

# Commentary: Regulating Finance and Regulators to Promote Growth

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Ross's work has elevated the debate on crucial questions concerning the relationship among finance, growth, and regulation. In particular, he and his co-authors have made pioneering contributions by building international data sets and constructing indexes to allow systematic analysis of issues that previously were argued largely by anecdote and assertion. Both academics and policymakers owe a great debt to Ross for this work and for his many thoughtful analyses of the data.

In this paper, Ross focuses on two key questions:

- 1) What is the impact of financial development/depth and growth and income distribution?
- 2) What characteristics of financial regulation and governance are most effective in generating growth?

To address these questions, he uses cross-country regressions, comparisons across U.S. states, and historical examples. To briefly summarize, his main conclusions are:

- 1) Financial development/depth enhances economic growth and is particularly helpful for those at the lower end of the income distribution. The primary mechanism for the effect is

improving the efficiency of the allocation of capital in an economy (see also the paper by Dufflo and comment by Murphy in this volume).

- 2) One size does not fit all for financial regulation and regulatory structures. He underscores that regulatory policy may have different effects in different institutional settings. The governance and incentives of regulators and supervisors are crucial in determining the effectiveness of regulatory policy.

Ross draws on a vast array of research he and his co-authors have done to establish these conclusions. I will use Ross's thoughtful and wide-ranging paper to focus on four issues:

- 1) A crucial unanswered question about volatility,
- 2) A crucial unanswered question about financial innovation,
- 3) An amplification of Ross's concern, on which I believe he is correct, that many regulators are relying on capital regulation to cure too many ills, and
- 4) A somewhat different perspective on the finding that more power to supervisors often ends in tears.

### **Finance and Volatility: Is There a Trade-Off?**

I believe that the goal of financial development and regulation (both public and private) should be to support and enhance sustainable economic growth, consistent with consumer protection. Ross's work provides evidence that a deeper and more efficient financial system is a driving force behind economic development and growth. A crucial unanswered question is: Might there be a trade-off with volatility? That is, to obtain a higher growth "return" through financial development, is there a cost in terms of greater "risk" in the system? Following the crisis, this is a critical issue to investigate. It also raises a further and much more vexing question: If there is such a trade-off, then how would we determine the "optimal" size of the financial sector in an economy? (See Kroszner and Strahan 2011)

In theory, greater financial depth and development could either increase or decrease stability. On the one hand, a larger and more

developed financial sector could improve risk sharing and diversification and thereby reduce volatility. On the other, a larger and more developed financial sector could allow greater concentrations of risk and generate interconnections, thereby potentially making the entire system more fragile and vulnerable to shocks.

I was surprised to find almost no studies examining this issue using cross-country data. In earlier work with Luc Laeven and Daniela Klingebiel on banking crises (2007), for example, I indirectly addressed this by looking at whether firms that relied more on sources of external finance were hit harder during banking/financial crises than firms that relied more on internally generated cash flows. Not only did we find this generally across countries, we found that this affect was most pronounced in countries with the deepest financial systems (See also Kroszner 2007). This evidence thus hints at the possibility of a trade-off. The deeper financial system might create more connections between the real and the financial sectors that could make the firms that rely most heavily on the financial system more vulnerable in a banking crisis. Our analysis, however, did not allow us to address in detail the welfare question of whether these types of firms or the economy as a whole was better off in the long run.

In contrast, data from branching deregulation across U.S. states suggests that there is no trade-off but that deepening of the financial sector is a “win-win.” As Ross notes, state growth rates tend to increase following branching deregulation. Examining the quarter century during which states removed barriers that had prevented banks from branching across states, Morgan, Rime, and Strahan (2007) and Kroszner and Strahan (forthcoming) find that measures of state economic volatility fell as the banking system integrated across state lines. The variability of state employment growth and the growth of gross state product, for example, decreased after interstate branching was permitted. Interestingly, both growth shocks and trend growth rates become more alike across states as the degree of commonality of the ownership of banks in those states increased.<sup>1</sup>

Thus, the relationship between financial sector development and volatility is an open question. Much more empirical work is needed. One straightforward way to do this would be for Ross to extend his

main cross-country sample, which is primarily from 1960 to 1995, to 2010 in order to encompass the 2008-2009 crisis and investigate both growth and volatility impacts of financial sector development. I would rate this as one of the most important unanswered questions raised by the recent crisis.

### **Financial Innovation: Janus-faced?**

Ross rightly points out that historically, financial innovation has been necessary to keep up with the increased complexity of production processes and of corporate organizations that accompany economic growth. He characterizes this simultaneous development of innovation and organizational complexity a natural “co-evolution.”

While I very much agree that financial innovations are crucial in a dynamic, growing economy, in some cases these innovations may be Janus-faced. The “good” face of credit default swaps (CDS), for example, is that they are brilliant innovations that permit market participants to hedge default risk and give supervisors one metric to measure market perceptions of a firm’s or a sovereign’s risk in real time. The “bad” face of CDS, however, is that they can permit astonishing risk concentrations (e.g., AIG) that can generate fragile interconnections and systemic risk when such contracts are traded over-the-counter and not centrally cleared (see Kroszner and Shiller 2011).

How then can a supervisor (or market participant) determine in advance the risks associated with a new instrument or the market structures that would be necessary to reduce those risks? Obviously, with a new instrument, it is difficult—if not impossible—to undertake the empirical testing to assess the two faces that such an innovation may have. The cost of stopping all types of financial innovation due to insufficient data, however, seems too great. Developing a framework for evaluating the costs and benefits of innovation is another crucial issue raised by the recent crisis. How to do this, however, remains an important unanswered question.

Even in cases where we do have relatively long data sets, it is possible that the innovation itself can change the historical correlations and risks—that is, they may be endogenous to the innovation (See Kroszner 2010a). For most of the 20th century, for example, the

mortgage market in the United States was relatively fragmented geographically, so geographic diversification of a mortgage portfolio could reduce risk. Interstate banking, as well as geographically diversified pools of mortgage-backed securities (MBS), helped to provide a national source of financing. In principle, banks could then diversify away from local housing risk concentrations and individual home owners could tap a national rather than localized market for financing their mortgages.

These innovations, however, changed the historical correlations and risks by helping to increase the integration, hence correlation, of housing markets across the country. Thus, the benefits of geographical diversification waned precisely as instruments such as MBS rose to provide that diversification. As this example shows, trying to assess the faces of a financial innovation is a particularly vexing task but one that deserves much attention.

### **Capital Requirements: Could They Form a Maginot Line?**

Both the quantity and quality of capital held by banking and financial institutions were clearly inadequate prior to the crisis. I want to state unambiguously that I believe that imposing higher capital requirements following the crisis is the right response. My concern, however, is that raising capital requirements is not a cure-all and in some cases seems to be relied upon as a substitute for directly addressing fragilities in the system.

I worry that high capital requirements can provide a false sense of security to regulators and to the public about the safety and soundness of the financial system and lead to complacency in crucial areas of regulatory reform. A high capital requirement, for instance, is not a substitute for developing orderly resolution procedures, both domestically and cross-border, or for improving market infrastructure, such as central-clearing of over-the-counter derivatives (see Kroszner and Shiller 2011). I believe that it is best to address problems and vulnerabilities directly rather than indirectly in order to reduce the likelihood of unintended consequences.

Much as we would not want banks to put too many of their eggs in one basket, relying too heavily on any one instrument, such as

capital requirements, may not be a prudent approach for regulators and supervisors. As Ross points out, very high capital requirements can generate incentives to the owners of the financial institution to try to take on more risk in order to reach return-on-equity goals. More generally, the higher the requirement, the more incentive there is to find ways around it. These incentives can lead to a number of unintended consequences.

First, a very high capital requirement can lead to more off-balance-sheet activity and risk exposures by regulated institutions that may be harder for supervisors and the public to detect. Second, it can push activities off into the “shadows,” to markets and institutions that are not directly regulated but that may be closely interconnected to the regulated institutions, for example, borrowers, funders, and counterparties. Third, it can channel efforts in financial innovation to create instruments that may evade particular capital requirements but not reduce risks to an individual institution or to the system as a whole. It is quite difficult for the Basel Committee as well as national regulators to get the risk pricing “right” in a dynamic market. Thus, rather than conserving supervisory resources and providing greater cushions against shocks, very high capital requirements could paradoxically require greater vigilance by supervisors, generate more fragile interconnections, and thereby potentially reduce the overall safety and soundness of the system.

Overreliance on any one line of defense brings to mind an analogy with the Maginot Line: the more heavily you rely on any one instrument, the more incentive there is to evade it and the fewer resources may be allocated to other instruments of defense (or offense). Following the large losses of life in World War I, the French debated the most effective way to prevent a repeat of that tragedy. Charles de Gaulle argued that France should invest in new types of armored mobile vehicles, airpower, and the training of a large standing army to deter a German invasion and allow a rapid and flexible response if one did occur. Andre Maginot countered that resources would be more effectively used to build a heavily fortified barrier to deter and slow a German invasion. If an invasion were to begin, he argued, this

defense would give sufficient time for France to mobilize and call up reserves, thereby substituting for a large standing army and investment in new means of rapid response.<sup>2</sup> Maginot of course won the argument, and France built what came to be known as the Maginot Line along its eastern border in the 1930s.

In response, the Germans naturally tried to find ways around the fortification and invested heavily in innovative armored mobile vehicles (Panzer Divisions) and airpower (Luftwaffe). The Germans made a lightning fast strike (Blitzkrieg) through the Ardennes forest, the weakest point of the Maginot Line. Given the denseness of the forest and their fortifications, however, the French did not believe that a quick invasion through the Ardennes was possible.<sup>3</sup> Obviously, they were wrong and soon the Maginot Line was surrounded, and France fell to Germany two months after the initial invasion.

The false sense of security and excessive reliance on one instrument holds important lessons for supervisors today. Capital “barriers” can be helpful but they can also create strong incentives to find innovative ways to evade them. As the crisis demonstrated, what may have been seen as a well-capitalized institution can have this “fortification” erode extremely quickly in tumultuous market conditions. “Prompt corrective action” relied on capital layers above the regulatory minimum to provide sufficient time for remedial action, but the rapid decline of Washington Mutual’s capital ratios, for instance, demonstrates that the capital “fortification” may not give supervisors sufficient time to act. In addition, activities that were thought to be relatively low risk, such as housing (as evidenced by low Basel I risk weights), could actually be the places of greatest vulnerability, much like the Ardennes.

Supervisors and regulators should take these lessons to heart and not rely on very high capital as a substitute for dealing with fragilities and vulnerabilities throughout the system since the unintended consequences have the potential to reduce, rather than enhance, stability of the system. Capital requirements are a complement to supervisory vigilance and not a source of complacency.

## **Increased Regulatory Authority: Why Doesn't It Generally Improve Outcomes?**

I want to conclude with a few thoughts on Ross's fascinating finding that giving more power and authority to the regulators and supervisors often ends in tears. Ross finds that only countries with extremely good governance for their regulators and supervisors can avoid the negative outcomes. This is an important result given that supervisors and central banks around the world are being asked to do more, and being given more authority, to engage in "macro-prudential" policy. In particular, central banks are being asked to act not only in their traditional role as "fire extinguishers" as the flames of a financial crisis have begun to burn but also to act as macro prudential "smoke detectors" before the flames appear. (The following draws on Kroszner 2010b and forthcoming, and Kroszner and Strahan 2011.)

The "fire extinguisher" role is the classic one that central banks have played as lenders of last resort and liquidity creators in times of financial stress and tumult. Once the flames of the crisis appear, the central bank can then douse them with liquidity to prevent the fire spreading from one institution or market to another in order to avoid a systemwide conflagration.

The "smoke detector" or "macro-prudential" role emphasizes that the central bank has a fundamental responsibility to act early to prevent the tinder from igniting into flames. Being proactive in monitoring individual institutions and interconnected markets for signs of froth and fragility is what macro-prudential policy should focus upon. The macro-prudential role certainly does not conflict with the more traditional "fire extinguisher" role, but it requires a much expanded set of authorities and activities on the part of the central bank.

I think there are a number of challenges to successful implementation of macro-prudential policy (see Kroszner 2010b and forthcoming), but the issue most relevant to Ross's finding relates to the political economy dynamic. It may be very difficult to maintain a central bank's or supervisor's independence when it is actively engaged in macro-prudential policymaking, hence, it may be difficult to maintain excellent governance structures when these bodies effectively allocate credit through macro-prudential policy choices.<sup>4</sup>



Consider the case of housing. The United States and many other countries have numerous government programs and policies that encourage home ownership, ranging from reductions in down payments to direct subsidies to securitization (in the United States, for example, through Fannie Mae and Freddie Mac). If a central bank becomes concerned about “frothiness” in housing, how easy would it be to adopt policies that reduce loan-to-value ratios, restrict securitization, raise capital requirements, or otherwise increase the costs of mortgages? The unelected body of the central bank could be portrayed as trying to overrule public policies explicitly adopted by an elected body. This certainly could put the central bank in the political cross hairs and lead to questions about its judgments and demands for greater political oversight. Effective macro-prudential policies thus may involve risks for central bank independence and good governance.

### **Conclusions**

Ross has written a wide ranging paper that examines the role of banking and finance in economic development and the most (and least) effective ways to regulate the sector. As I have described above, crucial questions still remain to be answered, but Ross’s work will be a key touchstone going forward for research and policymaking related to these questions.

## Endnotes

<sup>1</sup>In more recent work, however, Loutskina and Strahan (2011) find that financial integration raised the sensitivity of local economies to housing price shocks during the 1990s and 2000s, thus amplifying volatility.

<sup>2</sup>The purpose of the Maginot Line “was to halt a German attack long enough for the French Army to mobilize and then to serve as a base for a counteroffensive,” (Romanych and Rupp 2010, p. 8).

<sup>3</sup>“Believing permanent defenses would compensate for shortcomings in training and equipment, the divisional commander (in the Ardennes where the Germans first invaded) emphasized the construction of fortifications rather than training,” (Romanych and Rupp 2010, p. 33).

<sup>4</sup>Charles Goodhart (2010) suggests that “the combination of operational independence to set interest rates and liquidity management together with prospective macro-prudential regulation just vests too much power in a non-elected body.”

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