The Nexus of Monetary Variables on Construction Prices

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STATEMENT OF THE PROBLEM

• Developing economies, such as Nigeria, usually experience fluctuations in general price;
• leading to domestic inflation;
• and an adverse effect on aggregate demand in the economy (particularly the housing sector) due to variation in the cost of construction materials
OBJECTIVES OF THE STUDY

The study set out to examine the:

• trend of monetary variables and materials prices, as well as the
• relationship between cost of construction materials and monetary variables

CONTRIBUTION OF THE STUDY

The outcome of this study will:

• help minimize fluctuations in monetary variables through targeted monetary policies
• help in the proactive management of inflation triggers
• expand the frontiers of knowledge on the subject area
THEORETICAL BACKGROUND

• The construction industry contributes substantially to global and national economic development and stability

• In 2008, it contributed about £75 billion to the UK economy (Dye and Sosimi, 2010)

• Developing economies should pursue economic policies that would curtail inflation, stabilize price level and exchange rate, ensure equilibrium in balance of payment, and promote economic development (Jhingan, 2003).

THEORETICAL BACKGROUND (contd.)

• These policies are expressed as monetary policies, measured through monetary variables

• Monetary policies seek to achieve desired macroeconomic objectives by managing the quantity of money in the economy (Central Bank of Nigeria, 2011)

• Monetary policies and variables indirectly affect the construction industry, with extreme situations leading to insolvency of companies in the sector

• (Rwelamila and Lobelo, 2002)
METHODOLOGY

• Data used were obtained through
  – secondary sources for data on monetary variables
  – primary sources for data on construction material prices
• Using a non-probabilistic purposive sampling method
• Both descriptive and inferential analyses were carried out:
  – descriptive graphs were used to show trends in monetary variables and construction cost change, while
  – regression (inferential) analysis was used to explore the relationship between monetary variables and construction cost

SUMMARY OF MAJOR FINDINGS

• Analysis of trend in monetary variable reveals that the F-values are significant at above .05 level
• implying an agreement between the predicted value and the actual value of all the monetary variables
• only the model for credit to the private sector is accepted, having an $R^2$ value of 0.811 (i.e. above 0.7)
• for material price trend analysis, the model can only be accepted for five materials (i.e. PVC pipe, ceramic floor tiles, hardwood, electric cables and emulsion paint), all with $R^2$ above 0.8
SUMMARY (contd.)

- thus, for the rejected models there will be significant variation between the predicted and actual values
- when the analysis of price and monetary variables was carried out at a 0.9 (or 90%) level of acceptance, only the models for hardwood and sandcrete block met the model criteria for acceptance
  - perhaps, because these materials are abundant locally and require the least technological input in production

CONCLUSION & RECOMMENDATION

- The study established a relationship between monetary variables and the cost of procuring construction materials, and;
- recommends the establishment of monetary framework(s) to guard against sudden changes in fiscal policy
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