

Finance and Economic Growth

Remarks by IMF First Deputy Managing Director John Lipsky
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This conference will address a topic that is perennially important, but especially so at this time: How best to produce strong, sustained and balanced growth? For now, it is widely recognized that the challenge of restoring global growth in the wake of the current crisis will require reinvigorating private demand while restoring fiscal sustainability, and at the same time promoting balanced growth by shifting the relative sources of expansion between domestic and external demand in surplus and deficit economies. Moreover, the recent Pittsburgh Leaders' Summit and the Fund's International Monetary and Financial Committee (IMFC) endorsed a mutual assessment of economic policies to be conducted by the G20 economies. This initiative represents an important opportunity to help make policies during the recovery and beyond mutually consistent and supportive, and thereby more effective. The Fund's role in this new mutual assessment process will be to provide analytical support for this G20 process.

Of course, the focus of this conference is not the short-term policy challenges, but on longer-term issues for sustaining growth. This session will focus on the various forces that influence economic growth, a topic that remains a critical one, but one on which there is no complete consensus.

There is strong evidence, however, that trade openness was one key to East Asia's sustained strong growth and more broadly to all the growth success stories since the 1960s. Nonetheless, efforts to pin down precisely other determinants of "growth acceleration" episodes are generally held to have been inconclusive.

In fact, there probably is greater consensus about the factors that tend to impede growth. For example, excessively expansionary fiscal and monetary policies have proven to be damaging to growth prospects. And despite the doubts about financial liberalization that have found new life with the current crisis, financial repression also has proven consistently to represent another important impediment to strong, sustained and balanced growth.

In my remarks today, I will review briefly current views about the role of finance in economic growth. In particular, I'll discuss the implication of these views for financial regulation. It should not be surprising that the conclusion suggests that the principal challenge for policymakers is to strike a reasonable balance between financial openness that supports innovation, investment and growth while implementing regulations and effective supervision that limit the potential risks of financial excesses and instability.

The Role of Finance in Growth and Development: The Debate

I would like to begin with a bit of intellectual history that is particularly vivid both to our host Guillermo Ortiz and to me. Next year will mark the fiftieth anniversary of the publication of Jack Gurley and Ed Shaw's path breaking monograph, *Money in a Theory of Finance*¹. Building on their seminal 1955 *American Economic Review* article,² they placed finance and its monetary counterparts into a modern theoretical framework. An important implication of their work was that the financial system's role had been substantially overlooked as an essential determinant of economic growth.

Consensus views at that time were that finance at best was a second order consideration. You can look in vain for financial variables in Solow's canonical 1956 growth model and almost all the work that followed in its wake. At that time, the key to economic development typically was portrayed as getting the "real flows" right. Hence the focus was on domestic and/or foreign saving. For example, Paul Rosenstein-Rodan's 1961 article on the economics of foreign aid represented a complete antithesis of the Gurley-Shaw view.³ Rosenstein-Rodan projected domestic savings on the basis of recent performance, added expected aid flows, and derived 20-year growth rate forecasts.

Ron McKinnon joined Ed Shaw in emphasizing the role of the financial system in promoting economic growth, notably in his 1973 volume *Money and Capital in Economic Development*.⁴ *This theme also was central to Shaw's Financial Deepening in Economic Development*⁵ published in the same year.

Of course, it took some time for this viewpoint to take hold. Perhaps the poor economic performance of the 1970s encouraged a re-examination of many long-held views. As McKinnon and others pointed out, the combination of rapid inflation, together with a repressed financial system, produced lower savings at the same time that it distorted investment decisions. Distressingly, the evidence for this view was easy to come by at the time.

Focusing on savings-investment flows, without considering the financial system, misses two other key points. First, poorly designed incentives for financial institutions – sometimes associated with state ownership – can contribute to inappropriate capital-output ratios, thus muting growth. Second, the failure to develop effective securities markets implies excessive reliance on traditional banking. The results tend to include either systemic inefficiencies and/or a tendency toward instability and crisis.

Too many countries learned these lessons the hard way, particularly through the high inflation that afflicted many advanced economies in the 1970s, and through the 1980s debt crises in Latin America and elsewhere. In these cases, the principal failures did not originate in the financial system. However, the combination of macroeconomic imbalances and repressed financial systems helped produce lasting and growth-robbing distortions in saving and investment.

The 1990s and After: Consensus, Financial Innovation and Backlash

By the early 1990s, the consensus among both policy-makers and academic economists had shifted to become much more positive about the potentially growth-supportive role of a modern financial system in the process of economic growth and development. Scholars from a variety of perspectives found evidence suggesting significant growth-enhancing effects from financial development, typically measured in terms of either credit or broad money measures relative to GDP.⁶ Increasingly, policy proposals to encourage financial systems development moved to center stage, for example in the World Bank's *Doing Business Indicators*, which include several proxies for the efficiency of credit contracts.

Two other research streams also contributed to the shift in views regarding the role of finance. Raghu Rajan and Luigi Zingales showed that the availability of "outside" finance (other than retained earnings) has a decisive impact on the course of industrial development.⁷ Other researchers focused on the importance of civil and common law "legal origins" for financial system development⁸

At the same time that academic views were shifting, financial innovation became a more notable force. In particular, the share of finance in the US economy grew significantly, with spillover effects in other advanced economies.⁹ The securitization process accelerated strikingly, boosted by the rapid development of derivatives markets. The incentives were clear-cut: As Robert Merton argued, properly designed hedging strategies could dramatically reduce the amount of capital that financial institutions (and others) would need to hold as a cushion against potential losses.¹⁰ If financial innovation simply resulted in more efficient capital use, its pro-growth implications would be straightforward. But warning signals regarding the potential dangers of an increasingly securitized financial system represented by the Mexican crisis of 1994-95, and the 1997-98 Asian crisis (including, of course, the failure of Long-Term Capital Management) were not fully perceived or heeded.

There is no doubt that the global financial crisis of 2008-09 has created an incipient intellectual backlash regarding the prospective positive impact of financial development. Much of this reassessment is natural and sensible. However, it is fair to say that the idea that financial markets are not perfectly self-regulating does not represent a novel insight. To the contrary, there are good reasons why they are regulated universally.

Rather, the critical question is where the proper balance lies between the positive impact of financial development against the risks of instability and distortions. An associated issue is to what extent regulatory reforms – together with more effective supervision—can improve that balance by strengthening market safeguards. Moreover, the highly differentiated performance of even some of the largest international financial firms suggests that the magnitude of the current crisis wasn't inevitable, even given the existing regulatory setup.

Turning back for a moment to the academic debate, there is at present no clear consensus regarding how to measure the specific impact of financial development on growth. At the same time, while there is a broad consensus regarding the direction for needed reforms in financial sector regulation, there is uncertainty regarding the specific degree to which such reforms will reduce the risk of potential systemic instability. In other words, there is no generally accepted analytical method currently available to gauge with precision the overall cost/benefit balance of new financial sector

development. Ultimately, this issue will be settled by the practical decisions of policymakers and market participants.

The American Experience

With this somewhat unsatisfactory perspective on the state of our knowledge, perhaps it will be productive to look briefly to economic history, at least broadly defined. In particular, it is interesting to find that the role of finance in US economic development has been greatly reassessed since Gurley, Shaw and McKinnon first published their studies. Scholars such as Richard Sylla¹¹ and, more recently, Peter Rousseau¹² have concluded that a well functioning financial sector was crucial to early US economic development.¹³

In the 1780s, the US “lacked nearly all the elements of a modern financial system, but by the 1820s had a financial system that was innovative, large and perhaps the equal of any in the world” (Sylla and Rousseau, 2005, p.3). This was the result of financial reforms introduced by Alexander Hamilton, the first Secretary of the Treasury, who established The Bank of the United States, which helped manage the country’s credit and establish a more uniform currency. The US had only 3 state-chartered banks in 1789, but more than one hundred were chartered over the next two decades (Sylla and Rousseau, 2005, p.5). All of these had limited liability, which was innovative for the time.¹⁴ Banking was highly competitive but also very profitable, and the number of banks rose to more than 800 by 1840 and to 1600 by 1860. Already by 1825, when the United States and the United Kingdom had roughly the same population, US banks had nearly 2.5 times the amount of bank capital as their UK counterparts¹⁵

Sylla and Rousseau find that, to a large degree, “McKinnon and Shaw were right”: That is, the financial system accomplished the pooling of capital necessary to undertake large projects and to fund recurring investment cycles. According to their analysis, a strong financial system made possible the commercialization of technological innovation in 19th Century America, beginning with the adaptation of railway engines and moving rapidly to completely new technologies, such as the telegraph and telephone—as well as the creation of a truly national market. This was not just about well-run banks; *The Wealth of Nations Rediscovered*, by Robert E. Wright,¹⁶ is a fascinating and convincing portrayal of information efficiency in early (pre-1850) American capital markets, that in fact were subject to very light regulation.

Moreover, the US financial system was quite open and diversified from its beginning. By 1803, more than half of all US securities were held by European investors. By 1825, the number of listed securities in the United States (232 in New York, Philadelphia, Boston, Baltimore and Charleston combined) was approaching that of England, which had 320 listed securities. Equity market capitalization was similar in both countries, and both listings included pioneering sectors, including insurance, transportation, utilities and some manufacturing (Sylla and Rousseau, 2005, p. 8-9)

Of course, these periods of development were not free of crises (as we are reminded most recently by Reinhart and Rogoff, *This Time Is Different*, 2009). A broader view would be that the financial crises of the 19th and early 20th centuries led to improved regulations and market structures, but that the course of progress was not inevitably forward at all times.

Recent theoretical work has built on the development and analysis of the historical record. For example, Diamond and Dybvig (*JPE*, 1983)¹⁷ examined the role of deposit insurance. The models of Bernanke and Gertler (*AER*, 1989)¹⁸ also helped to illuminate how financial panics, in various “accelerator” forms, can drive and disrupt investment. And Ben Bernanke’s research on the Great Depression (*AER*, 1983)¹⁹ shows in a vivid way how historical research can influence practical policy choices.

What does research imply for the current conjuncture?

Taken broadly, the historical record points to three general lessons:

First, financial development is critical for both growth and development. There are few, if any, instances where the transition from a predominately agricultural economy through sustained and diversified growth has taken place without a well-functioning system of financial intermediation. While the details of national systems have varied, the broad principle has not.

Second, the presence of financial crises, even recurring crises, has not reversed the positive relationship between financial system development and economic growth.

And, third, financial crises and their impact can be suppressed completely only through severe financial sector repression and by autarkic policies—and at a clear cost to economic growth and development.

In other words, the basic conclusions of Gurley, Shaw and McKinnon still appear to be valid fifty years after their publication. Still, the scale of the output losses being experienced in the current crisis by some of the most effected economies has raised questions about their policy choices. Moreover, the debate over the future of finance in the United States, Europe and elsewhere continues to be intense. I therefore will conclude by connecting these general points to the challenges facing emerging markets and by saying a few words about the current debate about such issues as whether bank size should be limited.

What are the implications for Emerging Markets?

One striking point about the leading emerging market economies, is that the recent global crisis has not undermined their authorities’ confidence in growth through open economy policies accompanied by further financial system development. There are three main reasons for this rather measured reaction to the current turmoil, especially regarding their own financial sector development.

First, structural improvements – and the improvement in the management of fiscal and monetary policies – bolstered the resilience of most large emerging market economies to external shocks, allowing them more perspective on their response to the crisis.

Second, the large emerging market economies have not yet fully liberalized their financial markets. One lesson that they—and the IMF—drew from the emerging market financial crises of the late 1990s was the importance of strengthening their domestic financial systems before exposing them more completely to international markets. Aided among other things by the Financial Sector Assessment Programs (FSAPs), provided jointly by the IMF and the World Bank, they have significantly strengthened their own systems’ ability to withstand external shocks.

Third, there is a widespread recognition of the costs and disadvantages of repressed financial systems, fueled by vivid memories of the distortions and difficulties created in the past in their own economies by such systems.

Thus, authorities in emerging market economies are likely to follow a cautious approach to further development of their financial systems, but there is little danger that they will turn back to earlier financial repression. To the contrary, a more fully developed financial system – including both more complete markets as well as strengthened regulation and supervision – is both likely and appropriate. This time, because the financial systems in many emerging market economies are somewhat insulated from international influences, they were protected in many ways from the current financial turmoil.

However, that is no guarantee that this would be the case in the future, when new strains might arise from other sources, perhaps domestic ones. Thus, more complete and more resilient financial systems in emerging market economies no doubt would support stronger and more stable growth, but also would help to avoid financial crises or mitigate their effects when they do occur. After all, past crises in some emerging economies have produced steep output losses that reverse years of progress.

It is my impression that while the outlook for coherent and consistent improvements in the financial sectors in major emerging economies is far from assured, it is in fact more positive than at any previous period. The enhanced role of the G20 has brought major emerging market authorities into the relevant policy discussions to an unprecedented degree. Moreover, the creation of the Financial Stability Board has included these authorities for the first time directly in the process of negotiating global regulatory and supervisory reforms.

Reassessing Mature Financial Systems

In looking at the unfolding of the recent crisis in advanced economy financial systems, it is clear that not all of major financial institutions implemented the same risky strategies that fueled the crisis, nor did all of them suffer from deficient risk management. Rather, it was the flawed strategies and inadequate risk management of *some* institutions that were at the heart of the financial turmoil. Moreover, poor regulation and/or inadequate supervision did not cause the crisis, but both regulation and supervision were inadequate to prevent those firms from putting at risk both themselves and systemic stability.

Thus, one aspect of systemic reform undoubtedly will involve a return to the normal market process whereby those firms that follow better strategies and are better managed will tend to expand, eclipsing the less able, the less capable and the simply unlucky. The second principal aspect of reform will be to strengthen regulatory and supervisory standards and their application. Viewed broadly, there is little doubt that these two broad factors – normal market forces and structural reforms -- will combine to produce new shifts in the financial landscape – involving both changed institutions and a revamped systemic architecture.

The Fund is an active participant in the process of regulatory reform taking shape mainly in the FSB, and a broad consensus has formed already about the three key aspects that will be required for success. First, the perimeter of regulation must be

redrawn to include all systemically important institutions: Second; regulation must include macro prudential aspects in order to reduce procyclicality, and: Third; that an agreed resolution mechanism is required for institutions that have systemic importance and/or that are operating in multiple jurisdictions.

An agreement on comprehensive resolution mechanisms would contribute substantially to mitigating the risks of future financial crises. Of course, this issue is often cast as dealing with the challenges created by institutions that are deemed “too big to fail”. However, the recent crisis has demonstrated that size alone doesn’t create systemic risks. Some of the largest financial firms avoided the most damaging problems, while some relatively small – but highly interconnected – firms caused substantial difficulties.

Beyond the creation of resolution mechanisms, it has been asked in many quarters whether financial reforms should include limits – in either absolute or relative terms – to the size of financial institutions. In particular, some observers have suggested that the largest banks should be reduced in size. However, recent experience has demonstrated that size not the sole determinant of an institution’s systemic importance. Moreover, there is no clear guide to the optimal size of banks and nonbank financial intermediaries. Of course, this issue deserves further serious study—indeed the Fund has been asked to look into this issue together with the FSB, and we have made a start on developing a framework for analysis. But it is not yet possible to make any precise determination on this issue. In this context, precipitous action could invite unintended consequences.

While the effort to improve regulation and supervision is still underway, the new Early Warning Exercise conducted jointly by the Fund and the FSB, is intended to make sure that relevant authorities are aware of potential risks, and that they have given thought to prospective policy action should tail risk scenarios appear to become more threatening. At the same time, the Fund is studying whether its support facilities for its member countries can be improved. In particular, the new Flexible Credit Line (FCL) and High Access Precautionary Arrangements (HAPA) represent new tools that can be effective in crisis prevention. The Fund is analyzing whether it can devise additional insurance-like facilities that would reduce risks. Finally, the Fund has been asked to study whether financial sector taxation can be improved, and whether the costs of risk mitigation should be borne more directly by the sector, just as deposit insurance typically is funded by a charge levied on the relevant financial institutions.

Concluding Remarks

In sum, a new global economic and financial system is evolving at a rapid pace right before our eyes. These issues were addressed directly at the recent Pittsburgh Leaders Summit and the just-concluded IMF/World Bank Annual Meetings in Istanbul.

At the same time, the basic insights brought to our attention fifty years ago by Gurley, Shaw and by McKinnon -- that financial systems play a key role in economic development and growth – today are well accepted. But our understanding of this process is still far from what we would like it to be.

Thus, beyond the urgent tasks that we have been discussing, we should not forget the broader remaining intellectual challenges. We should turn with renewed urgency to efforts to understand more fully the relation of financial sector development to the

achievement of strong, sustained and balanced growth. Thus, our Macro/Financial Studies Group in our Research Department is working with our Monetary and Capital Market Department to push our understanding forward in this area. We also are reaching out to other institutions and to our academic partners. I am sure that this conference will help to spur that effort.

¹ Gurley, John G., and Edward S. Shaw, (1960), *Money in a Theory of Finance* (Washington: Brookings Institution).

² Gurley, J.G., Shaw, E.S. (1955), "Financial aspects of economic development", *American Economic Review*, Vol. 45 No.4, pp.515-38.

³ Rosenstein-Rodan, Paul, "International aid for underdeveloped countries." *Review of Economics and Statistics* XLIII 2, pp. 107–138.

⁴ McKinnon, Ronald I., and Edward S. Shaw, "*Money and Capital in Economic Development*" (1973), The Brookings Institute.

⁵ Edward S. Shaw, "*Financial Deepening in Economic Development*" (1973), Oxford University Press.

⁶ King, Robert G. and Levine, Ross (1993). "Finance and Growth: Schumpeter Might be Right," *Quarterly Journal of Economics* 108(3), 717-737; Levine (1997), "Financial Development and Economic Growth: Views and Agenda" *Journal of Economic Literature*, June 1997; Levine, Ross and Zervos, Sara, "Stock Markets, Banks and Economic Growth," *American Economic Review*, June 1998.

⁷ Rajan, Ragusa G. and Luigi Zingales, "Financial Dependence and Growth." *American Economic Review* 88, No. 3 (1998).

⁸ La Porta, Rafael; Lopez-de-Silanes, Florencio; Shleifer, Andrei; and Vishny, Robert W. "Law and Finances," *Journal of Political Economy*, December 1998.

⁹ Tomas Phillipon, "The evolution of the US financial industry from 1860 to 2007: theory and evidence," unpublished paper, NYU Stern School of Business.

¹⁰ "Financial innovation and the management and regulation of financial institutions," *Journal of Banking and Finance*, July 1995.

¹¹ Sylla, Richard, "Financial systems and economic modernization," *Journal of Economic History*, 2002. (New York, Cambridge University Press).

¹² Rousseau, Peter, "*Historical Perspectives on financial Development and Economic Growth*," Federal Reserve Bank of St. Louis Review, 2003.

¹³ See also Sylla and Rousseau, "Emerging Financial Markets and Early US Growth," in *Explorations in Economic History*, 2005. (pp. 8-9, 2005).

¹⁴ In contrast, among English banks at the time, only the Bank of England was granted limited liability.

¹⁵ See Sylla, Richard; in Federal Reserve Bank of St. Louis Review, (1998, p.93).

¹⁶ Wright, Robert E., "*The Wealth of Nations Rediscovered: Integration and Expansion in American Financial Markets*" (1780-1850).

¹⁷ Diamond, Douglas W. and Philip H. Dybvig, 1983 "Bank Runs, Deposit Insurance and Liquidity," *Journal of Political Economy*, University of Chicago Press Vol. 91(13), pp 401-19, June.

¹⁸ Bernanke, Ben S. and Mark Gertler, (1989) "Agency Costs, Net Worth and Business Cycle fluctuations" *American Economic Review*, Volume 79(1) March.

¹⁹ Bernanke, Ben S. (1983) "Non-Monetary Effects of the Financial Crisis in the Propagation of the Great Depression", *American Economic review*, Volume 73(3), June.