Review of: "Impacts of Innovations in Financial Services Delivery on the Macroeconomy in Nigeria"

Lukman Olorogun

Potential competing interests: No potential competing interests to declare.

General comments

The study tries to establish a positive relationship between innovations in the financial services sector, rGDP and money demand in Nigeria. It tries to justify that greater economic wellbeing of Nigeria could be measured through rejuvenation of financial services that have been recorded in Nigeria over the periods under study. It is an excellent idea considering that fewer existing studies focus on this area. The author(s) are well grounded on the subject-matter and methodology to some extent, and the country. Generally, the study puts forward a wide range of knowledge from the beginning of the study until the end. The study is to some extent seems to be well arranged and well-connected to modern scientific approach. References are updated due to the fact that the area of study is an evolving research area. Conclusively, the study is relevant, however, needed a lot of amendments before it can be publishable.

The work was poorly arranged in terms of usage of literature or citations to authenticate a claim or proposal, technically chronological citations are not well arranged. A lot of statements need clarifications. In other words, the study is full of statements that do not put forward complete or intended ideas. The study overly focused on Nigeria without recognition of global contributions, specifically the first world or advanced countries' academics and other stakeholders to the study area. Methodology is an open field which is not acceptable. Finally, the contribution of the study is missing which makes readability difficult. Nevertheless, the study brought forward some interesting knowledge on the cordial relationship between financial innovations, rGDP and money demand in Nigeria. Overall sections' arrangements violate standard empirical study procedures.

Shortcomings of the study

Title

Impacts of innovations in financial services delivery on the macroeconomy in Nigeria

This title did not reflect the phenomena the study was trying to resolve, and methods adopted. This is because "Macroeconomy" is too general and much too heavy to be studied in a single study.

I suggest that the title should be:

Impacts of innovations/development in the financial services sector on GDP and money demand in Nigeria: Error Correction Model approach

OR

Relationships between financial services innovations on rGDP and money demand in Nigeria

Abstract

The abstract is well written. It puts across the idea of the research to the reader. The current abstract contained a problem statement, methodology, variables description and data ranges, results or findings and a conclusion. However, the sources of data are missing. The author(s) adopted rGDP and money demand as a proxy for macroeconomy??? which is strange considering that macroeconomy is a wider phenomenon as indicated in the previous sections.

Introduction

The introduction contains some vital and relevant information about the whole field under study. Nevertheless, the introduction was without several incomplete statements. For example, the last sentence in paragraph 1 "the plethora of studies suggest that…. determination respectively" means what???? In addition, the author(s) indicated that there are several studies but only stated two references??? Similarly, paragraph 2 line 1: the author(s) concluded that Financial Innovation (FI) redefined the determinant of money demand as established in previous study which brings the study to an end. Furthermore, in the Parag. 2 sentence 2, author(s) need to provide clarification of "[…] traditional investigation of money demand that leads to significant structural changes […]" where does this statement come from? What does "traditional investigation of money demand" mean??? Why did the author(s) concur with the idea of proxying macroeconomy on the impacts of FI on money demand and rGDP??? Likewise, why did the author(s) agree that the impact of FI on macroeconomy is multi-dimensional? Provide examples of the dimensions? The statement "Since launched of FI in 2014 [...] does that mean FI was only launched in Nigeria in 2014 or what???? Is there no ATM, internet banking etc. in Nigeria long before 2014??? Parag. 3 "Despite the mediating role of FI ……. other financial innovations? Like what and what???

2- Economic performance and Financial Innovation Mediating role

This section proves nothing other than Nigeria history. In fact, it is more or less tautology of what financial innovation is in Nigeria which has already been stated in the previous sections. Throughout the section, there were no references to well-established literature and international policies that were the foundation of the research area.

The above are just tips of an iceberg because throughout the study those are common. Add to this, terminologies such as M3, M2, broad money etc. were used without definitions. It would be better if finance or financial economics' jargons are clearly defined in its simplest form or to a layman's understanding. One of the main themes of the research was totally missing such as the last paragraph is expected to contain the main objective of the study followed by the contributions of the study in order to bring the reader earlier on to the whole context of the study. However, this is missing.

Conclusively, author(s) have not shown any mediating role of FI and economic performance or prove what economic performance and FI is to mediate.

Research Question and Objective

Questions and objectives were clearly stated throughout relevant sections. The models were wrongly written or typed.

Empirical Literature

It is conventionally known as “literature review” or “review of literature”, however, it was titled “Empirical literature”. Literature review normally entails both theoretical and empirical studies. Thus, the section was wrongly titled because paragraphs 1, 2, and 3 detailed theoretical aspects of the area. The literature was well detailed albeit unorganized and most of them are outdated publications. Like I pointed out earlier, the study area is an evolving phenomenon, thus, a chunk of current studies is available online across publication outlets. This is not to discard earlier literature, nevertheless, current literature would have provided the author(s) a strong justification of the study’s outcomes. Every paragraph contains incomplete ideas or sentences that failed to pass across the intended information.

Parag. 1 author(s) stated “[…] classical approach to money demand, my question is “What and what is classical approach and who and who are regarded as classical theorists??? Another one is, however, the critical approach, what is the critical approach and how does it come by????

Parag. 2, it was claimed that technology brings about various definitions of money. Who defines this? How does technology change the well-established definition of money???? Money is a means of exchange even if it is the Central Bank’s digital currency, its main purpose is to facilitate exchange with an ease process.

Parag. 3. Monetary policy through financial innovations has no uniform impact on economic growth and money demand, my question is when and where does this happen?? Similarly, Sanya and Tunji’s study on where? The statement: For example, the ATM and POS […] is for what and for which year and country? Mathew et al. (2010) on which problem and location??

Parag. 4. Evidence […] Inverse correlation theory of interest rates?? Where is the source of the evidence and if it implies that FI has no significant impact on money demand in Nigeria. Why are the authors conducting the research???? What is the meaning of this sentence???? Likewise, Okafor et al.’s study for which country and what are they trying to resolve??? These and many more questions are very important. Monetary policy is too complex and differs in designs and applications. A huge difference between developed and developing nations’ monetary policies and applications. In fact, the impact of macroeconomic issues differs so to say.

Parag. 5. The authors stated “Later literature […]” but the citation was 1974. In 1974 there were less statistics too and less FI so the authors cannot use 1974 publication to justify 1990 empirical results (please reread the article to understand my argument), rather you can use 1990 to argue for or against 1974 results. Furthermore, authors have to clarify the term “foreign interest rate”???

Despite the above stated shortcomings, there are lights and knowledge in the literature review section but it requires serious rewriting and rearrangements.

Analytical framework

This section was titled “Analytical framework” which is not right. The section was awkwardly arranged. Starting with the definition of Irvin Fisher’s quantity theory of money. The authors totally concur and adopted the theory, forgetting about its inadequacies proven by Keynesians, Tobin and other subsequent theorists. For instance, Fisher’s theory failed to recognize the role of interest rate etc. Moreover, Fisher’s theory is a conjecture which needs to be proven and analysed. It is not an analytical framework. In fact, the authors have not proven anything from Fisher's theory. From Fisher, Keynesians, Tobin etc. studies abound and it is expected that the authors consciously recognize those excellent works in this section. Conventionally, this section is “Methodology”. Methodology allows you to list the processes one has chosen to solve the study’s problem(s) and achieve its objective(s). It is normally a long range of steps and procedures that must be detailed in each step. A standard methodology would start with data and sources wherein you define each and every variable, and state their sources, followed by empirical analysis/procedures with details and justifications for chosen those procedures. For every procedure has its merits and demerits and how you prepare to mitigate those obstacles.

This will be followed by model specifications. The authors’ version stated the models’ specifications before definition of variables. Monthly data were obtained from the Central Bank of Nigeria. This includes GPD which is questionable because GDP is annualized data. Plus, data conversion from annualized to monthly without specification on how that was achieved and its implications on the generated results from the econometrics’ results i.e., empirical results. I question the reliability of those data, however, for microeconomic data such as ATM, POS etc. I have no problem with that. For the sake of brevity, the whole section is chaotic.

Interpretation of Results

The results interpretation is nothing more than symbolic. The descriptive statistics were analyzed wrongly e.g., Jacque-Bera statistics were significant which is an indication of a problematic data that would definitely have grave consequences on the results. However, the authors concluded that it indicates a well-defined data which is good to proceed for further analysis. Even the means speak the truth of my comments. The authors further claimed that the results are symmetry, nevertheless, the Standard Deviation and Kurtosis speak otherwise. I am not sure if this was the reason why the “Correlation Analysis” was omitted or forgotten???? Although correlation does not necessarily mean causation, nonetheless, its presence would clarify many things in the descriptive statistics section.

The interpretation section began with the whole paragraph putting forward the justification for the study. I observed similar tautology throughout the study. In the second paragraph, on the impacts of FI on GDP, the authors discovered that ATM has a negative impact on GDP in the short-run???? ETR has a positive impact on the long or short run????

Paragraph 3, Lending rate???? This was not defined in the variable section. In addition, ETR, POS, and rGDP, ATM analyzed and measured against what and what????....and the conclusion that there was other relationship other than long and short runs?? However, authors have not provided that other relationship. In fact, R-square means what?? DW means what? And their implications???? F-Bound test statistics were only compared with 5% probability???

In all, only MPR was compared or justified with a previous study. Tables were wrongly arranged. Only GDP ARDL was presented in the body of the paper. Money Demand ARDL results were in the appendix for what reason???? Similarly, the unit root or stationarity tests' implications were totally missing. Add to that, traditional ADF and KPSS chosen for what reason????

Looking at the data set and series of developments in Nigeria, each one of those FI variables were monetary policies implemented over a period of time. It started with ATMs before others were invented. I have the feelings that structural break implications have not been taken into consideration.

Recommendation

Major revision