 November 2009, at: [www.voxeu.org/article/great-trade-collapse-what-caused-it-and-what-does-it-mean](http://www.voxeu.org/article/great-trade-collapse-what-caused-it-and-what-does-it-mean).

<sup>449</sup> *The Economist*, “**Currencies: The Weak Shall Inherit The Earth.**” Oct 6<sup>th</sup>, 2012, at: [www.economist.com/node/21564210/print](http://www.economist.com/node/21564210/print). Of course, the global financial crises led to international commodity prices, as seen above, and capital inflows to fall and therefore domestic incomes.

<sup>450</sup> The WB Sudan’s Country Memorandum, Dec. 2009, p.: 16.

<sup>451</sup> Ibid., p.: 18.

<sup>452</sup> By the way, The Gulf region suffer from the same phenomenon. Their massive NIR and other foreign assets, as the case of today’s China, support them to maintain a pegged ERR.

<sup>453</sup> The surplus in the current account of 2009 was the result of increasing domestic tax rates, charges, VAT, and the devaluation of the currency. It was due to a tough cold turkey fiscal policy.

<sup>454</sup> This curve implies what was concluded by the famous “Swan Diagram” for domestically produced goods and for international payments, as determined by the real ER, i.e. the nominal ER times the ratio of prices at home and abroad.

<sup>455</sup> Print Edition, “African Economic Growth: The Twilight Of The Resource Curse?,” *The Economist*, Jan 10<sup>th</sup>, 2015, at: <http://www.economist.com/node/21638141/print>.

<sup>456</sup> Because the Sudanese undiversified unindustrialized economy remained weak, the Sudanese pound remained becoming stronger because of deliberate, due to some Sudanese economists’ cult-Belief, in attracting foreign savings as long as there remained a lot



of rich foreign countries and citizens want to park their money in Sudan. And as long as they think Sudan remains safer they will, for sure, invest in Sudan more. But the serious problem remains in forcing Sudan’s (intermediate goods) exports more expensive and (final goods) imports cheap. As a result of sustaining the underlying policies for such results that generate accumulation of ED stock. Everything else remains equal, mainly the structure of the Sudanese economy, Sudan must, therefore, remain forever hungry for positive NBKIs. In addition, the assumed growth, of the kind and pace that was targeted cannot be realized for all the people of neither today or in the future. As mentioned above, there remain Sudanese believers, since the launching of the 1960s “Ten-Year Plan,” in supporting Sudan’s growth of GDP by calling foreign savings in the economy for development purposes. But they didn’t establish any better solution than devaluation for the overvalued Sudanese pound.

<sup>457</sup> IMF, “Sudan: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding,” *IMF Update*, Khartoum, March 7<sup>th</sup>, 2014, at: <http://www.imf.org/External/NP/LOI/2014/SDN/030714.pdf>

<sup>458</sup> The IMF, “Sudan: Staff Monitored Program—Staff Report; Press Release; And Statement By The Executive Director For Sudan,” *Country Report No. 14/203*, July 15, 2014, at: <http://www.imf.org/external/pubs/cat/longres.aspx?sk=41746.0>

<sup>459</sup> Buttonwood, “Why Currency Volatility Has Got Worse,” *The Economist*, Feb 3rd 2015, at: <http://www.economist.com/node/21642003/print>.

<sup>460</sup> IMF, “Sudan: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding,” March 7<sup>th</sup>, 2014, op. cit.

<sup>461</sup> IMF, IMF Country Report No. 14/203, p.: 4, 7, and, 17.

<sup>462</sup> Blanchard, O., J. Ostry, A.R. Ghosh, and M. Chamon, 2015, conclusions.

<sup>463</sup> It is important to note from the start that the details causing CCs in Sudan during the studied episodes in this chapter are too much extensive. As result, what is included in this chapter are only a summary of what is considered as the most important details for fulfilling CCs in Sudan.

<sup>464</sup> For more details, see: Robert Skidelsky, 2010, p.: 113 – 123. The Policy Regime Shift details are summarized in the comparative table below: -

Table 5.4: The Post WWII Keynesian and Post 1973 Adopted Macroeconomic Policies and Used Indicators

School	Objective	Policy Instrument(s)	Indicator
Keynesian	Full Employment	Demand Management (Mainly Fiscal)	Low and Declining Unemployment Rates
Washington Consensus	Price Stability	Interest Rate	Low and Declining Inflation Rates
Keynesian	BoPs Adjustments	Fixed, but Adjustable, ERR	Sustainable EDS
Washington Consensus		Flexible/Floating, but Manageable, ERR	Internal Devaluation For Sustainable EDS
Keynesian	International Trade Promotion	Tariff Reduction, Quota Policy Removal, etc.	Higher GDP Shares
Washington Consensus			
Keynesian	Economic Development	Official Assistancess	Sustainable Higher Productivity Rates
Washington Consensus		Loans	
Keynesian	Government Size	Government Investment	Relatively Higher GDP Growth Rates
Washington Consensus		Privatization and Private Sector Investment	

Source: Robert Skidelsky, 2010, p.: 114 and 115

<sup>465</sup> The 1970s and 1980s were an era of laissez-faire economic ideas ascendancy that was promoted by the Chicago school. [See: Paul Krugman, “The M.I.T. Gang,” *The New York Times*, July 24<sup>th</sup>, 2015, at: <http://www.nytimes.com/2015/07/24/opinion/paul-krugman-the-mit-gang.html?partner=rss&emc=rss>] and [R.A., “How Capital

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Controls Work,” *The Economist*, Jun 29<sup>th</sup>, 2015, at: <http://www.economist.com/node/21656439/print>]. It is important to consider their insignificant growth since the “2008 GFC” and its aftermath recession to date.

<sup>466</sup> Maurice Obstfeld, 2/1985, p.: 369.

<sup>467</sup> That was the shift from *Post WWII Keynesian to Post 1973 Liberalization* macroeconomic policies regimes, well renowned by the “*Washington Consensus*.” [For more details, see the table and comments on figures in: Robert Skidelsky, 2010, p.: 113 – 123].

<sup>468</sup> The 1973’s monetary and ERR liberalization aftermath was the most distinctive part of post WWII history. Since 1973, the world’s advanced countries adopted a temporary unmanaged floating ERR that many economists of the time had advocated. They targeted letting individual nations to reconcile the often conflicting requirements of internal and external balance under the world’s economy “Stagflation” destabilizing pressures. Post-1973 “*managed floating ERRs*” was described by Maurice Obstfeld as follows: -

*“In spite of a surprising short-run volatility in exchange markets under the interim system, the consensus among policymakers at the end of 1975 was that floating rates had worked reasonably well. This consensus found expression in the joint declaration following the November 1975 Rambouillet economic summit, which committed participating monetary authorities to “counter disorderly market conditions, or erratic fluctuations, in exchange rates,” but made no provision for a return to fixed parities. Agreements at Rambouillet led directly to the formalization of the floating rate system through amendment of the Articles of Agreement of the International Monetary Fund (IMF) at Kingston, Jamaica, in January 1976. A new Article IV dealing with exchange rate arrangements implicitly sanctioned floating, subject only to broad prohibitions against actions detrimental to “financial and economic stability. The sharp real depreciation of the dollar between 1976 and 1979 and the even larger real appreciation between 1979 and 1985 have led many to modify whatever sanguine views of the floating rate system they may have held in the mid-1970s. Labeled misalignments, these massive medium-terms wings in floating rates are increasingly viewed as a source of resource misallocation, a spur to protectionism, and an impediment to prompt current account adjustment.”*

Practically, that was a kind devaluation, more than depreciation, of their currencies. [For more details, see: Maurice Obstfeld, 2/1985, p.: 369].

<sup>469</sup> According to Maurice Obstfeld (2:1985, p.: 369), the managed floating regime was, actually, adopted since the November 1975 Rambouillet economic summit. In that summit it was committed by the participating monetary authorities to “*counter disorderly market conditions, or erratic fluctuations, in exchange rates.*” It made no stipulation to restore fixed parities. They also wanted the participants’ commitment to avoid any “hidden/undeclared” “Beggars thy neighbor” war too. On that basis, the researcher named that regime as “*floating, but managed, ERR*” in contrast to the “*fixed, but adjustable, ERR.*”

<sup>470</sup> The Economist, “Ending the Debt Addiction: A Senseless Subsidy,” *The Economist*, May 16<sup>th</sup>, 2015, at: <http://www.economist.com/news/briefing/21651220-most-western-economies-sweeten-cost-borrowing-bad-idea-senseless-subsidy>. See also, the following website: <http://www.economist.com/blogs/buttonwood/2014/11/deflation-and-markets>.

<sup>471</sup> Sir Arthur Lewis, “The Slowing Down of the Engine of Growth,” *Lecture to the memory of Alfred Nobel, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel*, December 8<sup>th</sup>, 1979, at: [http://www.nobelprize.org/nobel\\_prizes/economic-sciences/laureates/1979/lewis-lecture.html](http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1979/lewis-lecture.html).

<sup>472</sup> Paul Krugman, “Iceland, Ireland, and Devaluation Denial,” *The New York Times*, November 27, 2015, at: [http://krugman.blogs.nytimes.com/2015/11/27/iceland-ireland-and-devaluation-denial/?\\_r=0](http://krugman.blogs.nytimes.com/2015/11/27/iceland-ireland-and-devaluation-denial/?_r=0).

<sup>473</sup> C. W., “Africa And Commodity Prices: No Longer The Kiss Of Death?,” *The Economist*, April 23<sup>rd</sup>, 2015, at: <http://www.economist.com/node/21649438/print>.

<sup>474</sup> Here, and thereafter, ICIP will be used interchangeably as the “Influential Commodity’s International Prices” and as the “Influential Cotton’s International Prices.

<sup>475</sup> Leaders, “Development: The two Mexicos,” *The Economist*, Sep 19<sup>th</sup> 2015, at: <http://www.economist.com/node/21665027/print>.

<sup>476</sup> The Economist, “Inflated Claims: Deflation In China Has Relatively Little Impact Abroad,” *Finance and economics*, Sep. 5<sup>th</sup> 2015, at: <http://www.economist.com/node/21663239/print>.

<sup>477</sup> Export revenues can be squeezed by the appreciation of the USA dollar. [For more details, see: Pablo Druck, Nicolas E. Magud, and Rodrigo Mariscal, IMF WP/15/179, July 2015].

<sup>478</sup> For more details, see: Pablo Druck, Nicolas E. Magud, and Rodrigo Mariscal, IMF WP/15/179, July 2015.

<sup>479</sup> As will be clear in this and the previous chapters, the Sudanese consecutive governments were adopting the colonial development paradigm. Since the expansion of the Gezira scheme’s productive-base by the Managil extension for increasing the production and exportation of cotton raw-materials, it can be found the consecutive plans were doing the same thing. For example, the 1972 Phased Action Plan and the 6-year Plan were trying to make the cotton-specialized Sudan the Arab’s “Bread Basket.” The 1990’s Strategic Comprehensive 10-year plan ended with the production and exportation of oil for the rest of the world. After “The Republic of Sudan” Cessation in 2011, different stabilization program remained targeting the production and exportation of the raw “Gold and Livestock” to the rest of the world. So, yes, the Sudanese people were consuming part of those export commodities, but there no one project that is well-known or famous for the exclusive production to the Sudanese and the rest of the world consume part of it. That is, nothing was of equal significance can be observed to be established by the consecutive governments by same sizes, quantities, qualities, and prices for the exclusive production to the Sudanese people.

<sup>480</sup> مع ملاحظة ان الدول العربية هي دول غير صناعية وغير متنوعة وتعتمد على انتاج وتصدير سلعة خام رئيسية وحيدة في دخلها القومي. بمعنى انها تتأثر سلبيا وايجابيا بالتقلبات الاقتصادية بالدول المتقدمة كالسودان. [راجع: المؤسسة العربية لضمان الإستثمار، سلسلة الدراسات القطرية، 1985م، ص: 79].

<sup>481</sup> Sudan Central Bank, memo, 2015.

<sup>482</sup> Although Dr. Abdel Rahim Mirghani admitted, based on “*Studies of history of development ...*,” in his famous 1983 book, “... *that there can be development without foreign capital inflow,*” he stated that it was decided to resort to foreign capital inflows. See: Abdel Rahim Mirghani, 1983, p.: 143.

Yes, in the very early stages of development, the hinted that too much national investments were chasing too few national savings. Consequently, the plan’s need for NBKIs, as the following plans, becomes indispensable for importing foreign physical capital. It didn’t define a critical time to get rid of it or made a signaling it as a temporary measure all along the big expansion of the economy’s base. In other words, it didn’t explicitly determine when it would be stopped or to state explicitly when the economy’s financial capacities would become strongly stabilized.

<sup>483</sup> Despite the conflicts among the plan’s objectives, this is just a literal statement of the “Ten Year Plan of Economic and Social Development: 1961/62 – 1970/71” objectives [For more details, see: Abdel Rahim Mirghani, 1983, p.: 38].

<sup>484</sup> Abdel Rahim Mirghani, 1983, p.: 39 [and .41 ص: 1985م، ص: 41].

<sup>485</sup> According to A/Rahim Mirghani (1983, p.: 143), as one of the (1961/62 - 70/71) plan’s core designers, was: -

“... *to develop the country through the expansion of the already developed centers rather than through an effort to raise all parts of the country equally. Viewed from another angle the plan tends to concentrate the resource of the country on an improvement and expansion of the modern part of the economy rather than on an equal rise in the modern and traditional parts.*”<sup>485</sup> In addition, “... *the pace of development that outstrip the population explosion, perceptibly improve living standards, and provide a regular and a fairly high rate of growth, could hardly be achieved without appreciable injections of capital from abroad.*” [Emphasis Added]

<sup>486</sup> Remember that: to support the industrialization of their home, import-substitution, and export industries, during the gold-standard regime of fixed ER in their early stages of industrial development, the (now industrial) major ex-colonizing European nations minimized their imports to 10% or less of their GDPs from their colonizing (now) industrial competitor nations. Most colonies were tolerating almost most prices and wage flexibility, as was the case of Sudan during the Great depression. That supported the gold standard to long-live in supporting the accompanied “*fixed ER*.” As hinted by Milton Friedman:

“... the gold standard also had its costs. ... only because governments were small (spending in the neighborhood of 10 percent of the national income rather than 50 or more percent as now), prices and wages were highly flexible, and the public was willing to tolerate, or had no way to moderate, wide swings in output and employment.”

[See: Milton Friedman, “The Euro: Monetary Unity To Political Disunity?,” *Project Syndicate*, August 28<sup>th</sup>, 1997, at: <http://www.project-syndicate.org/print/the-euro--monetary-unity-to-political-disunity>.]

Hayek mentioned that, during the industrial revolution, the (now) advanced countries adopted to the “gold standard” to limit the monetary authorities’ power to avoid inflation, which negatively impact ER’s real value, exports, and imports, of course. As he put it: -

“*This history, indeed, has been largely a history of inflation; significantly, it was only during the rise of the prosperous modern industrial systems and during the rule of the gold standard, that over a period of about two hundred years (in Britain from about 1714 to 1914, and in the United States from about 1749 to 1939) prices were at the end about where they had been at the beginning. During this unique period of monetary stability the gold standard had imposed upon monetary authorities a discipline which prevented them from abusing their powers, as they have done at nearly all other times. Experience in other parts of the world does not seem to have been very different: I have been told that a Chinese law attempted to prohibit paper money for all times (of course, ineffectively), long before the Europeans ever invented it!*” [Emphasis Added]

[See: Friedrich August Hayek, “Choice In Currency: A Way To Stop Inflation,” pp.: 7 – 8, at: <http://www.iea.org.uk/sites/default/files/publications/files/upldbook409.pdf>].

<sup>487</sup> باعادة النظر في الرسم البياني رقم: 5 بالفصل السابق، وبغض النظر عن ما ذكره بروفييسور عبد الرحيم ميرغني عن معنى التوسع في هيكل الإقتصاد السوداني الذي بالتنوع (أنظر ص: 3 بمقدمة كتابه أعلاه)، يؤكد تيم نبلوك (يناير 1994، ص: 207) كانت بسبب إتجاه الدولة نحو التوسع في، وليس التغيير الجذري لـ، هيكل إقتصاد الإستعمار الموروث، فيما بعد الإستقلال، بسبب تخوف من الآثار السلبية لذلك التغيير الهيكلي في الإقتصاد على أصحاب المصالح المكتسبة في المدى البعيد، خاصة تلك بنت مصالحها بدعم من ذلك الإستعمار نفسه، ومقاومتها للتغيير في الهيكل الإقتصادي الإستعماري الموروث. ولذلك: -

“*اتجهت السياسة الإقتصادية في الفترة من 1956 إلى 1969 إلى التوسع داخل نفس الإطار الذي كان سائداً قبل عام 1956* ... [التسميك مضاف]

وهذا بالفعل ما توكده أهداف الخطة العشرية أعلاه.

<sup>488</sup> Artificially made CAD, via importing NBKI, was intended to meet the governments’ decision to finance what they believed to be their development investments. They were able to do this in part by the use of capital controls policies that inhibit offsetting private capital inflows; but the key point is that Sudan was forced to adopt a de facto policy of forcing NBKIs to the country. That meant there was a deliberate (negative) shift in the natural equilibrium current account balances caused by governments’ exogenous decisions. So, by importing foreign savings from the rest of the world, and creating or deteriorating a CAD *artificially*, Sudanese governments were making all the Sudanese citizens, despite the national income distribution, *artificially* well-off. Those (desired) *artificial* surpluses in the BoPs on the capital accounts were actually the driving force for supporting a strong Sudanese pound relative to foreign currencies. A strong Sudanese pound is the mechanism through which Sudan’s capital-import policy gets translated into physical imports of goods and services. NBKIs were therefore a means to weaken domestic committed ER of the Sudanese pound relative to the strengthened demand for foreign currencies. Government currency intervention, in which the Sudanese government buys foreign assets for domestic assets, on a massive scale weakens the committed ER. In other

words, it was the mechanism through which Sudan's capital-import policy was getting translated into physical imports of goods and services.

<sup>489</sup> Abdel Rahim Mirghani admitted, based on "*Studies of history of development ...*," in his famous 1983 book, "... *that there can be development without foreign capital inflow.*" [See: Abdel Rahim Mirghani, 1983, p.: 143.] But it is important to note that it is to be expected, of course, that the international financiers can, and will, not pour limitless amounts of money into any country without setting conditions as external and internal imbalances remained deteriorating, in their relationships to diminishing NIR relative to the swelling DMS.

<sup>490</sup> Exports, capital imports, and domestic credit expansion have an identical effect on the DMS, income, and imports, and may be considered in the aggregate as gross money creation,  $Q.4$  Imports,  $M$ , constitute a drain on the DMS and  $(Q - M)$  therefore represents net money creation or the net rate of increase of the DMS. [For details, see: J. Marcus Fleming and Lorette Boissonneault, March 1968, pp.: 227 – 228.]

<sup>491</sup> See the previous chapter for the committed rate.

<sup>492</sup> Keynes considered such an investment program as long term mean to maintain a full employment level, rather than just an economic and social transformation processes, in the face of volatile environment. As he put: -

*"It seems to be agreed today that the maintenance of a satisfactory level of employment depends on keeping total expenditure (consumption plus investment) at the optimum figure, namely that which generates a volume of incomes corresponding to what is earned by all sections of the community when employment is at the desired level. ... The problem of maintaining full employment is, therefore, the problem of ensuring that the scale of investment should be equal to the savings which may be expected to emerge under the above various influences when employment, and therefore incomes, are at the desired level. Let us call this the indicated level of savings."*

[See: J.M. Keynes, "The Long Term Problem of Full Employment," *Ecological Headstand*, May 1943, at:

<http://ecologicalheadstand.blogspot.com/p/long-term-problem-of-full-employment.html>].

<sup>493</sup> Yes, Big Push and Balanced Growth development theories warned to take the risk making population growth to surpass real GDP growth rate. Latin American and African countries under-developed stages of today validated their unattainable goals from practical point of view. Rapidity in improving productivity of existing productive capacities proved to be the crux principle for gradual rapid structural changes of the underdeveloped structure. Arthur Lewis and Albert Hirschman proved to be more practical. Furthermore, the economy's problem is all about developmental structural changes for rapid GDP growth at whatever costs. It is, in addition, about macroeconomic stability for stable GDP growth at the least costs.

<sup>494</sup> That was the experience of different countries of the world. As put by Joseph Stiglitz: -

*"Austerity had failed repeatedly, from its early use under US President Herbert Hoover, which turned the stock-market crash into the Great Depression, to the IMF "programs" imposed on East Asia and Latin America in recent decades. And yet when Greece got into trouble, it was tried again. ... Keynesian economists predicted that the austerity that was being imposed on ... crisis countries would fail. It would stifle growth and increase unemployment – and even fail to decrease the debt-to-GDP ratio."*

<sup>495</sup> Joseph Stiglitz, "To Choose Austerity Is to Bet It All on the Confidence Fairy," *The Guardian*, 19 October 2010, at:

<http://www.theguardian.com/commentisfree/cifamerica/2010/oct/19/no-confidence-fairy-for-austerity-britain>.

<sup>496</sup> د. سيد نميري، 1978م، ص: 27 – 33. ويضيف تيم نبلوك (1994م، ص: 187) بملاحظته التالية: -

*"تميز التاريخ السياسي للفترة ما بين 1956 – 1969م بخاصية مركزية مفادها ان السلطة والنفوذ السياسي ظلت بايدي المجموعات التي استفادت من عملية توزيع الموارد التي جرت ابان الحكم الثنائي. وكما هو متوقع فان الذين رسموا سياسة الحكومة لم يكونوا حريصين على احداث اصلاح راديكالي جذري على*

*بنیان الاقتصادي والاجتماعي."*

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Moreover, the inherited international trade strategy and directions from the colonial era remained unaltered during 1956/70. According to Prof. Ali Abdalla Ali: -

*“The economic policy during the first fourteen years after independence remained mercantilist, which was the same as before independence. The mercantilist direction was maintained in order to have a good relationship with the world market system, especially the United Kingdom.”*

[See: Prof. Ali Abdalla Ali, “The Sudanese Economy Since 1956: An Overview,” in “*Kenana Handbook Of Sudan*,” Edited by Peter Gwynvay Hopkins, at: [https://books.google.com/books?id=a4q3AwAAQBAJ&pg=PA588&lpg=PA588&dq=a+handbook+of+kenana+project&source=bl&ots=c1T7JPwapu&sig=PCIui2\\_6uRf60L-iEUoOXzZY05o&hl=en&sa=X&ved=0CCIQ6AEwAGoVChMI\\_Iaog5j-igIVQxcsCh3ExAvP#v=onepage&q=a%20handbook%20of%20kenana%20project&f=false](https://books.google.com/books?id=a4q3AwAAQBAJ&pg=PA588&lpg=PA588&dq=a+handbook+of+kenana+project&source=bl&ots=c1T7JPwapu&sig=PCIui2_6uRf60L-iEUoOXzZY05o&hl=en&sa=X&ved=0CCIQ6AEwAGoVChMI_Iaog5j-igIVQxcsCh3ExAvP#v=onepage&q=a%20handbook%20of%20kenana%20project&f=false), p.: 567].

Thus, by politically and financially tolerant supportive foreign capital inflows, it was actually targeting the expansion of the inherited colonial productive-base that strengthens, rather than weakens, the already existing gargantuan influence of its foreign trade sector on the economy.

<sup>497</sup> The question that is always raised remains to be “*how are those imbalances financed, at what costs, and for how long?*”

<sup>498</sup> The damage magnitude depends, of course, on the running management gumption.

<sup>499</sup> Christine Lagarde, *Finance & Development*, September 2014, p.: 26.

<sup>500</sup> That means the volatile nature of the world economy and its related politics, in its relationship to the Sudanese economy, will not be discussed in this chapter.

<sup>501</sup> As a result of nationalization decision in May 1970, for example, the whole Banking System was under the full ownership of the state to service the economic development efforts in Sudan. [انظر: العرض الاقتصادي: 76/1975م، ص: 85].

<sup>502</sup> This factual observation is supported by Dr. Ahmed ElSheikh M. Ahmed by stating that: -

*“Production of investment goods is almost negligible in developing economy of the Sudanese type. Consequently, realization of large proportion of gross domestic capital formation had always been inextricably linked to the importation of these investment goods.”*

[For more details, see: Dr. Ahmed ElSheikh M. Ahmed, “**An Import Demand Function for The Sudan Economy**,” 1990, p.: 9., at: - [http://jeas.cbe.uaeu.ac.ae/jeas1990\\_may/4.pdf](http://jeas.cbe.uaeu.ac.ae/jeas1990_may/4.pdf)].

<sup>503</sup> IBRD Report, 1969, op. cit., p.: ii.

<sup>504</sup> IBRD Report, 1972, Vol. I, p.: 21.

<sup>505</sup> IBRD Report, 1969, op. cit., p.: ii.

<sup>506</sup> As can be observed from figure 5A above, the adopted loose budget deficits policy didn’t drive up real interest rates at otherwise higher rates.

<sup>507</sup> As put by IMF’s WEO [April 2015, footnote, p.: 71.]: -

*“The concept of sustainable output is related to external sustainability, especially in the context of small open economies. For example, rapid credit growth can be fueled by capital inflows and CADs.”* [Emphasis added]

<sup>508</sup> Population consumption, including investment, is naturally in an increasing trend due to domestic and international population increasing trend. As a result, population consumption increase cannot be blamed as much as the State’s failure to increase national income beyond the increase of consumption levels, for maximizing national savings.

<sup>509</sup> Historically, monetary policy was always assigned the function of combating/managing the economy's external imbalances to maintain an ED sustainability reputation. As stated by the Robert Mundell (March, 1962, p.: 70):-

*“Specifically, it is argued that monetary policy ought to be aimed at external objectives and fiscal policy at internal objectives, and that failure to follow this prescription can make the disequilibrium situation worse than before the policy changes were introduced.”*

<sup>510</sup> It was well-known, during the gold standard era, that export revenues decline, in anyone country, the quantity of DMS and incomes fall. In comparing Sudan's case during 1960/72, it can be seen that when export revenues fell, due to cotton's low and stagnant international prices, GDP/Capita fell while DMS/NIR ratio remained rising. This implies that Sudan's, relative to foreign, currency is ineffective in influencing the stability of GDP/Capita growth in the face of shocks. That was of course due to the existing foreign-trade, rather than national indigenous sectors, dependent economy.

<sup>511</sup> The reduction in income per capita, hence aggregate domestic expenditure, hence imports, in turn damaged overall tax revenues, which was dominated indirect tax revenues, mainly from imports, though not necessarily to an extent equal the initial reduction in public expenditure. There was a contracting vicious circle during this period.

<sup>512</sup> If compared with the gold standard era, it can be seen that when export revenues decline domestic quantity of money and current incomes fall

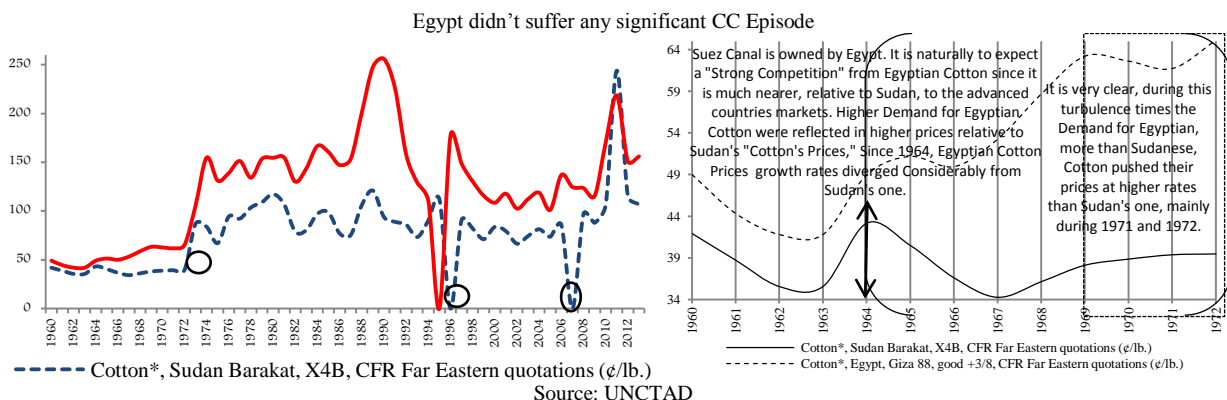
<sup>513</sup> As it is known, *external balance*, i.e. NIR, implies that the (net) *balance of current account equals (net) capital exports* at the determined exchange parity in the official and/or unofficial, i.e. free, markets for foreign currency.

<sup>514</sup> From a multiplier perspective, declining aggregate investment spending was, not only due to low national savings but also, due to declining aggregate domestic plus export demand. Core problem to the aggregate demand was the adopted fiscal austerity policy in a depressed economy. From an accelerator perspective, lower GDP/Capita growth prospects lead to lower investment demand which makes it difficult to the private sector to spend more. It was very clear that there was a feedback from the multiplier to the accelerator effects and vice versa.

<sup>515</sup> Abdel Rahman Ahmed Abdel Rahman, 1995, p.: 161.

<sup>516</sup> As can be seen from figure 21 below, Sudan was lacking the needed considerable “pricing power” in cotton exports, relative to the owner of the Suez Canal, i.e. Egypt's, pricing power.

Figure 5.21: High Competition from Egypt that was selling at relatively higher prices than Sudan.



<sup>517</sup> Since 1966, the appointed Sudanese Minister of Finance and Economy declared the full Sudanization of the economy, mainly in the banking and the foreign trade sector [See: Minister's Speech to the Parliament in 1966/67]. Despite putting his hands on the brakes to slow-down the monetary authority's NIR use, that decision opened a road for foreign capital to retreat, hence triggering NBKOs to run. So that decision and action had naturally built expectations about the generation of powers for a CC. The clear

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indicator for the rapid deterioration of the Sudanese pound's ER was the black market premium. As figure 6E above shows, the black market's ER premium was increasing since the declaration of the Sudanization of the Sudanese economy. During the 1969 – 1972, a more aggressive confiscation and nationalization policy was implemented that short-cut the road towards the 1972 CC, as will be seen below.

<sup>518</sup> Historically, interest rates policies remained always very effective in combating external, rather than internal, imbalances, via depreciation/appreciation of the ER, specifically, for final traded and non-traded goods and services.

<sup>519</sup> Francis A. Lees and Hugh C. Brooks, op. cit., p.: 107.

<sup>520</sup> Bank of Sudan, 12<sup>th</sup> Annual Report: 1971, p.: 88.

<sup>521</sup> NIR ≡ Net International Reserves.

<sup>522</sup> DMS ≡ Broad Money ≡ M2.

<sup>523</sup> Recall that the relationship between the rich lending (ex-colonial) countries and the poor (ex-colonized) borrowing economies remains to be much more of a political, rather than of an economical, nature.

<sup>524</sup> IBRD Report, 1967, op. cit., p.: ii.

<sup>525</sup> IBRD Report, 1969, op. cit., p.: i.

<sup>526</sup> Revise Sudan's Minister of Finance and National Economy for the Fiscal Year 1966/67.

<sup>527</sup> Prof. Ali Abdalla Ali, unpublished memo.

<sup>528</sup> Biong Kuol Deng, 2007, p.: 51. The Ansar protest against Gaafar Nimeiry's newly established government in Khartoum, was met with an attacked on the island with the help of Egyptian fighter-bombers, allegedly directed by Hosni Mubarak who was then a young air force chief, in 1970. It was very extensive, and hence costly, that led to the killing of approximately 12,000 of the Ansar in the assault including the uncle of Sadiq al-Mahdi and the extensive holdings and property of the Mahdi family were sequestered by the state. [See: The Free Encyclopedia Wikipedia, at: [http://en.wikipedia.org/wiki/Aba\\_Island](http://en.wikipedia.org/wiki/Aba_Island).

<sup>529</sup> In 1969 a military coup took power with the help of the Sudanese Communist Party (SCP). The latter tried, in 1971, to overthrow ex-President Nimeiri (1969 – 1985) but Nimeiri's supporters were able to crush them in a move which did not last long, only a few days [Prof. Ali Abdalla Ali, unpublished paper].

<sup>530</sup> Prof. Ali Abdalla Ali, "Kenana Handbook Of Sudan," p.: 567, at: <https://books.google.com/books?id=a4q3AwAAQBAJ&lpg=PA567&ots=c1T6SJ7ql&dq=sudan's%201970%20-%201975%20plan&pg=PA565#v=onepage&q=sudan's%201970%20-%201975%20plan&f=false>.

<sup>531</sup> See: Francis A. Lees and Hugh C. Brooks, op. cit., p.: 99. Of course, what the quote-above documented should the natural ultimate result from the adoption of (inflationary) austerity programs during 1966 – 1968. Government tightening its own belt meant a plunge in its own tax receipts and a surge in spending, as investment plunge, as figure *uuu*, in footnote --- above confirms.

<sup>532</sup> Sudan's National Planning Commission, Economic Survey, 1973, p.: 68.

<sup>533</sup> The WB Report, 1979, p.: 1. But the weakness in this quote is the resource problem itself which remained fading during the 1963 – 1972, mainly from the influential foreign sector on whose the economic activities depend gigantically, in the absence of, or without developing, a competitive indigenous productivity increasing capital producing sector.

<sup>534</sup> Bank of Sudan, 1970, p.: 35.

<sup>535</sup> Ministry of Finance, 1973, p.: 67 – 68.

<sup>536</sup> Ibid.



<sup>537</sup> Global Investment and Business Centre, 2013, p.: 111, at: [https://books.google.com/books?id=G9OAYrXC0oC&pg=PA110&lpg=PA110&dq=sudan+Five-Year+Plan+of+Economic+and+Social+Development,+1970-74.&source=bl&ots=3ZCvPD8m5e&sig=UFBVUX0oVw0Hx\\_LnjEuGEG7xV0A&hl=en&sa=X&ved=0CC0Q6AEwAWoVChMIurHH66zGyAIVCM2ACh3bmgY9#v=onepage&q=sudan%20Five-Year%20Plan%20of%20Economic%20and%20Social%20Development%2C%201970-74.&f=false](https://books.google.com/books?id=G9OAYrXC0oC&pg=PA110&lpg=PA110&dq=sudan+Five-Year+Plan+of+Economic+and+Social+Development,+1970-74.&source=bl&ots=3ZCvPD8m5e&sig=UFBVUX0oVw0Hx_LnjEuGEG7xV0A&hl=en&sa=X&ved=0CC0Q6AEwAWoVChMIurHH66zGyAIVCM2ACh3bmgY9#v=onepage&q=sudan%20Five-Year%20Plan%20of%20Economic%20and%20Social%20Development%2C%201970-74.&f=false).

<sup>538</sup> This process cease once the pound has tumbled sufficiently enough so that investors consider it as undervalued forcing them to buy Sudanese assets in the expectation of a future pound rise. ER surpassing is a key chunk of the tale.

<sup>539</sup> As can be observed, Nureldin Hussien, as many other Sudanese economists, considered such a CC event, the immediate quote below, as just a currency re-alignment. As figure 8C above demonstrates, it was a CC event.

<sup>540</sup> As can be observed, the quote above didn't consider the increasing domestic price level, as representing the internal imbalance in 1972, to be considered beside the widening CAD, as a proxy for worsening the external imbalance, as figure 8B above shows. [See: Mohamed Nureldin Hussien, (May 1984), "The IMF Supply-Side Approach to Devaluation: an Assessment with Reference To Sudan," in "*Economics of Growth and Development: Selected Essays of A.P. Thirlwall*," p.: 96 – 97, at: <https://books.google.com/books?id=syOEe5sX5AAC&lpg=PA96&ots=hM205w1YMi&dq=sudan's%201978%20devaluation&pg=PA95#v=onepage&q=sudan's%201978%20devaluation&f=false>].

<sup>541</sup> Karim Nashashibi, March 1980, Footnote #: 10, p.: 36.

<sup>542</sup> WB Country Report, Memorandum on the Economy of Sudan, October 24, 1979, p.: 5.

<sup>543</sup> It seems that the denationalization process was based on an IMF advice. The seriousness of the sudden acute external payments deficits in the first half of the 1970s, as during 1968/72, forced the May 1969 military government to resort to a series of supporting IMF-economic stabilization programs. The three stand-by arrangements with the IMF were covering the fiscal 1972/73, 1973/74, and 1974/75 years. *However, the last two programs were discarded in the mid ways, due to domestic political riots* [See: Abdel Rahman Ahmed Abdel Rahman, 1995, p.: 161].

In all cases, the impose of tightening policies, amid a depressing advanced economies since 1973, on which the Sudanese economy remained dependent on their import demand, added its recessionary powers to the already existing domestic recession in the 1970s, as during the 1960s. But despite this fact, that meant Sudan's sustained need for international lenders of last resort, mainly during its economic turmoil, and instabilities, times as its development processes. Against the ruling government's ideology, the IMF Policy Prescription was conditioning a big government bite from the real domestic aggregate demand while the Sudanese economy was struggling to find a bit of it from the rest of the world via increased export demand.

<sup>544</sup> As can be observed from figure 11C above, Sudan's Central Bank was able, in 1971, to limit the demand for foreign currencies by equating to its supply at the OER. The core reason can be found in Sudan's central bank capacity to increase sharply the real interest rate in year. That monetary policy caused the NIR/DMS ratio to improve as supported by positive NBKI's and low inflation rates, as figure 11B shows.

<sup>545</sup> This curve implies what was concluded by the famous "Swan Diagram" for domestically produced goods and for international payments, as determined by the real ER, i.e. the nominal ER times the ratio of prices at home and abroad. It is also important to note here that the any one curve slopes at a rate higher than the other, there will also be a positive or negative crash. There can be small appreciation or depreciation. This is clearly observed in 1971, when IR of continued to decline while the external sector's deficit was narrowing which caused the ER to appreciate as NIR improved. Compare these slopes with the 1972 CC when they go in a meeting point.

<sup>546</sup> Nothing is found about that minimum threshold.

<sup>547</sup> Global Investment and Business Centre, 2013, op. cit.

<sup>548</sup> المؤسسة العربية لضمان الإستثمار، سلسلة الدراسات القطرية، 1985م، ص: 41 – 42.

<sup>549</sup> Global Investment and Business Centre, 2013, op. cit.

<sup>550</sup> Actually, the advanced countries' international banks' recycling of the 1970s' petro-dollar mounting savings in the UUEs, such as Sudan, as sovereigns of relatively risk free, was targeting the reduction of the global imbalance and avoiding the loss of some world spending in favor of the advanced economies. The increased petro-dollar savings, practically, led to lower interest rates and higher money demand. [For more details, see: Robert C. Shelburne, "Global Imbalances, Reserve Accumulation and Global Aggregate Demand when the International Reserve Currencies are in a Liquidity Trap and Debt Constrained," *Georgetown University*, summer 2013, at: [file:///C:/Users/WAIL/Desktop/PHD/fulltext\\_stamped%20\(3\).pdf](file:///C:/Users/WAIL/Desktop/PHD/fulltext_stamped%20(3).pdf)].

<sup>551</sup> These plans are the "1970/75 Socioeconomic Development Plan," the "1972/77 Phased Action Plan," and the "1977/83 Economic and Social Development Plan."

<sup>552</sup> This is not different the colonial British government to transform Sudan into the "*Cotton Supplier of British Lancashire and Liverpool Textile Monopoly Industries*."

<sup>553</sup> For more details, see: Y. Hossein Farzin, January 1988.

<sup>554</sup> USA Country Studies, "Economic Development," at: <http://countrystudies.us/sudan/54.htm>.

<sup>555</sup> بروفييسور على عبدالله على، 2014م، ص: 33 – 34.

<sup>556</sup> د. سيد نميري، 1978م، ص: 150.

<sup>557</sup> LaVerle Berry, 2015, p.: 153.

<sup>558</sup> Robert S. Kramer, Richard A. Lobban Jr., and Carolyn Fluehr-Lobban, "Historical Dictionary of the Sudan," at: [https://books.google.com/books?id=0OKZRewiEOsC&lpg=PA67&ots=4wVxMB\\_5-C&dq=sudan's%20position%20from%20camp%20david&pg=PA67#v=onepage&q=sudan's%20position%20from%20camp%20david&f=false](https://books.google.com/books?id=0OKZRewiEOsC&lpg=PA67&ots=4wVxMB_5-C&dq=sudan's%20position%20from%20camp%20david&pg=PA67#v=onepage&q=sudan's%20position%20from%20camp%20david&f=false)

<sup>559</sup> Prof. Ali Abdalla Ali, "The Sudanese Economy Since 1956: An Overview," in "*Kenana Handbook Of Sudan*," Edited by Peter Gwynvay Hopkins, at: [https://books.google.com/books?id=a4q3AwwAAQBAJ&pg=PA588&lpg=PA588&dq=a+handbook+of+kenana+project&source=bl&ots=c1T7JPwpu&sig=PClui2\\_6uRf60L-iEUoOXzZY05o&hl=en&sa=X&ved=0CCIQ6AEwAGoVChMI\\_Iaog5j-xgIVQxcsCh3ExAvP#v=onepage&q=a%20handbook%20of%20kenana%20project&f=false](https://books.google.com/books?id=a4q3AwwAAQBAJ&pg=PA588&lpg=PA588&dq=a+handbook+of+kenana+project&source=bl&ots=c1T7JPwpu&sig=PClui2_6uRf60L-iEUoOXzZY05o&hl=en&sa=X&ved=0CCIQ6AEwAGoVChMI_Iaog5j-xgIVQxcsCh3ExAvP#v=onepage&q=a%20handbook%20of%20kenana%20project&f=false), p.: 568.

<sup>560</sup> As the Gezira scheme was extended by the Managil extension for the production and exportation of more cotton.

<sup>561</sup> Insufficiency of export revenues are implicit in the different issued plans.

<sup>562</sup> As put by IMF's WEO [April 2015, footnote, p.: 71.]: -

"The concept of sustainable output is related to external sustainability, especially in the context of small open economies. For example, **rapid credit growth can be fueled by capital inflows and current account deficits**." [Emphasis added]

<sup>563</sup> For more details, see: Y. Hossein Farzin, 1988.

<sup>564</sup> وزارة المالية والتخطيط والاقتصاد الوطني، العرض الاقتصادي: 1976/75م، ص: 123.

<sup>565</sup> Y. Hossein Farzin, January 1988, p.: 3.

<sup>566</sup> LaVerle Berry, 2015, p.: 153.

<sup>567</sup> Global Investment and Business Centre, 2013, op. cit.

<sup>568</sup> The WB, October 24, 1979, p.: i.

<sup>569</sup> LaVerle Berry, 2015, p.: 153.

<sup>570</sup> For more details, see: Y. Hossein Farzin, 1988.

<sup>571</sup> WB Country Report, Memorandum on the Economy of Sudan, October 24, 1979, p.: 6.

<sup>572</sup> WB Country Report, Economic Memorandum on Sudan, September 27, 1976, p.: ii.

<sup>573</sup> Richard Brown, Nov. 1984, pp.: 11 – 12.

<sup>574</sup> LaVerle Berry, 2015, p.: 153.

<sup>575</sup> Richard Brown, Nov. 1984, p.: 39.

<sup>576</sup> But the real problem lied with the IMF itself. It played dirty game with Sudan via its creditors around the world, but mainly the Arab ones, that resulted in aggravating Sudan's EDS. According to Mamoun Behari [2001, p.: 128 – 129], an Ex-Minister of Sudan's Ministry of Finance and Economy during 1975/77: -

"موظفو [الصندوق] كانوا دائماً يصلون بعد وقوع الأحداث، وليس من السهولة رؤيتهم في أي مكان عندما تتعرض دول العالم الثالث للأوضاع الجائرة والمواجهات غير المتكافئة... خلال زيارتي لبعض الدول العربية للتفاوض حول المساعدات المالية كان المضيفون عادة يجبروني بأن صندوق النقد الدولي نصحهم بعدم التجاوب مع مطالبنا، وذلك لأن المساعدات سوف تشجعنا على الإستمرار في حماقتنا المالية فنظل بعيدين عن تبني السياسات السليمة. وبدلاً من توجيه الجهات المانحة بوضع الشروط اللازمة للأولويات وإستعمال المساعدات في الأغراض المتفق عليها، نجد أن صندوق النقد الدولي يقدم لها مقترحات تفاقم وتزيد من تعقيدات الوضع. المانحون العرب يتحدثون عن منح وقروض ميسرة ويمسكون عن فرض أي شروط مما كانت خفيفة وذلك خوفاً من أن يصطدم ذلك بسياساتهم المقدسة والهادفة إلى عدم التدخل في الشؤون الداخلية للإقطار الأخرى." [التسميك وما تحته خط مضاف]

<sup>577</sup> -----, "Economics of Growth and Development: Selected Essays of A.P. Thirlwall," p.: 96 – 97, at: <https://books.google.com/books?id=syOEe5sX5AAC&lpg=PA96&ots=hM205w1YMi&dq=sudan's%201978%20devaluation&pg=PA95#v=onepage&q=sudan's%201978%20devaluation&f=false>

<sup>578</sup> The WB, October 24, 1979, p.: i.

<sup>579</sup> The WB, October 24, 1979, p.: i.

<sup>580</sup> The decline of the black market premium over the government's OER after 1975 was actually due to several import related "rationing" policy, such as oil, gasoline, and several food stuff.

<sup>581</sup> As can be observed from figure 14C above, Sudan's Central Bank was able, in 1974, to limit the demand for foreign currencies by equating to its supply at the prevailing OER. The core reason can be found in the sharp contraction of government expenditure and sustained improvement in the real terms of trade, as figures 12J and 12L above respectively shows. That fiscal contractionary policy and improved real terms of trade caused the NIR/DMS ratio to improve in 1974.

<sup>582</sup> WB Country Report, Memorandum on the Economy of Sudan, October 24, 1979, pp.: 5 and 23.

<sup>583</sup> Karim Nashashibi, March 1980, Footnote #: 10, p.: 36.

<sup>584</sup> As mentioned in chapter, flexibilities was seen to be *enforced* and *reflected* in: -

1. Lower minimum real wages; 2. Easier workers-firing policies; 3. Allowance for increased unemployment and poverty rates, with *alleviating safety-nets*; 4. *De-regulation* of the banking system; and 5. *Flexible* ERR for a *liberalized* international trade and financial arrangements.

<sup>585</sup> It was clear that the above program was based on The first June 1989' Statement of the Military Salvation Revolution Government that summarized the economy's situation as follows: -

"لقد تدهور الوضع الاقتصادي بصورة مزرية وفشلت كل السياسات الرعناء في إيقاف هذا التدهور ناهيك عن تحقيق أي قدر من التنمية فازدادت حدة التضخم وارتفعت الأسعار بصورة لم يسبق لها مثيل واستحال على المواطنين الحصول على ضرورياتهم إما لانعدامها أو لارتفاع أسعارها مما جعل كثيراً من أبناء

الوطن يعيشون على حافة المجاعة وقد أدى هذا التدهور الاقتصادي إلى خراب المؤسسات العامة وانهيار الخدمات الصحية والتعليمية وتعطل الإنتاج وبعد أن كنا نطمح أن تكون بلادنا سلة غذاء العالم أصبحنا أمة متسولة تستجدي غذاءها وضرورتها من خارج الحدود وانشغل المسؤولون بجمع المال الحرام حتى عم الفساد كل مرافق الدولة وكل هذا مع استشراء الفساد والتخريب والسوق الأسود مما جعل الطبقات الاجتماعية من الطفيليين تزداد ثراء يوماً بعد يوم بسبب فساد المسؤولين وتهاونهم في ضبط الحياة والنظام ... إن إهمال الحكومات المتعاقبة على الأقاليم أدى إلى عزلها عن العاصمة القومية وعن بعضها في انهيار المواصلات وغياب السياسات القومية وانفراط عقد الأمن حتى اقتعد المواطنون ما يحميمهم ولجأوا إلى تكوين الميليشيات وكما انعدمت المواد التموينية في الأقاليم إلا في السوق الأسود وبأسعار خرافية" [التسميك وما تحته خط مضاف]

راجع: البيان الأول لثورة الانقاذ يونيو 1989 بموقع: أرجي في: <http://www.alnilin.com/642411.htm>.

<sup>586</sup> Robert A. Mundell, March 1962, pp.: 70 – 71.

<sup>587</sup> Correlation = 0.999884452.

<sup>588</sup> انظر على سبيل المثال لا الحصر: المؤسسة العربية لضمان الإستثمار [سلسلة الدراسات القطرية، 1985م، ص: 85] حيث افادت بانها: -

"في خلال الفترة 1983/78 تبين "التدهور السريع في عائدات القطن والذي تزامن مع زيادة كبيرة في تكلفة استيراد المواد البترولية مما ادى الى تدهور كبير في الميزان التجاري. الا ان الزيادة الملحوظة في المتحصلات الخاصة والرسمية ساعدت في امتصاص بعض الاثر السلبي هذا. وقد ساعدت الاجراءات الاقتصادية الاخيرة في تدفقات اكثر من العالم الخارجي. ويتضح ذلك من الزيادة التي طرأت في جملة الموارد اذا ارتفعت من حوالي 1.7 بليون دولار من عام 1980/79 الى 2.23 بليون دولار 1982/81. وقد ساعد ذلك كثيرا في مقابلة جزء كبير من الاحتياجات الكلية والتي ارتفعت من 1.8 بليون دولار الى 2.4 بليون دولار خلال نفس الفترة وامكن تغطية العجز النهائي بين الموارد والاجتياجات بدعم صندوق النقد الدولي وفق البرنامج المتفق عليه معه."

<sup>589</sup> Laurence Ball, 2/1999, P.: 189.

<sup>590</sup> For example, according to Benaiah Yongo-Bure, the Finance Minister Sayyid 'Ali Zaki called, in September 1989, for emergency measures to redress a budget deficit of 7.5 billion Sudanese pounds, resulting mostly from the collapse of customs receipts since the June 1989 coup. *Meanwhile, the IMF pushed the government for repayment of \$60 million out of more than \$1 billion the country owed.* Keen to impress the IMF, the government announced a 25 percent increase in the prices of bread, cooking oil, soap and petroleum products - 24 hours before the annual September meeting of the IMF in Washington. [Benaiah Yongo-Bure, "Sudan's Deepening Crisis," *Middle East Research and Information Project*, September/October 1991, Vol. 21, at: <http://www.merip.org/mer/mer172/sudans-deepening-crisis#7>].

<sup>591</sup> Historically, monetary policy was always assigned the function of combating/managing the economy's external imbalances to maintain an ED sustainability reputation. As stated by the Robert Mundell (March, 1962, p.: 70):-

*"Specifically, it is argued that monetary policy ought to be aimed at external objectives and fiscal policy at internal objectives, and that failure to follow this prescription can make the disequilibrium situation worse than before the policy changes were introduced."*

<sup>592</sup> Real interest rate is a cost of borrowed funds for investments as it is a return on different kinds of depositing/saving funds around the world in an open economy, such as Sudan. The inverse influence of the real interest rate and ER is much stronger than the influence of the prevailing quantity of the real DMS, which acts as an available real purchasing power, on the ER.

<sup>593</sup> In advance, no one economist can determine what alternative policies would be placed to the adopted past macroeconomic policies, given the prevailing ideologies and international circumstances. The same is considered for the future ones. But unless the international H-STGLP is totally neutralized, the root problem will ever cause the adoption of inapt macroeconomic policies. Unless good experiences are gained from *managing the finance* of import at less than 10% of real GDP, i.e. the today's advanced European and Asian economies at their early stages of industrial development, semi-perfect macroeconomic policies cannot be determined for all positions of full-employment macroeconomic equilibrium in their respective different times.

<sup>594</sup> CCs in Sudan were always accompanied by worsening imbalances in either internal or external or both sectors of the economy. The worsened imbalance of any one or both sectors, due to unaccommodating net capital flows, caused NIR to evaporate relative

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to the expanded DMS. As a result, the foreign currency market was featured by foreign currency scarcity relative to prevailing stock of DMS. Consequently, in any worsened imbalances and faded NIR relative to the prevailing DMS case the committed ER was sharply devalued beyond 13.86% threshold.

<sup>595</sup> Most stuff that comes out of the ground is priced by largest world USA economy's dollar. It was observed that when USA Economy boom was fanned by a weak dollar it can be seen that the international commodity prices of the under-developing economies were hammered as a result of reduced USA interest rates and vice versa. The real curse for producers is over-supply in almost all raw materials when their prices plummet. Their export revenues fall further which hurt the buffering NIR of the ER which ultimately plummet after exhaustion of all financial supports from all potential lenders of last resort.

<sup>596</sup> In other parlance, Sudan's case showed that CCs were not just the product of Von Mises' extensive use of the printing press, or Krugman's budget's role in increasing DMS, or was Obstfeld's conflicting domestic fundamental's, such as expansionary monetary policies or unemployment vs. fixed ERR, or were other absolute variables. In Sudan's case, all these were endogenous rather than exogenous. Sudan's case showed that it was the influential commodity's international prices, via export revenues, movements that were moving the external sector's balances and the national budget balances in their movement of the DMS/NIR ratio against, or for, the movement of the prevailing ER. That is, all which were depended on the availability of NBKIs, whose insufficiency led its economy to fall in CCs.

<sup>597</sup> Actually many mathematical, statistical, and their macro-econometric mix of, economic models were tried for this research. The results were completely substandard and unpersuasive to the researcher. As a result, it is found that the above methodology was the most appropriate one at this stage of understanding of CCs, their fulfillment conditions, in Sudan.

<sup>598</sup> In some episodes, the NIR/DMS ratio might pick-up insignificantly. But that insignificant pick-up might have had been financed by NBKIs, which is equivalent to the widening CADs. That insignificant pick-up says that, in one way or another, the monetary authorities decided to devalue the ex-committed ER by stopping financing the foreign currency market.

<sup>599</sup> This explanation is in contradiction to what became established since Sudan's 1979's debt crisis, via the IMF and WB Institutions, that the Sudanese *people* are: -

1. Consuming more than producing;
2. Investing more than savings;
3. Importing more than exporting.

Actually these macroeconomic imbalances are what the macroeconomic demand identity tells on the basis of face calculation. These *superficial* and *bogus explanation* to these imbalances was used to justify contractionary policies, in the short and medium terms, on the *Sudanese poor people*, who remains to be characterized by their low productivity, for the ruling Sudanese, as akin, governments to sustain servicing the *restructured* EDs in due time. They didn't explain it from the perspective of post-independent Sudan's consecutive governments' economic doctrine failure to *structurally change the undeveloped poor, foreign currency-dependent*, UAE.

<sup>600</sup> Falling international prices' negative impact on developing economies are not restricted to the raw-materials exports of course. They do have the same impact on the export industrialized goods and services even of the industrialized advanced countries. In both cases, that implies the weaknesses of different domestic markets for different goods and services, given the adopted international and domestic macroeconomic policies.

<sup>601</sup> It is important to remember that DMS expansion is a *declaration of a currency war*.

<sup>602</sup> Of course it will also fly out the country as domestic inflation becomes a strong incentive to increase import, rather than import-substitution and export, competitiveness.

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<sup>603</sup> Angus Deaton, Summer 2010, p.: 4.

<sup>604</sup> See the following web:

[https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0CAcQjRxqFQoTCNrcoaKVpccCFcEWkgodgqAOCw&url=http%3A%2F%2Fwww.slideshare.net%2Fvikrams85%2Finaf-ta-session-9&ei=IBXMVdrCG8GtyASCwbpY&bvm=bv.99804247,d.aWw&psig=AFQjCNF6uR\\_i\\_zkKfHiqOPQ0fl\\_n2pJRWa&ust=1439524531295743](https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&cad=rja&uact=8&ved=0CAcQjRxqFQoTCNrcoaKVpccCFcEWkgodgqAOCw&url=http%3A%2F%2Fwww.slideshare.net%2Fvikrams85%2Finaf-ta-session-9&ei=IBXMVdrCG8GtyASCwbpY&bvm=bv.99804247,d.aWw&psig=AFQjCNF6uR_i_zkKfHiqOPQ0fl_n2pJRWa&ust=1439524531295743)

<sup>605</sup> Even if NBKIs were sufficient enough, their transformation into local currency will add the existing DMS.

<sup>606</sup> That is, incremental expansionary monetary policies led always to addition to domestic prices more than to real GDP/Capita under that floating regime relative to the fixed one.

<sup>607</sup> Milton Friedman, “The Euro: Monetary Unity To Political Disunity?,” *Project Syndicate*, August 28<sup>th</sup>, 1997, at: <http://www.project-syndicate.org/print/the-euro--monetary-unity-to-political-disunity>. The 10% imports/GDP average meant that the now advanced economies decided that everything else must be produced domestically at whatever costs of production.

<sup>608</sup> Ben Bernanke, op. cit.

<sup>609</sup> Francesco Caselli, Camille Landais, Christopher Pissarides, Silvana Teneyro, Wouter den Haan, “LSE Letter On Greece Crisis,” *VOX, CEPR’s Policy Portal*, July 09<sup>th</sup>, 2015, at: <http://www.voxeu.org/article/lse-letter-greece-crisis>.

<sup>610</sup> This same conclusion of austerity programs lead to unsustainable levels of debt can be found in: -

Joseph E. Stiglitz, “Greece, the Sacrificial Lamb,” *The New York Times*, July 25<sup>th</sup>, 2015, at: <http://www.nytimes.com/2015/07/26/opinion/greece-the-sacrificial-lamb.html>.

<sup>611</sup> Of course, this dictum is referred to “*Prophet Joseph or Yusuf*,” (Peace upon Him). It is documented in the Bible and the Koran (Sorat: Yusuf).

<sup>612</sup> There is a general understanding that the role of positive foreign currency inflows role, mainly from the capital and financial accounts on the balance of payments. The general understanding considers NBKIs as relief to the pressures on the BoPs current on the account deficits. Actually, those borrowings increases, not decreases, those pressures on the BoPs on the current account by increasing the demand for imports and EDS, if not reserved to bad and hard times.

<sup>613</sup> انظر على سبيل المثال لا الحصر: د. محمد خير أحمد الزبير، أكتوبر – ديسمبر 1985م، ص: 41.

<sup>614</sup> John Maynard Keynes, “An Open Letter to President Roosevelt,” *New Deal Documents*, December 31st, 1933, at: <http://newdeal.feri.org/misc/keynes2.htm>.

<sup>615</sup> Actually, the researcher is fully convinced in, and totally biased for the, establishing a *specialized government institution*, such as the *Ministry of The Economy* that is prevalent in many advanced and non-advanced countries, for the management, for the determination of right policies for, the fiscal and monetary sector of the Sudanese economy.

<sup>616</sup> Remember that rapid expansion of DMS, at speeds higher than export revenues and NIR growth rates, opens or widens a CAD, i.e. deteriorate the external imbalance. That implies not only the need for equivalent NBKIs to meet the excess demand for foreign currency in the foreign currency market. If the required NBKIs were sufficient to meet the created excess aggregate demand by the increase in the DMS, the committed ER becomes at risk of destabilization, as reflected in premiums determined by the black market. Unless the DMS, not only relative to the growth real GDP/Capita but also, relative to export revenues and NIR growth rates, were eliminated whatever ERR will be destroyed by consecutive crises.

<sup>617</sup> Sir Arthur Lewis, op. cit.

<sup>618</sup> The most famous example is the inverse relationship between gold and the USA dollar when the fed changes its domestic monetary policy that affects its domestic real interest rates.