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Financial sector development, economic volatility and shocks in sub-Saharan Africa

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Introduction

Evidence abounds of the positive relationship between financial development and economic growth. While the empirical and theoretical literature has established a positive impact of financial sector development on economic growth, the potential links between financial development and volatility in developing countries and sub-Saharan African (SSA) in particular have been understudied despite the apparent rampant shocks. Specifically, the channels through which financial development potentially affects growth volatility remain unknown. More so, the extent of the volatility–financial development nexus is very mute in the literature. Meanwhile volatility, regardless of its source, is a natural source of worry in a world of market imperfections. This holds with particular force in developed economies where the financial sectors are relatively well developed. Some studies have long revealed greater forms of volatilities in high income countries on account of greater economic concentration. Legitimate as it is, if volatility matters in developed economies, then it must pose an even greater source of concern for developing countries that are still struggling to meet basic needs. Empirically, what we know so far on the financial development–volatility nexus is inconclusive and none of earlier studies on finance–volatility nexus have investigated the channels through which finance impacts on volatility in SSA. Even the few existing studies have failed to decompose volatility into its various components thereby obscuring how finance uniquely interacts with each component, and leaving out much of the richness of the volatility–finance–shocks relationships as much of the real world interactions can best be explained by disaggregated models of economic fluctuations. By disaggregating volatility, this study examines the effect of financial development on volatility as well as channels through which finance affects volatility components in 23 SSA countries over the period 1980–2014 using the newly developed panel cointegration estimation strategy.

Key Findings and Policy implications

Our evidence highlights the role of financial sector in economic fluctuations given the negative relationship between financial development and business cycle volatility. The implication is that, developed financial systems are more capable of screening potential borrowers, which should reduce the likelihood that projects with greater probability of failure are financed. Thus, smoother business cycle is associated with financial systems characterized by reduced credit markets imperfections. Because external shocks to economic activity are magnified by asymmetric information, lowering the level of market imperfections is therefore expected to reduce volatility at the business cycle. The overall result is that economic fluctuations are less volatile with developed financial sector. However, unbridled financial development associated

with over developed financial sector is not healthy for growth as financial development–volatility nexus is intrinsically nonlinear. While developed financial systems tend to be more efficient in identifying those firms that wrongly overstate the extent of their liquidity, over developed financial sector is often associated with excessive credit growth to the private sector thus permitting the financing of unsustainable projects magnifying business cycle volatility. Policy makers should rather seek to strengthen the appropriate size and quality of finance rather than expanding the financial sector.

Further evidence suggests that volatility caused by monetary shocks is more important and persistent than that caused by real shocks and financial underdevelopment of SSA. However, while monetary shocks have large magnifying effect on volatility, their effect in the short run is minuscule. The reverse however holds for real shocks. If domestic output fluctuations were primarily driven by external shocks, then our evidence would have supported the real business cycle view that economic fluctuations are largely influenced by world productivity disturbances. Rather, our findings show that factors driving fluctuations are largely internal. Turning to the transmission channels, higher levels of financial development magnify the impact of monetary shocks. Rising inflation reduces consumers' spending as this erodes purchasing power thus lowering firms' revenues, net worth and creditworthiness. These increases the agency costs and the external financing premium magnifies shocks to economic activity by amplifying spending, borrowing and investment vagaries. The magnifying effect of financial sector is however higher at the short run business cycle relative to the long run. This notwithstanding, financial development dampens the positive effect of real shocks on volatility components. Apart from relaxing credit constraints for firms, deepening the financial sector may also help mitigate real shock to economic activity as it promotes diversification thereby lowering risk. Strengthening financial sector supervision, including cross-border oversight as well as adoption of inflation targeting may be very crucial in examining the right levels of finance and price stability necessary to falter economic fluctuations.

Concluding thoughts

This paper quantified the relative importance of a monetary and real shocks and the how finance affects business cycle and long run volatilities through its interaction with the broad set of shocks. Our overall finding shows that while well-developed financial sector dampens volatility at the business cycle, unbridled financial development may also magnify fluctuations. Further findings show that while monetary shocks have large magnifying effect on volatility at the long run business cycle, their effect in the short run is minuscule. The reverse however holds for real shocks. Our main conclusion is that irrespective of the component, volatility caused by monetary shocks is more persistent than those caused by real shocks and financial underdevelopment. This notwithstanding, our evidence reveals that irrespective of the time horizon, financial development dampens (magnifies) the effect of real shocks (monetary shocks) on the components of volatility although the dampening effects are huge in the short run.