

Finance, Growth, and Opportunity: Policy Challenges

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This paper first describes the connections between the functioning of the financial system and both the rate of long-run economic growth and the availability of economic opportunities. The paper next discusses how financial innovation affects economic prosperity. The paper concludes with an analysis of financial regulations, describing the lessons that have been learned over the last few decades and how these lessons should be reevaluated in light of the recent financial crisis

Finance matters for growth²

A large and growing body of research shows that the operation of financial markets and intermediaries exerts a first-order impact on the rate of long-run economic growth: (1) Countries with better functioning financial systems grow faster over many decades, and (2) Improvements in the operation of financial systems accelerate the rate of economic growth within particular economies.

Financial markets and intermediaries provide particular services that affect long-run rates of economic growth. They mobilize savings, choose where to allocate capital, monitor the use of that capital once it is allocated, and provide mechanisms for pooling and diversifying risk. To the extent that the financial system performs these services well, economies tend to grow correspondingly faster. To the extent that a financial system simply collects funds with one hand and passes those funds along to cronies and the politically-connected with the other hand, the economy tends to grow more slowly.

Moreover, consistent with the focus of the new growth literature, finance affects long-run growth by altering the rate of technological change and the efficiency with which resources are allocated. Finance is not very strongly linked with the savings rates. Rather, finance shapes the rate of economic growth by affecting the flow of capital to more or less efficient ends.

Indeed, recent research shows that financial policy reforms that enhance the competitiveness of the financial system spur entrepreneurship in the nonfinancial sector. Better, more efficient financial systems both ease the entry of excellent new firms and also ease the exit of relatively poor old firms.

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² The section draws on Ross Levine (2005), "Finance and growth: Theory and evidence," in *Handbook of Economic Growth*, ed. P Aghion, S Durlauf, 1A:865--934. Amsterdam: North-Holland Elsevier

Because there are winners and losers, not everyone wants a better functioning financial system. Some will fight vigorously against policy reforms that improve the functioning of the financial system and hence the rate of economic growth. Thus, political economy considerations are obviously paramount in reforming financial policies, either for the better or for the worse.

Finance matters for the poor³

But, who actually benefits from a better financial system? Does financial development induce an increase in per capita GDP only because the very rich get even richer? Or, does finance expand economic opportunities for the bulk of society?

Economic theory suggests that the operation of the financial system could have a major impact on the distribution of economic opportunities.

The financial system influences who can launch a new business venture and who cannot, who can acquire education and who cannot, who can live in a neighborhood that fosters the cognitive and noncognitive development of their children and who cannot, who can pursue one's economic dreams and who cannot.

Thus, the financial system affects the degree to which a person's economic opportunities are bounded by individual skill and initiative, or whether familial wealth, social status, and political connections delineate the contours of one's economic horizons.

Though much less well-developed than the literature on finance and growth, a growing body of research indicates that more competitive, better functioning financial systems exert a disproportionately positive impact on relatively low-income families.

With greater competition among financial institutions, banks lower interest rates and are pushed to become better at screening projects and monitoring managers. By boosting competition and efficiency in the nonfinancial system, financial development spurs economic activity and increases the demand for labor. Empirically, this manifests itself as an increase in the relative demand for lower-income workers. The relative working hours and relative wage rates of lower-income workers increase as improvements in the financial system accelerate economic growth.

This evidence raises an obvious question: if finance is so beneficial for accelerating the rate of economic growth and expanding economic opportunities, what are the barriers to creating well-functioning financial systems?

³ This section draws on the literature review by Asli Demirguc-Kunt and Ross Levine (2009), "Finance and Inequality: Theory and Evidence," *Annual Review of Financial Economics*, 1. The literature considers three related, though clearly distinct and potentially contradictory, definitions of inequality. Many researchers stress equality of opportunity. Others emphasize the intergenerational persistence of cross-dynasty relative income differences. Still others concentrate on income distribution because (1) they use income distribution to proxy for equality of opportunity or intergenerational persistence or because (2) income distribution is an independently worthwhile focus of inquiry, as relative income directly affects welfare. Since my goal is simply to note that a considerable body of research relates the operation of the financial system to various concepts of the distribution of economic opportunity, I do not distinguish among these different views of economic inequality, but see Demirguc-Kunt and Levine (2009).

I believe the answer is also obvious: some people do not want well-functioning financial systems that give the economically disenfranchised greater opportunities. They do not want to compete on more equal terms. Thus, generating financial reforms that accelerate economic growth will involve much more than identifying which financial sector policies are good for economic growth.

Financial innovation is indispensable for growth⁴

Before turning to a discussion of the types of policies that help in the creation of a growth-enhancing financial system, it is crucial to discuss financial innovation.

The literature on economic growth over the last two decades, if not the last six decades, has placed technological innovation in the starring role. Yet, the literature on finance and growth has largely ignored financial innovation. History suggests that this is a mistake: Financial and technological innovations are inextricably linked.

Financial innovations have been essential for permitting improvements in economic activity for several millennia. Whether it was (i) the design of new debt contracts six thousand years ago that boosted trade, specialization, and hence innovation, (ii) the creation of investment banks, new accounting systems, and novel financial instruments in the 19th century to ease the financing of railroads, (iii) or the development and modification of venture capital firms to fund the development of new information technologies and innovative biotechnology initiatives, financial innovation has been a critical component of fostering entrepreneurship, invention, and improvements in living standards.

The evidence does not imply that financial innovation is unambiguously positive. Financial innovations are frequently implemented simply to avoid regulations, and they played prominent roles in triggering our current suffering.

At the same time, the evidence does imply that financial innovation is important in fostering economic growth and expanding economic opportunities.

These observations – that (a) finance shapes the rate of long-run economic growth, that (b) finance affects the distribution of economic opportunities, and that (c) financial innovation is a pivotal input into the quality of the financial services provided to the nonfinancial sector -- have at least three policy implications:

- (1) Improvements in the financial system will generate winners and losers, suggesting that the political power of particular constituencies will play a central – if not the central – role in determining the degree to which a country selects growth-enhancing financial policies.

⁴ This section draws heavily on Stelios Michalopoulos, Luc Laeven, and Ross Levine (2009), “Financial Innovation and Endogenous Growth,” National Bureau of Economic Research, working paper, 15356.

- (2) The financial regulatory regime should not focus exclusively on stability since financial development and financial innovation influence human welfare by shaping economic growth and the distribution of economic opportunities.⁵
- (3) The regulatory regime must adapt to financial innovation, or well-reasoned, well-intentioned, well-structured regulations will become obsolete and potentially detrimental to economic prosperity as a country innovates.

Existing evidence on which financial regulations work best⁶

I now discuss evidence on which financial regulations work best in creating a financial system that boosts economic growth and expands economic opportunities.

First, in the name of economic growth, we should be wary of recent calls for more regulation and greater government intervention in financial systems. We should be very concerned about the form of regulation and the nature of government intervention and not just focus on the quantity.

In particular, an enormous body of research suggests that financial regulations are frequently used to help a small group of powerful elites, not to promote economic welfare in general. Whether it is Brazil or Mexico, India or Pakistan, Italy or the United States, publicly-owned, government-controlled, and state-protected banks are associated with slower growth, not more rapid rates of economic development. Moreover, these government-influenced banks do not typically lend much to the poor; rather, they lend the bulk of their funds to politically connected firms.

In terms of official supervision, a large literature finds that official supervisory agencies that exert a direct, powerful influence over banks typically use that power to alter the flow of credit toward political ends. Around the world, in countries with supervisory agencies that exert an influential hand over the affairs of banks, we observe much higher rates of corruption in lending, along with declines in bank efficiency.

The evidence, however, does not advertise the efficacy of a laissez faire approach to regulating financial systems.

The evidence instead indicates that countries that force financial institutions to disclose information in a transparent, easily comparable manner enhance the functioning of financial markets. Moreover, the evidence indicates that legal and regulatory system that both facilitate and compel equity and debt holders to oversee the management of financial institutions create

⁵ I am not suggesting that crises are unimportant. Indeed, crises are exceptionally costly. In developing economies, the fiscal costs of banking crises in the last two decades of the 20th century were greater than all of the non-military international aid provided to developing countries during the 20th century. In the United States, the IMF estimates the cost of the financial crisis at about \$3 trillion, which is about \$20,000 per US taxpayer and exceeds educational expenditures by federal, state, and local governments during the last decade. We obviously should care about financial stability. Yet, reducing the risk of systemic crises is not the only goal of financial regulation and therefore is not the only consideration in rethinking the governance of financial regulations.

⁶ This section draws heavily on James R. Barth, Gerard Caprio, Jr., and Ross Levine (2006), *Rethinking Bank Regulation: Till Angels Govern*, New York: Cambridge University Press.

more efficient, competitive financial systems that foster economic prosperity. Or, put differently, growth-promoting financial intermediaries arise with a greater probability when governments refrain from enacting and implementing regulations that interfere with the ability and incentives of shareholders and creditors to monitor financial intermediaries.

The crisis and financial policies: Lessons for promoting growth

Does the recent U.S. financial crisis conflict with these policy conclusions?

No. I think it reinforces the earlier findings. A series of regulatory policies in the United States (1) hindered transparency, (2) erected barriers to shareholders and creditors effectively monitoring the activities of financial institutions, and (3) created incentives for financial institutions to take excessive risks. Thus, the U.S. did not follow the basic lessons about financial regulations that have been learned from the last few decades of research. It is inaccurate, and ultimately unhelpful, to view the crisis as a failure of the market. The U.S. had, and has, lots of regulations and very powerful regulators. It is both more accurate and more useful to identify the regulatory and political failures that produced the crisis, so that the U.S. and other countries can enact more growth-enhancing policies.

For example, the U.S. Congress made it difficult for market participants and government regulators to acquire information on exposure to credit default swaps (CDSs). For many years, the Federal Reserve was very well aware -- and very concerned -- that it could not assess the counterparty risk of CDSs. Yet, it still let banks dramatically reduce capital through the purchase of CDSs. This was a bad choice, potentially influenced by the political power of bankers.

As a second example, the Securities and Exchange Commission (SEC) and Federal Reserve knew for over a decade that Nationally Recognized Statistical Rating Organization (NRSRO) would have overwhelming incentives to sell high credit ratings on securitized mortgages for over a decade. They knew that the explosive growth of securitization and collateralized debt obligations would dramatically intensify the conflicts of interest inherent in credit rating agencies. Basically, these credit rating agencies might not sell their reputations for a few million dollars, but for many billions of dollars, they energetically produced whatever ratings the banks needed. Yet, the SEC and Fed themselves still relied on the ratings of these agencies in evaluating the riskiness of intermediaries supervised by the SEC and Fed. This was not a lack of regulatory power. Rather, there was an institutional and political unwillingness to adapt the discretionary implementation of regulations in the presence of new financial innovations.

As a final example, consider the horrible incentives created by the behemoths Fannie Mae and Freddie Mac in conjunction with the policies of the Department of Housing and Urban Development and the Federal Reserve. For a host of political reasons, these institutions pushed banks to participate in sub-prime mortgages. Yet, even though these institutions and Congress knew for over a decade that the situation was deteriorating, politics trumped sound policy.

Over the course of many years, policymakers and regulators made choices, bad choices, in the United States. They did not adapt regulations in response to financial innovations to help and induce shareholders and creditors to monitor financial intermediaries and instead maintained policies that interfered with the ability and incentives of investors to govern financial institutions effectively. A more publicly responsible -- and responsive and accountable-- regulatory system could have captured the benefits to economic growth and economic opportunity from securitization, collateralized debt obligations, and credit default swaps, rather than turning them into malignant tools of financial destruction.

Conclusion

In conclusion, the operation of the financial system exerts a first-order impact on the rate of long-run economic growth. Moreover, research has produced useful guidelines regarding which financial policies have been most successful at creating growth-promoting financial institutions.

With regards to actually enacting and implementing growth-enhancing policies, however, the greatest difficulty lies in creating regulatory agencies that are powerful enough to facilitate and compel shareholder and creditor oversight of financial institutions while also obliging powerful regulatory agencies to act in the best interests of the public.