

Anticipating the Next Crisis: What Can Early Warning Systems Be Expected To Deliver?⁺⁺ – A Review

Dakup D. Koplamma*

I. Introduction

The world economy is still struggling to recover from one of the most severe financial and economic crises since the great depression of the 1930s. This financial crisis started from the United State of America and spread into several other countries with varied degrees of impact. The impact on Nigeria's economy, as seen in terms of decline in exports, fall in commodity prices, lower portfolio and FDI inflows, fall in equity market, and decline in remittances from abroad, has necessitated the need to have a rethink on the possible ways to cope, reduce or avoid the negative impact of any future crisis. The essence of this review, however, is to reawaken the general public and the Nigerian policymakers to the need for sound strategies and policies that will brace-up the economy against future occurrences as well as mitigate its impact. A summary of the paper is presented below, followed by comments and lessons for Nigeria.

II. Summary of the Paper

The paper attempts to rekindle the interest of policymakers and the general public towards having early warning systems (EWS) that would anticipate future financial crisis. The authors highlighted how the systems would realistically sound alarms and their effectiveness in various economies.

The study showed from past experiences that even though nearly all economies reflected a confluence of some underlying economic vulnerabilities and specific crisis triggers; crises in advanced and emerging economies were always more costly. The underlying vulnerabilities are often in the form of credit or asset price bubble, and balance sheet mismatch (excessive borrowing in foreign currency, at too-short maturities, or with inadequate capitalization). On the other hand, the crisis triggers could be almost any event - political turmoil, terms of trade shocks, contagion from other countries, or the example of the current crisis, the collapse of the subprime mortgage market.

⁺⁺ Written by Atish R.Ghosh, Jonathan D. Ostry, and Natalia Tamirisa and Published in the IMF Finance and Development, September 2009

* Dakup is a Youth Corps member of Research Department, Central Bank of Nigeria.

The authors emphasise that an early warning system would clearly show the underlying vulnerabilities ahead of time so that the country can come up with necessary measures to prevent the crisis from happening. To them, restricting unhedged foreign currency exposure of banks or borrowers, limiting leverage and requiring higher capital ratios will go a long way to reduce the buildup of vulnerabilities. Though, it was stressed that EWS cannot prevent every vulnerability, but would sound alarm about imminent risk to allow countries to brace themselves against impending crises.

The authors outlined certain steps towards developing an EWS: the first step is determining what events it should warn of. In this step, the authors stress the need to know the likely causes of crisis in the economies of the world. According to them, most crises in emerging markets were caused by, or at least accompanied by sharp reversals of capital flows (especially sudden stops of capital inflows). Though the authors agree that such crises may have an external dimension, but they were more likely to be centered on the financial sector. The authors also added that the sharp declines in output, beyond mere cyclical fluctuations, were likely to be of independent interest to policymakers, regardless of whether they were accompanied by a financial crisis.

The paper further stated that after a crisis had been defined, the next step would be to develop the appropriate analytical toolkit. This toolkit needed to combine formal quantitative analysis with more heuristic methods such as broad-based consultations and judgment. They classified the role of quantitative tools into fourfold: first, providing a means for searching systematically for vulnerabilities; second, exploring linkages, especially through the financial sector that could allow a crisis to mutate and propagate across sectors, markets and across countries; third, quantifying both the likelihood and repercussions of a crisis materializing, given the identified vulnerabilities; and fourth, disciplining and informing the use of judgment. In complementing these quantitative tools, the authors therefore, suggest approaches such as consultations with policymakers, market participants and academics, as well as application of experience-based "rules of thumb", intuitive judgments, and common sense, which will help spot new sources of vulnerabilities.

According to the authors, policymakers were persuaded by a clear and candid communication of early warnings, substantiated by comprehensive analysis. These analyses needed to include a description of the underlying sources of vulnerability to unwind, and of how these shocks could propagate across sectors, markets, and countries. Furthermore, they suggested that early warnings needed

to be accompanied by a clear set of policy options emphasizing trade-offs between addressing different types of risk and underscoring the need for international policy coordination. The paper concludes that communication needed to be carefully calibrated with some messages transmitted in a confidential manner to policymakers while other less sensitive information should be released to the public.

III. Comments

The research on the early warning system was mainly to raise flags about possible worst-case scenarios and present policymakers with options for how best to respond. This required rigorous analysis, sound judgment and sharp communication. However, even a perfectly designed EWS might not predict and prevent all crises.

In addition, the authors noted that crises were caused by a variety of vulnerabilities and triggers in several countries. These included the weaknesses in financial regulation which led to the collapse of the subprime mortgage market in US (2007), governments short-term external (and foreign – exchange-denominated) liabilities and political shocks in Mexico (1994), terms of trade deterioration (asset price deflation) in Thailand (1997) with contagion effect on Indonesia in the same year. Others were tightening of monetary policy, exchange rate depreciation and weaknesses in risk management at the individual bank level in Sweden and Finland (1991). The past experiences in these countries would help us to develop EWS that would sound alarm on imminent risks, which will allow countries brace themselves up against the impending crises and also make policymakers to put contingency plans in place. The likely causes of future crises were not enumerated and the past experiences reflected that of developed and emerging economies only, thus it generally excludes developing countries like Nigeria which were always at the receiving end. Therefore, the authors should look into the causes of future crises and incorporate developing countries whose experiences were different from the developed and emerging economies.

IV. Lesson for Nigeria

The vulnerabilities and triggers earlier mentioned were the main causes of crises in those countries. In Nigeria, there have been observations that the economy is very vulnerable to oil price shocks. Others are political/religious conflicts like the boko haram surge, the militancy in the Niger delta and cases of balance sheet mismatch. These however have resulted in falling productive capacity and welfare. The macro-economic and social challenges posed by the global

financial crisis require a much better understanding of the appropriate policy recommendation that could be applied to the situation in Nigeria.

First, the mono-cultural nature of the economy exposes it to external shocks. In other words, the over-dependence on oil at the expense of other sectors reduces the country's capacity to absorb shocks in the wake of such crises. This can be resolved by diversifying the economy for more resilience to future crises. Other sectors of the economy such as agriculture and tourism should be developed. Second, absence of technological innovations that drive growth and development can reduce the country's ability to absorb shocks. Economically, inclined crises would find a ready place in a country that is import dependent. This can be mitigated by rapid technological innovations to transform the economy. The transformation of scientific ideas and technological knowledge into goods and services should be encouraged by all stakeholders. Third, lack of a sound and vibrant financial system (money and capital markets) can expose the country to future crisis. A weak financial system and poor risk management would make the country vulnerable to crisis. A strong and vibrant financial system that performs effective financial intermediation roles in the economy would serve as an in-built stabilizer against any crisis. Fourth, a robust development of the human capital that will provide a means for searching systematically for vulnerabilities and readiness is required. This can be done through scholarship and university funding. In addition to this, government should make consultations with policymakers, market participants and academicians as well as the application of educated guesses, intuitive judgments, common sense, and "out-of-the box" thinking to be able to discover new sources of vulnerabilities.

V. Conclusion

Beyond the technical difficulties of identifying vulnerabilities, the greatest challenge to the development and usage of EWS is perhaps, persuading policymakers to act on them. This puts a premium on clear and candid communication of early warnings, substantiated by comprehensive analysis. Given the policy implications discussed above and their appropriate attainment by policymakers, Nigeria would be able to predict, prevent and even spot new sources of vulnerabilities, bearing in mind that the next crisis may be different from previous ones.