

**Sudan University of Science & Technology**  
**College of Graduate Studies**



**Opportunities, Incentives and Challenges  
of Implementing International Supervisory  
Standards on the Sudanese Banking  
System. A Case Study of Omdurman  
National Bank 1997-2008**

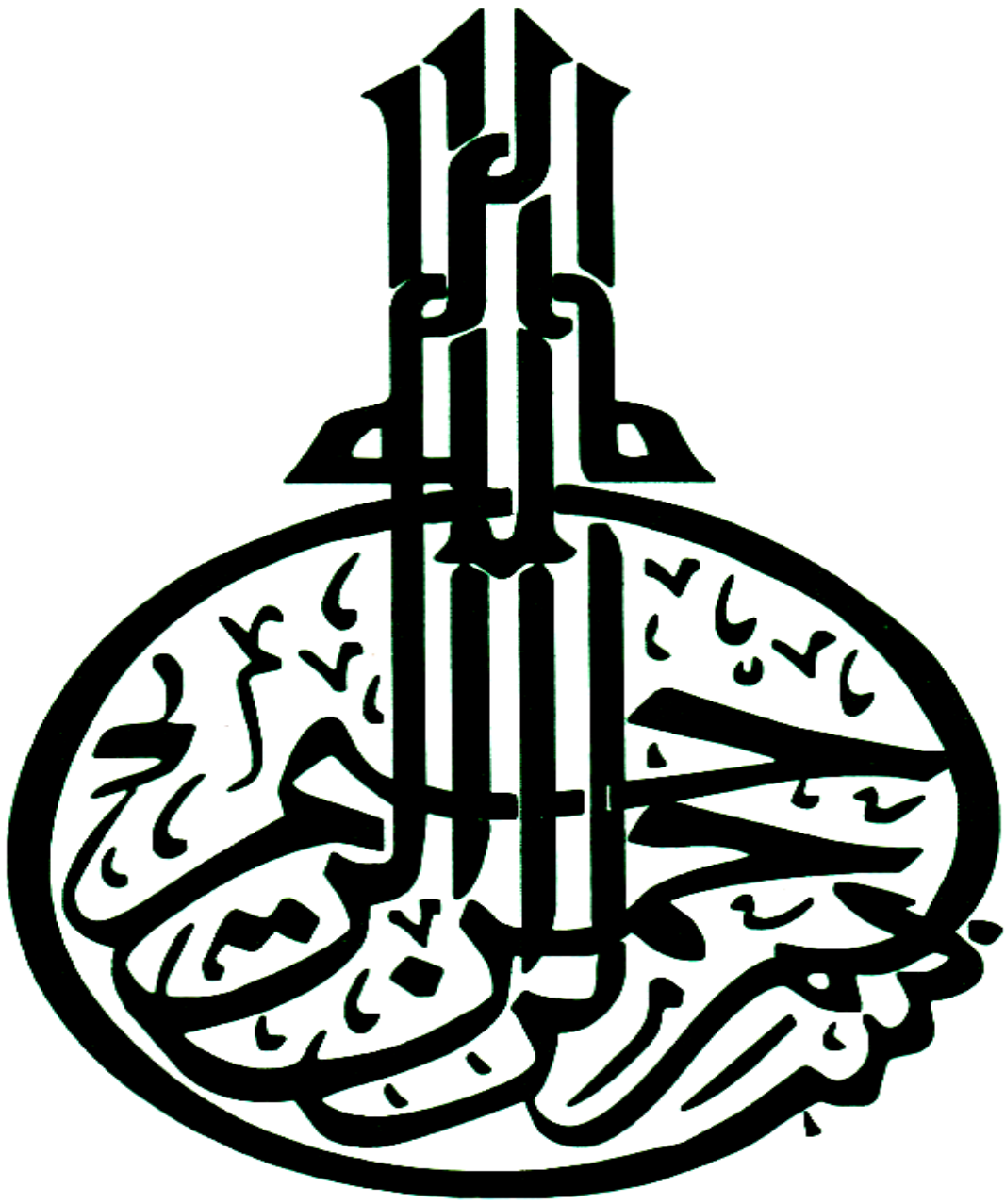
**تطبيق المعايير الرقابية الدولية على البنوك  
الإسلامية السودانية: الفرص والحوافز والتحديات.  
دراسة حالة بنك أمدرمان الوطني 1997 – 2008**

**A Thesis Submitted for a Ph.D. Degree in Economics;**

**Prepared by:**  
**Omer Hassan Ahmed Hassan Mohammed**

**Supervised by:**  
**Dr. Ahmed Ali Ahmed**

**June 2010**



*In the Name of Allah,  
the Most Gracious, the Most Merciful.*

بسم الله الرحمن الرحيم

قال تعالى:

( وَأَوْفُوا الْكَيْلَ إِذَا كِلْتُمْ **وَزُنُوزًا** بِالْقِسْطَاسِ الْمُسْتَقِيمِ ذَلِكَ خَيْرٌ وَأَحْسَنُ  
تَأْوِيلًا ) {الإسراء: 35}

And fill up the measure when you measure,  
and weigh with the straight equitableness; that  
is more charitable and fairest in interpretation.  
{Al-Israa.35}.

(وَأَقِيمُوا **الْوَزْنَ** بِالْقِسْطِ وَلَا تُخْسِرُوا الْمِيزَانَ) {الرحمن: 9}

And keep up the weight with equity, and do  
not cause loss in the balance.  
{ Ar-Rahaman 9 }.

## **ACKNOWLEDGEMENT**

After Almighty Allah (S.W.T.) I wish to thank a number of people for their valuable assistance and contribution in completing this thesis. First of all I would like to thank Management of Sudan University of Science & Technology for accepting me as A Ph. D. Student, and namely I would like to thank my honorable supervisor, Dr. Ahmed Ali Ahmed, staff of the Faculty of Commercial Studies- Sudan University of Science & Technology, for accepting me as his post graduate student. He provided continuous encouragement, thoughtful review of this work and constructive comments. My thank also goes to brother Tariq Al-Sayed, a Palestinian student at the faculty of commercial studies ,who typed and arranged the type writing of all this study with patience and punctuality .

I am also deeply indebted to University of Khartoum (U of K) as an Institution and staff. Especially my dear friends Dr. Al-Tayeb Shumo and Dr.Omer Ali Ibrahim both are lecturers at the faculty of economics and social studies (U of K) who helped me a lot, and sister Ibtisam ,secretary of the economic section, who typed the first chapters of this study. My great thanks go to Dr. Hassan Abdel Raheem Al-Tayeb, lecturer at Sudan Open University and Dr. Dirar Al-Mahi, lecturer at Gezira University who gave me their valuable advices' and continuous support.

My gratitude also goes to the Sudanese Banks' Association (SBA) represented in to my dear brothers Mr. Magzoub Gally the Trustee General of the Association, and his deputy Dr. Sirajuddin Osman for their financial support and continuous encouragement till this thesis became an existing reality.

In similar manner, I would like to extend special heartfelt thanks to my wife Mrs. Maha Al-Badry and my daughters and sons for their patience and encouragement throughout the period of my study.

There is however, a number of people whom I am indebted to and would like to dedicate, first and foremost all colleagues at the different departments of Omdurman National Bank(ONB ),(namely staff of Investment, Research and Risks Departments) and the Central Bank of Sudan (CBOS)(especially Mr.Fwaad and Miss Amna of the library of the CBOS) and Sister Assma Khairi, head of the Banking Supervision Department and the staff namely, Dr. Abdel Basit Mustafa and brother Abdel Aziz M.Abdel Rahman and Assaydah Fatima and all brothers and sisters at the different departments in the two mentioned banks for providing me with their encouragement and Support and providing me with the data I needed for this study.

## **Dedication:**

I would like to dedicate this work together with my faithful dwa'a , to my late grandfather Ahmed Hassan (AL-Hareef), may Almighty Allah(S.W.T.) put more mercy on his soul.

Also I dedicate it to my dear parents; Hassan Ahmed ( AL-Hareef) and Om-Alhassan Mohammed Al-Tayeb for their patience, support and continuous encouragement. I wish them a good and happy life time full of Ibadah and fear of Allah. Finally I ask Almighty Allah (S.W.T.) to bless them and us all.

## **Abstract**

This study investigates, analyzes and assesses the Opportunities, Incentives and Challenges of implementing the International Prudential Supervisory Standards on the Sudanese Banking System (SBS), in general, and Omdurman National Bank (ONB), in particular. The focus will be on Capital Adequacy, Disclosures to Promote Transparency, Corporate Governance and Risk Management Standards, during the period (1997-2008).

The importance of this study stems from the importance and role of banks in the economic life plus the importance of capital to banks' soundness and solvency. Also application of these standards on the (SBS) is a necessary condition to facilitate their entrance and strengthen their degree of competitiveness at local, regional and international levels, on one hand, and to avoid penalties and costs of not applying these standards on the other hand.

The Problem of this study lies in that , the peculiar and special nature of the Sudanese Islamic banking system (assets-based, profit and loss sharing system, no interest, no derivatives and other Shari'ah compliance requirements) requires special treatment when implementing the international standards on them specially Capital Adequacy Standard (CAS). This being the case, some of Basel Accords' contents need to be amended or sometimes where mere amendment is not enough, radical change will be inevitable.

The most important objectives of this study are to, investigate, analyze and assess the implications (e.g. Opportunities, Incentives and Challenges) of implementing the International Prudential Supervisory Banking Standards for the Sudanese Islamic Banks (SIBs) in general, and (ONB) in particular.

As for the methodology, this study adopted a comparative approach to compare between different banks on two Phases (1997-2002) and (2003-2008) of the Sudanese Banking System's (SBS) according to Basel Accords requirements. Analytical, descriptive, historical and case study approaches were mainly used to handle the research problem. In this regard financial accounting ratio analysis plus descriptive analysis to describe the performance of the SBS main indicators using measures of central tendency such as; the means and dispersion such as standard deviation and coefficient of variation were used . Testing of hypotheses using T-Test and Binomial- Test were also adopted. The study concluded that the Sudanese Banks are well- capitalized (11.9%on average), while ONB is adequately capitalized (9.39%on average) according to the Basel I Capital Adequacy Minimum Required Rate. The application of the International Supervisory Standards has positively contributed to the main indicators. The performance of the Sudanese Banks outperformed that of both Islamic as well as conventional banks at regional and international levels. Despite the major achievements recorded by the Sudanese Banks over the past period ( 1997-2008), the study highlighted the challenges down the road of the Basel 11 Accords, Basel3 and the (IFSB) requirements including; the needs for more new capital, internal models development ,internal controls improvement, effective risk management systems, full disclosure practices, relevant corporate governance, modern management information system, well trained staff and over and above all of what was mentioned above the( SBS) have to reap the fruits of implementing the International Standards without contradicting the Shari'ah principles.



## المستخلص

تناولت هذه الدراسة بالبحث والتحليل والتقييم فرص و حوافز وتحديات تطبيق المعايير الرقابية الدولية على الجهاز المصرفي الإسلامي السوداني بصفة عامة ، وبنك أمدرمان الوطني بصفة خاصة . تم التركيز على معايير كفاية رأس المال ، الإفصاح لتعزيز الشفافية ، الضبط المؤسسي (الحكم الرشيد أو الحوكمة) ، بالإضافة لإدارة المخاطر وذلك خلال الفترة (1997 – 2008) .

تتبع أهمية هذه الدراسة من أهمية المصارف ودورها في الحياة الاقتصادية ، بالإضافة لأهمية رأس المال بالنسبة لقوة وكفاءة ومثانة المصارف ، كما يعتبر تطبيق المعايير الرقابية الدولية على البنوك السودانية شرطاً ضرورياً لتسهيل دخولها وتقوية درجة تنافسيتها بالسوق المصرفية على المستوى المحلي والإقليمي والدولي هذا من ناحية ، وكذلك ضرورياً لتجنب العقوبات والخسائر التي يمكن أن تنتج من عدم تطبيق هذه المعايير من ناحية أخرى .

تتمثل مشكلة الدراسة في خصوصية النظام المصرفي الإسلامي السوداني والذي يتعامل (في الأصول وليس الديون ، ويعمل بنظام تقاسم الأرباح والخسائر ، وعدم التعامل بسعر الفائدة ، وعدم التعامل في المشتقات المالية مع الالتزام بكافة المتطلبات المتوافقة مع الشرع الإسلامي الحنيف ) ، مما يتطلب معاملة خاصة عند تطبيق هذه المعايير ، وخاصة معيار كفاية رأس المال . وفي هذه الحالة فإن بعض مقررات لجنة بازل ، والتي لم تراعى هذه الخصوصية ، تحتاج إلى تعديل ، وأحياناً فإن مجرد التعديل لبعض المقررات لا يكفي لموافقة الشرع الاسلامي مما يحتم ضرورة تغيير واستبدال هذه المقررات بأخرى تتماشى مع خصوصية النظام المصرفي الإسلامي .

من أهم أهداف هذه الدراسة هي بحث وتحليل وتقييم آثار وانعكاسات تطبيق المعايير الرقابية الدولية المتمثلة في شكل فرص وحوافز وتحديات على البنوك الإسلامية السودانية على وجه العموم وبنك أمدرمان الوطني على وجه الخصوص .

وفيما يتعلق بالمنهجية التي اتبعتها هذه الدراسة، فهي تتمثل في إتباع منهج المقارنة بين مصارف مختلفة خلال مرحلتين زمنية هما من ( 1997-2002) ثم من (2003-2008) وفقاً لمتطلبات مقررات لجنة بازل الأولى . وكذلك جمعت الدراسة بين المنهج التحليلي والوصفي والتاريخي ومنهج دراسة الحالة لمعالجة مشكلة البحث . كما تم استخدام أدوات التحليل المختلفة مثل النسب المالية لوصف وتحليل أداء المؤشرات المالية للمصارف السودانية ، وتمت الاستعانة ببعض أدوات التحليل الإحصائية مثل (مقاييس

النزعة المركزية) كالأوساط الحسابية ، ومقاييس التشتت كالانحراف المعياري ومعامل الانحرافات ، كما تم اختبار الفروض باستخدام اختباري (T-Student & Binomial -Test). أكدت الدراسة على جودة ملاءة وكفاية رأس مال المصارف السودانية (11,9%) في المتوسط ، وكذلك كفاية رأس مال بنك أمدرمان الوطني (9,39%) مقارنة بالحد الأدنى للجنة بازل الأولى وهو 8%. كما أكدت أن استخدام المعايير الرقابية الدولية قد أثرت ايجاباً على المؤشرات الأساسية للبنوك السودانية. وأوضحت الدراسة أن المصارف السودانية قد تفوقت في أدائها على نظيرتها الإسلامية والتقليدية على المستويين الإقليمي والدولي.

وبرغم الانجازات التي حققتها البنوك السودانية خلال الفترة الماضية إلا أن هنالك العديد من التحديات الجسام التي تنتظرها في المستقبل عند تطبيق متطلبات مقررات لجنة بازل الثانية والثالثة ومجلس الخدمات المالية الإسلامية ، مثل زيادة رأس المال ،بناء وتطوير النماذج لحساب رأس المال الرقابي ، تحسين أدوات الرقابة الداخلية ، إيجاد نظام فعال لإدارة المخاطر، ونظام شفافية وإفصاح ، وضبط مؤسسي أو حكم رشيد جيد ، و نظام معلومات إدارية فعال ،و موظفين أكفاء ، و فوق كل ذلك الاستفادة من فرص وحوافز تطبيق هذه المعايير الدولية بدون مخالفة للشرع الحنيف .

## List of Contents

Subject	Page No.,
Quaranic Verse.	III
Acknowledgement.	IV
Dedication.	VI
Abstract (English).	VII
Abstract (Arabic).	IX
List of Contents.	XI
List of Tables.	XII
List of Graphs.	XV
List of Figures.	XVI
Appendices (Arabic)	XVII
List of Abbreviations	XVIII
Glossary of Terms	XXI
Chapter 1: Introduction	1
Chapter 2: Historical Development of Banking, Regulations and Supervision Standards Worldwide.	20
Chapter 3: Islamic Prudential Standards' Setters	72
Chapter 4: Historical Development of Banking System and its Regulations and Supervision in Sudan.	110
Chapter 5: The Case of the Study	168
Chapter 6: Test of Hypotheses	228
Summary and Conclusion - Findings - Recommendations - Areas for future research	253
References	259
Appendices and Attachments:	267

## List of tables

<b>Table No.,</b>	<b>Name</b>	<b>Page NO.,</b>
<b>2-1</b>	Summary of Changes Between Basel I and Basel II	65
<b>3-1</b>	The Major Publications of AAOIFI:	74
<b>3-2</b>	CAR Risk-weighted Assets	97
<b>4-1</b>	Banks' Branches Operating in Sudan Until 2003	129
<b>4-2</b>	Number of Banks' Branches	132
<b>4-3</b>	The Banking System in Sudan by Type of Ownership (2008):	134
<b>4-4</b>	CAEL Rating System :Basic Benchmarks:	140
<b>4-5</b>	Evaluation of CAEL Implementation in Sudan (1997-1999)	144
<b>4-6</b>	4- Examples: Assessment of Some Banks as at 30- September 2004	149
<b>4-7</b>	Results of Implementation in Figures Sudan: Prudential Ratios and Limits	149
<b>4-8</b>	Compliance with Prudential Requirements (as of march 31,2000)	150
<b>4-9</b>	Sudan Risk Weights Version	152
<b>4-10</b>	Disclosure Principle for A Random Sample of Ten Banks 31/12/1998:	155
<b>4-11</b>	Restructuring Program –First Phase –Implementation Results.	156
<b>4-12</b>	(SBS) Main Financial Indicators for The Period(2000-2008)	164
<b>5-1</b>	Capital-Asset Ratios for Islamic Banks (1990-2002)	179
<b>5-2</b>	Liquidity Ratios for Islamic Banks (1990-2002)	180
<b>5-3</b>	Deployment Ratio for Islamic Banks (1990-2002)	182
<b>5-4</b>	Cost to Income Ratios for the Top 1,000 Banks	183
<b>5-5</b>	Cost to Income Ratios for Islamic Banks (1990-2002):	183
<b>5-6</b>	Profitability Ratios for the Top 1,000 Banks in the World	184

<b>5-7</b>	Profitability Ratios for Islamic Banks(1990-2002)	185
<b>5-8</b>	Sample for Peer Group Comparison	186
<b>5-9</b>	Comparative Annual Growth Rates (%)	186
<b>5-10</b>	Comparative Ratios (%)	187
<b>5-11</b>	Key Financial Ratios: Top Ten Banks,2002(%)	187
<b>5-12</b>	(SBS) Main Financial Indicators for The Period(1997-2008)	196
<b>5-13</b>	(SBS) Capital After Deductions (RC), RAWs and CAR (1997-2008):	196
<b>5-14</b>	(ONB) Paid-up Capital Development for the Period (1997- 2008).	198
<b>5-15</b>	(ONB ) Paid-up Capital as at 31-12-2007 ( Amount SDG):	199
<b>5-16</b>	(ONB) Paid-up Capital as at 31-12-2008 ( Amount SDG)	200
<b>5-17</b>	Trends of (ONB) Main Financial Indicators	202
<b>5-18</b>	Trend of (ONB) Assets	203
<b>5-19</b>	(ONB) Growth of Deposits on Demand	203
<b>5-20</b>	(ONB) Growth of Equity of Unrestricted Investment Account Holder	203
<b>5-21</b>	(ONB) Percentage of Investments A/Cs Profit Rates	203
<b>5-22</b>	(ONB) Growth of Owners' Equity in Millions SDG.	204
<b>5-23</b>	(ONB) Revenues1997-2008	204
<b>5-24</b>	(ONB) Expenses1997-2008	204
<b>5-25</b>	(ONB) Profits.1997-2008	204
<b>5-26</b>	(ONB) Total Paid-Up Capital to Total Assets (1997-2008)	205
<b>5-27</b>	(ONB) 's RC, RAWs, CAR and CAEL Composite Rating (1997-2008)	206
<b>5-28</b>	(ONB) ROA and ROE Before Tax (1997-2008):	207
<b>5-29</b>	(ONB) ROA and ROE After Tax (1997-2008):	208
<b>5-30</b>	(ONB) Owners' Equity Growth Rates (1997-2008)	209

<b>5-31</b>	(ONB) Owners' Equity and Deployment Rate (2002-2008)	210
<b>5-32</b>	(ONB) Liquidity Ratios (2002 – 2008)	210
<b>5-33</b>	(ONB) Cost Rate for the Period (1997-2008):	211
<b>5-34</b>	(ONB) Main Financial Indicators (2007-2008):	211
<b>5-35</b>	(ONB) Capital Adequacy (CAR) and CAEL Rating	212
<b>5-36</b>	Rating of Sudanese Banks According to Main Financial Indicators (2007-2008)	221
<b>5-37</b>	(SBS) and (ONB) Main Financial Indicators Compared for the Years 2007-2008	223
<b>5-38</b>	Disclosure Principle for A Random Sample of Ten Banks 31/12/1998	225
<b>5-39</b>	Comparison Between Top 1,000 International Banks, IBs, SBS and (ONB) (1997-2002)	227
<b>5-40</b>	Comparative Annual Growth Rates on Average (1997-2002)	227

## List of Graphs

<b>Graph No.,</b>	<b>Name</b>	<b>Page NO.,</b>
<b>2-1</b>	Distribution of Economic Capital Between Risks.	64
<b>4-1</b>	Development of Paid -up Capital	164
<b>4-2</b>	Development of Owners' Equity	165
<b>4-3</b>	Development of Total Assets	165
<b>4-4</b>	Development of Total Finance	166
<b>4-5</b>	Development of Total Deposits	166
<b>4-6</b>	Development of Capital Adequacy	167
<b>5-1</b>	Trends of (ONB) Main Financial Indicators	202
<b>6-1</b>	Comparison Between SBS, ONB and Basel CARs (1997-2008)	234
<b>6-2</b>	Trends of RC and RAW for SBS (1997-2008)	234
<b>6-3</b>	Trends of RC and RAW for ONB (1997-2008)	235
<b>6-4</b>	Trends of SBS Main Financial Indicators (1997-2008)	238
<b>6-5</b>	SBS Paid -up Capital	239
<b>6-6</b>	SBS Assets	239
<b>6-7</b>	SBS Capital to Assets Ratio	240
<b>6-8</b>	SBS ROA (Profitability)	240
<b>6-9</b>	SBS Cost Rates	241
<b>6-10</b>	Trends of (ONB) Main Financial Indicators (1997-2008)	243
<b>6-11</b>	ONB Assets Development	245

## List of Figures

<b>Figure No.,</b>	<b>Name</b>	<b>Page NO.,</b>
2-1	The Three Pillars of Basel II Accord	47
2-2	Banks 'Safety, Soundness and the Three Pillars.	48
2-3	The New Accord - Basic Structure	66
2-4	Overview Diagram	67
3-1	Profit Sharing Investment Accounts(PSIAs)	95
4-1	The Structure of the Central Bank of Sudan in the Year 1960.	118
4-2	The Structure of the National Commercial Banks by the End of the Year 1965.	118
4-3	The Structure of the Sudanese Banking Sector by the End of Year 1965.	119
4-4	The Structure of the Sudanese National Banks by the End of Year 1975.	121
4-5	The Structure of the Commercial and Foreign Banks by the End of Year 1977.	123
4-6	the Structure of the Sudanese Banking Sector by the End of the Year (1989)	127
4-7	the Structure of the Sudanese Banking Sector by the End of the Year (2003)	130
4-8	The Structure of Banking System (2008)	133
5-1	(ONB) Risk Management Department Hierarchy	214



الملاحق العربية :

(Arabic Appendices)

الرقم المتسلسل	اسم الملحق	الرقم	التاريخ
1	منشور تطبيق كفاية رأس المال الصادر من مجلس الخدمات المالية الإسلامية	ب س م/أ ع ر م/رقابية	2008/12/19
2	معيار المبادئ الإرشادية لضوابط المؤسسات المالية الإسلامية	بدون	2007/5/7
3	منشور تفعيل إدارة المخاطر	ب س م/أ ع ر م/23	2006/5/27
4	مخاطر أسعار الصرف	ب س م/أ ع ر م/23	2006/5/14
5	منشور إنشاء إدارة للمخاطر المصرفية	2008/5	2005/2/22
6	إدخال موقف البنك من إعادة الهيكلة وتصنيفه وفقاً لمؤشرات CAEL	ب س م/أ ع ر م/2	2003/5/9
7	كفاية رأس المال	2002/8	2002/8/10
8	تطبيق جزاءات على المصارف التي لم تستوف نسبة كفاية رأس المال	ب س م/أ ع ر م/23	2002/6/9
9	معيار المراجعة والمرابحة للأمر بالشراء	2001/10	2001/10/3
10	الخطوات والإجراءات المتعلقة بالدمج المصرفي	2000/10	2000/7/27
11	إعادة هيكلة وإصلاح الجهاز المصرفي	ب س م/أ ع ر م/4/2	2000/5/2
12	منشور تطبيق معايير المحاسبة المالية للمصارف والمؤسسات المالية والإسلامية	98/12	1998/6/15
13	منشور تطبيق معيار العرض والإفصاح للمصارف والمؤسسات المالية الإسلامية	98/11	1998/5/17
14	جدول معدلات الخصم لمختلف أنواع الضمانات	بدون	-
15	تصنيف التمويل وتحديد المخصصات	بدون	-
16	الموجودات المرجحة بأوزان المخاطر	بدون	-

## List of Abbreviations

<b>AAOIFI</b>	Accounting and Auditing Organization for Islamic Financial Institutions
<b>ABA</b>	American Bankers Association
<b>ABCP</b>	Asset Backed Commercial Paper
<b>ABS</b>	Asset Backed securities
<b>ALM</b>	Assets and liabilities Management
<b>AMA</b>	Advanced Measurement Approach
<b>BCBS</b>	Basel Committee On Banking Supervision
<b>BRA</b>	Basic Indicator Approach
<b>BIS</b>	Bank for International Settlements
<b>BOPs</b>	Balance of Payments
<b>CA</b>	Capital Adequacy
<b>CAD</b>	Capital Adequacy Directive
<b>CAR</b>	Capital Adequacy Ratio.
<b>CAS</b>	Capital Adequacy Standard.
<b>CBOS</b>	Central Bank of Sudan.
<b>CEBS</b>	Committee of European Banking Supervisors
<b>CDs</b>	Certificates of Deposits
<b>CP</b>	Consultative Paper
<b>CPA</b>	Comprehensive Peace Agreement
<b>CRM</b>	Credit Risk Mitigation
<b>EAD</b>	Exposure at Default
<b>EC</b>	Economic Capital
<b>EE</b>	Expected Exposure
<b>EL</b>	Expected Loss
<b>FED</b>	Federal Reserve (US)
<b>FSA</b>	Financial Services Act (UK)
<b>FSA</b>	Financial Service Authority
<b>GAAP</b>	Generally Accepted Accounting Principles
<b>GCC</b>	Gulf Cooperation Council.
<b>IAA</b>	Internal Assessment Approach
<b>IAHS</b>	Investment Account Holders.
<b>IAS</b>	International Accounting Standards.
<b>IBs</b>	Islamic Banks.
<b>ICAAP</b>	Internal Capital Adequacy Accountant
<b>IDB</b>	Islamic Development Bank

<b>IFRS</b>	International Financial Reporting Standards
<b>IFSB</b>	Islamic Financial Services Board
<b>IIFS</b>	Islamic Institutions Offering Financial Services.
<b>IIRA</b>	International Islamic Rating Agency.
<b>IMF</b>	International Monetary Fund
<b>IRBA</b>	Internal Rating-Based Foundation (Advanced)
<b>IRBF</b>	Internal Rating-Based Foundation (Approach)
<b>IT</b>	Information Technology
<b>KSE</b>	Khartoum Stock Exchange
<b>LGD</b>	Loss Given Default
<b>Libor</b>	London Inter Bank Offered Rate.
<b>LOLR</b>	Lender of Last Resort
<b>LT</b>	Long -Term
<b>M</b>	Maturity
<b>M &amp; A</b>	Merger and Acquisition
<b>NBFIs</b>	Non-Banking Financial Institutions
<b>NPA/D</b>	Non- Performing Assets or Debts
<b>NPL/F</b>	Non- Performing Loans or Finance
<b>NYSE</b>	New York Stock Exchange
<b>OC</b>	The Bank Own Capital (Tier I-II)
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>OIC</b>	Organization of Islamic Conferences
<b>ONB</b>	Omdurman National Bank
<b>ORM</b>	Operational Risk Management
<b>ORCR</b>	Operational Risk Capital Requirement
<b>PD</b>	Probability of Default
<b>PIRI</b>	Prudential information and regulations for Islamic banks.
<b>PLS</b>	Profit and Loss sharing System
<b>P &amp; L</b>	Profit and Loss Account
<b>PSIAs</b>	Profit Sharing Investment Accounts
<b>RAROC</b>	Risk Adjusted Return on Capital
<b>ROA</b>	Return on Assets
<b>ROE</b>	Return on Equities
<b>RWAs</b>	Risk Weighted Assets
<b>SA</b>	Standardized Approach
<b>SBA</b>	Sudanese Banks Association
<b>SBS</b>	Sudanese Banking System / Sector.
<b>SBs</b>	Sudanese Banks.
<b>SIBs</b>	Sudanese Islamic Banks.
<b>S&amp;L</b>	Savings and Loans Institutions

<b>SM</b>	Standardized Method (Based 1988)
<b>SME</b>	Small and Medium Sized Enterprises
<b>SRP</b>	Supervisory Review Process
<b>SREP</b>	Supervisory Review and Evaluation Process
<b>S &amp; P</b>	Standard and Poor
<b>ST</b>	Short -Term
<b>TIER- 1 or (Core capital)</b>	Paid-in-capital + declared reserves + retained earnings.
<b>TIER- 11</b> (Supplementary Capital).	Undeclared reserves + assets reassessment reserves of which 55% is excluded (i.e.max45%) + general provisions – of which 1.25% taken as a minimum from risk-bearing assets.
<b>TIER-111</b> (Introduced by 1996 amendment)	Short term unsecured subordinated debt, which can only be used for meeting market risk capital requirements.
<b>VaR</b>	Value at Risk

## **Glossary of Terms :-**

### **Al-Qur'an (also written as Qur'an only):**

The Holy book of Muslims, consisting of the revelations made by God to the Prophet Muhammad (peace be upon him). The Qur'an lays down the fundamentals of the Islamic way of life.

### **Asset Quality:**

The asset protocol in its entire form should be evaluated and should include an assessment of funded and off-balance sheet items.

Whilst non-performing assets and promising rates will reflect the quality of the loan book, high volatility of valuations and earning will reflect exposure to the capital market and sensitive sectors.

The key ratios to be analyzed include:

- Gross non-performing assets / gross advances rate.
- Net non-performing assets/ net advances ratio.
- Provisions held/gross non-performing assets ratio.

### **Bay al-Murabahah (also written as bay Muraabahah or simply Murabahah) :**

Sale at a specified profit margin the term, however, is now used to refer to sale agreement whereby the seller purchases the goods desired by the buyer and sells them at an agreed marked-up price, the payment being settled within an agreed time frame, either by installments or in lump sum. The seller bears the risk for the goods until they have been delivered to the buyer.

### **Bay al-Salam (also written as bay Salam only) :**

A sale in which payment is made in advance by the buyer and the delivery of the goods is deferred by the seller.

### **Bank:**

A bank is any financial institution which practices "Banking Business". It is an entity which accepts deposits from the public and uses such funds to lend or invest at its own risk. See Porter, (1993). The above definition, cover finance companies, building societies, as well as banks. (Although the supervision approach is basically

the same for all types of financial institutions for conducting banking business, certain requirements, such as Capital Adequacy and Liquidity, may differ by type of institution).

Prudential bank supervision concerned with maintaining safety and soundness. The prudential bank supervision is consists of a legal framework; laws, regulations, and policies from the supervisory authority (regulator or central bank). The regulatory authority is to ensure the soundness of individual banks and of the system as a whole. Thus, the Central Bank is considered as the heart of the financial sector because most central banking laws give the central Bank the responsibility for the sector's soundness. Thus banking supervision is a common function of Central Banks especially in developing countries.

### **Bank Capital:**

Bank Capital can be thought of as a cushion to protect depositors against losses. Since capital can be measured so, we have initial capital requirements, and ongoing capital requirements in our banking system and usually expressed as a ratio.

The so-called minimum capital requirement is the most important procedure for measuring capital adequacy of old operating banks and it is used for licensing new banks.

Minimum capital requirement is needed and any bank needs to start banking operations. Once a bank grows by accepting deposits and making loans, the minimum capital usually becomes outdated if not meaningless.

Capital is measured against risk, which is recognized as being both on and off the balance sheet, with risk weighted from zero to 100% as prescribed by Basel Accords.

Traditional ongoing capital requirements take ranging into account or the size of the bank by calling for capital to be a percentage of deposits, liabilities or total assets. Capital requirement, as defined, to be always 5% of total assets. Capital should normally include all paid in capital, share premiums, statutory or legal reserves and retained profits.

**Capital Adequacy:-**

The soundness of Bank can be defined as the likelihood of Bank becoming insolvent (Green span 1989). The lower this likelihood the higher is the soundness of Bank. One of the main objectives of supervision on Banks is to get sure of the soundness and strength of the financial position of banks.

Soundness of a bank depends on its ability to meet its obligations in crisis situation. This is usually measured by the capital-assets ratio. There are three major reasons for a bank to monitor its capital-assets ratio. First, regulatory authorities require a minimum amount of bank capital. Second, the size of the bank capital has some safety implications as it provides cannot satisfy its obligations to its creditors. Third , the amount of capital affects the rate of return to the bank equity holders. There is a trade-off between the return to the owners and the safety of the bank given return on assets, the smaller the bank capital, the higher the rate of return to the owner of the bank. Therefore, the owners of the bank have a natural tendency to keep lower capital-asset ratios. However, the lower capital-asset ratios increase the risk of bank failures. It is for this reason that the regulatory agencies prescribe certain minimum capital-asset ratios. According to the Basel Agreement (1988), the Basel Committee on Banking Supervision has defined international standards on banks' capital adequacy, According to these standard, a bank must meet two capital requirement: it must have a 'core' or Tier 1 capital (stockholder equity capital ) of at least 4 per cent of total risk-adjusted assets, and total capital (Tier 1 capital plus Tier 2 capital, which is made up of lone loss reserves and subordinated debt) of at least 8 per cent of total risk-adjusted assets.

Banks with high capital rates above the regulatory minimum levels, particularly tier 1, will be assigned a high rating, where as banks with low ratios well below the standard and with low ability to access capital will be assign very low rating.

Capital adequacy needs to be appropriate to the size and structure of the balance sheet as it represents the buffer to absorb losses during difficult /crises times.

Over-capitalization can impact overall profitability related issues Capitalization, is also the ability to raise fresh capital as and when required? Publicly listed banks and state owned (public sector) banks may be best positioned to raise capital whilst the unlisted private banks depend on the wealth and / or credibility of their owners.

In addition, it will be useful to calculate the capital to total assets ratio, which indicates the owner's share in the assets of the business and also denotes the soundness of bank. The ratio of tier 1 capital to total assets represents the extent to which the bank can absorb a counter party collapse.

Tier 1 capital is not owed to any one and is available to cover possible losses. It has no maturity or repayment requirement, and it is expected to remain a permanent component of the counter party's capital.

The Basel standards currently require banks to have a capital adequacy rate of 8 percent, with Tier 1 rate not less than 4 percent as mentioned in Basel 1 and CAEL analysis in this study.

#### **Country of incorporation / Regulatory Environment:**

Country risk need to be evaluated since a bank, which is financially strong may not be permitted to meet its commitments in view of the regulatory environment or the financial state of the country in which it is operating.

Banks should be rated (called bank tiring) on the basis of the above mentioned factors.

#### **Credit Risk (CR):**

The potential that counterparty will fail to meet its obligations in accordance with agreed terms

- Basel Committee on Banking Supervision, Principles for the Management of Credit Risk (September 2000).

#### **Deregulation and Home-Country Control Principles :**

It means all banks operating in one country were subject to the same rules. As against the principle of home – country control which means supervision of banks that were operating in several countries was transferred from host- country to home- country.



**Economic Capital (EC):**

Amount of capital needed to support a given set of business activities or risks. Economic capital typically aggregates, at a minimum: credit, market and operational risks.

-{ Basel Committee on Banking Supervision, Trends in Risk Integration and Aggregation (August 2003)}

**Facilities:**

Facilities to banks can be classified into three categories:

1. On balance sheet items such as cash advances, bond holdings and investments.
2. Off – balance sheet items which are not subject to market fluctuation risk, such as guarantees, acceptances and letters of credit.
3. Facilities, which are off-balance sheet and subject to market fluctuations. Such as foreign exchange and derivative products.

**Fatawa :**

Religious verdicts by fuqaha .It is plural of fatwa . Some times fatwas is also used as the plural form .

**Hadith:**

Sayings, deeds and endorsements of the prophet Muhammad (peace be upon him) narrated by his companions.

**Halal:**

Things or activities permitted by the shari ah.

**Ijārah:** The transfer of ownership of a service for a specified period for an agreed upon lawful consideration.

**Istisnā:** a contract of sale specified goods to be manufactured, with an obligation on the manufacturer to deliver them upon completion. It is a cost of manufacturing the goods.

**Liquidity:**

Commercial bank deposits generally have a much shorter contractual maturity than loans, and liquidity management needs to provide a cushion to cover anticipated deposit withdrawals. The key ratios to be analyzed include:

1. Total liquid assets to total assets ratio (the higher the ratio the more liquid the bank is).
2. Total liquid assets to total deposit ratio (this measures the bank's ability to meet withdrawals).
3. Loans, Investment or finance /to deposit ratio.

**Mal:**

Asset or Property.

**Management Ability (Soundness):**

Frequent changes in senior management, change in a key figure and the lack of succession planning need to be viewed with suspicion. Risk management is a key indicator of the management's ability as it is integral to the health of any institution. Risk management should be deeply embedded and respected in the culture of the financial organization.

**Maysir:**

Literally, it refers to an ancient Arabian game of chance with arrows used for stakes of slaughtered animals. Technically, gambling or any game of chance.

**Mudāraba:** a partnership in profit between capital and work. A Mudāraba is typically conducted between investment account holders, as providers of funds (Rabulmal), and the Islamic bank as a Mudārib (see below). The Islamic bank announces its willingness to accept the funds of investment account holders, the sharing of profits being as agreed between the two parties, and the losses being borne by the provider of funds, except in cases of managerial misconduct, negligence or violation of the conditions agreed upon by the Islamic bank. In the latter cases, such losses would be borne by the Islamic bank. A Mudāraba contract may also be concluded between the Islamic bank, as a provider of funds, on behalf of itself or on behalf of investment account holders, and business owners and other craftsmen, including farmers, traders... etc.

**Mudarib:**

An investment manager in a mudarabah contract.

**Murābahah:** sale of goods with an agreed upon profit mark-up on the cost there are two types of Murābahah sale , in the first , the Islamic bank purchases the goods and makes them available for sale without any prior promise from a customer to purchase it, termed a normal or spot Murābahah. The second type typically involves the customer's promise to purchase the item from the institution, which is called Murābahah to the purchase—order, it is distinguished from the normal type of Murābahah to which does not involve such a promise by the customer. The Murābahah to the purchase order is the sale of an item by the institution to customer (the purchase order) for a pre-agreed selling price , which includes a pre-agreed profit mark-up over its cost price , this having been specified in the customer's promise to purchase . Normally, a Murābahah to the purchase order transaction involves the institution granting the customer a Murābahah credit facility .to the purchase order transaction typically involves deferred payment terms, but such deferred payment is not one of the essential conditions of such transaction . A Murābahah can be arranged with no deferral of payment. In this case , the mark-up will only include the profit the institution will receive for a sale and not extra charge it will receive for deferral of payment .

**Mushārahah:** A form of partnership between the Islamic bank and its clients whereby each party contributes to the partnership capital in equal or varying degrees to establish a new project or to share in an existing one. Each of the parties becomes an owner of the capital on a permanent or declining basis and shall have his due share of profits. Losses, however, are shared in proportion to the contributed capital. It is not permissible to stipulate otherwise.

**Operational Risk:**

"...the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The definition includes legal risk and Shari'ah compliance risk but excludes strategic and reputational risk."

Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements. (IFSB2,December 2005).

**Ownership:**

The spread and nature of the structure is important, as it impinges on the propensity to induct additional capital. Support from a large body of shareholders is difficult to obtain if the bank's performance is adverse, whilst a smaller shareholders base constraints the ability to gather funds.

**Peer Comparison / Market Perception**

It is recognized that balance sheets tend to show different structures from one country to another and from one type of banks to another. Accordingly, it is appropriate to assess banks financial statements against those of its comparable peers. Special notice should be taken where the overall performance of the peer sector, in general, falls below international standards.

**Profitability:**

A consistent year on year growth in profitability is required to provide an anticipated return to shareholders include:

1. Return on average assets (ROA) (measures a bank's growth/decline in profits in comparison with its balance sheet expansion / contraction).
2. Return on equity (ROE) (provides an indication of how well the bank is performing for its owners).
3. In conventional bank's net interest margin (measures the difference between interest-paid and interest-earned, and therefore a bank's ability to earn interest, income).
4. Operating expenses to net revenue ratio (the cost/ income ratio of the bank).

**Rabb al-mal:**

Capital owner (financier) in a mudarabah contract.

**Riba:**

Literally, it means increase or addition or growth. Technically it refers to the 'premium' that must be paid by the borrower to the lender along with the principal amount as a condition for the loan or an extension in its maturity. Interest as commonly known today is regarded by a predominant majority of fuqaha' to be equivalent to riba.

## Risk Management Definition

Risk Management is defined as the process of identification, measurement, monitoring and control of risks.

### **Riba al-Fadl:**

Riba pertaining to trade contracts. Alternatively called riba al- buyu . It refers to an exchange of different quantities (but different qualities) of the same commodity. For example, exchanging one kilogram of dates (of one quality) with two kilograms of dates (of a different quality) in a barter exchange. Such exchange in some commodities defined in shari ah is not allowed. Different schools of fiqh apply this prohibition to different commodities.

### **Riba al-Nasa:**

Riba pertaining to loan contracts. Alternatively called riba al-nasi ah or riba al-qurud.

**Salam:** A contract for the purchase of a commodity for deferred delivery in exchange for immediate payment according to specified conditions.

**Sharī`ah:** The term Sharī`ah has two meanings: Islamic law and the totality of divine categorizations of human acts (Islamic). the second meaning of the term means Sharī`ah rules do not always function as rules of law in the western sense, as they include obligations, duties , and moral considerations not generally thought of as "law" Sharī`ah rules , therefore , admitting of both a legal and a moral dimension , have as their purpose the fostering of obedience to the Almighty. In the legal terminology, Sharī`ah means the law as extracted by the mujtahids from the sources of law.

### **Sharī`ah Non-compliance Risk**

"...arises from Islamic Financial Institutions' (IFI) failure to comply with the Shari'ah rules and principles determined by the Shari'ah Board of the IFI or the relevant body in the jurisdiction in which the IFI operate".

(IFSB2, December 2005.)

**Sunnah:**

The sunnah is the second most important source of the Islamic faith after the Qur'an and refers to the prophet's (peace be upon him) example as indicated by his practice of the faith. The only way to know the sunnah is through the collection of ahadith, which consist of reports about the sayings, deeds and endorsements of the prophet (peace be upon him).

**Regulatory Capital (RC):**

The minimum amount of capital imposed by Supervisors to maintain adequate level of capital in the banking system. {*Basel* Committee on Banking Supervision, Trends in Risk Integration and Aggregation (August 2003)}