Conclusions and Recommendations

7.1 Conclusions

It was found in this study that:

- (1) Construction resources were subjected to inflation at different rates during the research period. The first and second sub periods experienced high and diversify rates. Shifting high and hyperinflation risks to contractors through fixed prices clauses are not justifiable.
- (2) 82 % of construction projects employed either fixed price contract (no escalation at all) or ignored inclusion of escalation clauses.
- (3) 24 % of projects were ranked as failed, 58 % challenged and 18 % successful projects
- (4) An average Sudanese contract during the research period completed with:
 - 1.17 construction performance index ($\sigma = 1.47$)
 - 2.23 construction time index ($\sigma = 1.88$)
 - 27 % advance payment
- (5) Underestimating the reasons for cost and time variances would complicate project managers' decisions.
- (6) Construction projects cost and time overruns could be attributed to inflation and variation only and no contractor or a client was compensated through remedial damages.
- (7) Construction contracts that were run without any time schedules were found to be 45 percent of the projects studied.
- (8) 1998 2002 sub-period indices improved compared to those of the first and second sub periods.
- (9) None of the analyzed projects employed foreign currency as a measuring rod.
- (10) No pre-set formulae to adjust contract amount was recorded.
- (11) The government share as a client was high (47 %).

7.2 Recommendations

The researcher believes that not all construction time overruns were excusable with no compensation to innocent party. More research is to be conducted in collaboration with construction firms to distinguish excusable delays from inexcusable delays in order to identify responsibilities.

More research need be conducted to create trustable baseline measures for the construction industry; including the following areas:

- verification of whether planned construction schedules reflect contractor's real capabilities
- construction firm's employment of softwares available with an objective to make a quantum leap in reducing construction time indices
- construing good contracts to be supplemented by urging contract parties to adhere to
- the inclusion of liquidated damage clauses in contracts and whether they must reflect parties' real loss

All above research efforts have to be conducted in close collaboration between universities, research centers and the relevant organizing bodies of the construction industry in order to have real long term benefits.

References