

Christian Noyer: Financial systems for economic growth

Speech by Mr Christian Noyer, Governor of the Bank of France, at the 3rd Conference of the Monetary Stability Foundation, Frankfurt am Main, 6 July 2006.

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Ladies and gentlemen,

- Thank you for inviting me to this conference. It is a great pleasure to address a topic, namely “Financial systems for economic growth”, which is of the utmost importance not only to central bankers but also to all economic agents, in mature as well as in emerging economies.
- In modern economies, financial systems fulfil two main functions: (i) first, allocate savings to investment opportunities and (ii), second, distribute and allocate risk between economic agents. I will address each in turn before concluding with some thoughts on the role of central banks.

I Financial systems, saving, investment and economic growth

It is generally recognized that financial development contributes to higher long-run economic growth. There is a debate however, as to whether some financial structures are more efficient than others in allocating savings to investment. My own pragmatic view is that financial intermediaries and markets should be viewed as complementing, rather than substituting one another.

A Financial development contributes to higher long-run economic growth

Well-developed financial intermediaries and well-functioning markets can generate growth by improving the efficiency with which savings are used and increasing the amount of funds allocated to firms. Notably, financial development makes long-term investment more attractive by pooling savings, engaging in liquidity transformation and by reducing transaction costs on markets. Moreover, better monitoring of borrowers leads to a more efficient resource allocation. Improvement in risk allocation can enhance saving rates and promote innovative projects.

Empirical research highlights that financial development has a significant positive impact on economic growth¹ :

- In particular, financial development can improve productivity growth, thereby fostering sustained long-term economic growth. Younger firms in innovative, higher productivity sectors tend to depend more than established firms on external finance. Consequently, they benefit more from a developed financial system².
- Therefore, by improving the efficiency of investment, financial development supports and promotes economic development. A case in point is China where the modernisation of the financial system would foster a more balanced and sustainable long-run growth by preventing over-investment, helping to reduce savings for retirement and by boosting consumption.

B Financial structure and economic growth

As I said, allocating savings to investment is a central function of financial systems. But there are many ways to achieve such an allocation. A central distinction can be made between two categories of financial systems: those where banks – and other financial intermediaries – dominate; and those

¹ R. Levine (2002): “Bank-based or market-based financial systems: which is better?” William Davidson Working Paper n°442.

² R. Rajan and L. Zingales (1998): “Financial dependence and growth”, American Economic Review n°88.

where savings and investment needs are matched through the exchange of assets or instruments on financial markets. In the last decades, in industrialized and, more recently, in emerging economies, financial markets have played a growing role in the allocation of savings, a process commonly designed as "disintermediation". Has disintermediation increased or decreased the efficiency of financial markets? Or, in other words, is there a superior type of financial structure, an optimal mix of financial intermediaries and markets for promoting long-run economic growth? This "century old debate", to quote Ross Levine, has received conflicting answers³.

- According to the "intermediary-based" view, banks are more growth-enhancing than markets, particularly in the early stages of development, because they are better at monitoring firms and better equipped for reducing moral hazard. According to the "market-based" view, markets are *inter alia* more suited than banks to finance innovative and high-risk projects.
- Against this background, it could be tempting to establish a link between the acceleration as from the mid 1990s of productivity growth in the United States, in line with gains arising from the production and use of ICT (information and communication technology) and the market-dominated American financial system. During the same period, productivity growth slowed down in two major bank-dominated areas, Europe and Japan.
- However, empirical research argues that distinguishing countries by financial structure does not help in explaining cross-country differences in long-run economic growth⁴. Rather, what matters for growth is the overall level and quality of financial services produced by the entire financial system. In particular, legal and regulatory systems play a key role in determining growth-enhancing financial services.

My own view, to summarize, is that financial structure does not seem to matter much for growth. We should view financial intermediaries and markets as complementary components in a diversified and comprehensive system of financial intermediation.

- Competition for allocating financial flows and risks enhances economic efficiency. Financial competition is threefold: (i) within the intermediary-based system (banks, mutual funds, insurance companies...), (ii) between intermediaries and markets in a given country and (iii) between national financial systems.
- Financial intermediaries are also key market participants. They contribute to the effective functioning of markets. Banks, in particular, are the ultimate providers of liquidity; a function which is essential in ordinary times and can become critical in periods of stress.
- This is why a diversified financial system can help and absorb shocks and, in most extreme circumstances, mitigate the consequences of financial crisis. Financial crises have occurred in countries with differing financial structures, suggesting that the specific organisation of the financial system does not matter. Yet, I will quote Alan Greenspan⁵ who argues that "multiple alternatives to transform an economy's savings into capital investment act as backup facilities should the primary form of intermediation fail. In 1998 in the United States, banking replaced the capital markets. Far more often, it has been the other way around [...]."

II Financial systems, risk allocation and economic growth

One major function of a financial system is to reallocate risk between different economic agents. Through such reallocation, borrowers can tailor their risk profiles and therefore, are provided with greater access to capital. Savers become better able to diversify and to manage their portfolios. Gains are unquestionably generated from the efficient capital allocation resulting from improved risk sharing. For instance, high-return (and innovative) projects, which tend to be riskier, will be better financed. For investors, efficient risk management may increase their ability to hold portfolio of high-risk projects while, at the same time, reducing their overall exposure through diversification.

³ R. Levine (2002): "Bank-based or market-based financial systems: which is better?" William Davidson Working Paper n°442.

⁴ V. Dolar and C. Meh (2002): "Financial structure and Economic Growth: a non-technical survey", Working Paper 2002-24, Bank of Canada.

⁵ A. Greenspan (1999): "Do efficient financial markets mitigate financial crises?", Remarks before the 1999 Financial market conference of the Federal Reserve Bank of Atlanta.

A *Risk sharing and financial innovation*

In the past thirty years, financial systems have undergone sweeping changes. Financial innovations, such as the development of the derivatives markets and the securitization of assets, have enabled intermediaries to better diversify and manage risk.

Financial derivatives have revolutionised global capital markets. The emergence of substantial markets in forward, futures, options swaps and other derivative instruments has significantly altered the conduct of borrowing, investment and risk management activities. The significant economic benefits of financial derivatives include: (i) permitting the unbundling and trading in risks, (ii) the ability to hedge price risks and to synthesise investments with greater efficiency and lower costs, (iii) and an increasing liquidity of and trading in financial assets.

I would expect this process of constant innovation to continue in the decade ahead. First, because innovation is a natural feature of modern financial markets. The expansion of the credit derivatives in the last five years illustrates how fast new instruments can develop and expand. And, second, because markets are still incomplete, in the sense that some risks cannot be efficiently hedged or transferred in the current environment.

B *Incomplete markets and intergenerational risks*

One interesting example is demographic risk, and more generally, the efficient transfer of risk between different generations. Currently, markets may not be well equipped to deal with intergenerational risk that simultaneously affects different generations living at the same time. Many developed countries are going through a demographic transition, sometimes called the old age crisis. According to the World Bank's 1994 report for instance, by 2030 there will be 1.4 billion people in the world aged over sixty, versus 500 million in 1990. So, we are experiencing a transition to an economy with many more aged dependents relative to the active workforce. It seems to me that the old age crisis will prompt us to invent institutions to deal with this kind of risk or maybe to create additional investment products. For instance, the increase in life expectancy could generate risks that are not efficiently hedged in the financial markets or that are too difficult to manage by households.

Beyond pure demography, some risks could be more efficiently shared between generations. In his stimulating book – "The new financial order"- Robert Shiller suggests to expand the principles of financial management "to include the society as a whole". For example, he advocates the creation of "macro markets" on which long-term claims on national incomes and occupational incomes as well as for illiquid assets such as real estate would be traded. One of his most thought-provoking ideas is "intergenerational social security". Current old age "pay-as-you-go" systems do not share risks between generations. In fact, they transfer the income risks of retired people to working people and their dependents who thereby bear the risks of both generations. Intergenerational social security's defining characteristic would be a plan to pool the risks that different generations hold, including macro economic risks.

C *Innovation and risk*

Should we be somehow concerned by the speed of this innovation process or, as R. Rajan has put it, "has financial development made the world riskier"? According to a "benign" view, financial innovation has improved the efficiency and increased the resilience of the financial system. Risks are spread among more agents, willing and able to have them. Financial intermediaries are provided with sufficient incentives to improve their risk-management techniques. Therefore, the financial system is better able to absorb shocks without increasing the effects of such shocks on the economy.

Broadly speaking, this seems correct to me. The financial system has coped with remarkable success and with few signs of instability with the various episodes of financial turmoil and shocks in recent years. Market-functioning difficulties were short-lived. The impact of these episodes on the real economies of industrialised countries was generally limited.

However, we want to make sure that financial institutions and markets help to absorb and redistribute the shocks occurring in the real economy. We don't want them, in general, to be an additional source of shocks. In this regard, two specific questions come to the mind of policy makers. The first relates very simply to our ability to understand what is going on in the financial system when innovations permanently introduce additional layers of sophistication and complexity. As is often the case with

financial innovations, evaluating the risk they entail requires the use of complex techniques that are not always sufficiently tried and tested⁶. The second issue, singled out by Rajan himself, is about incentives, an issue made especially important by the shift from depository intermediation to professional asset management. The system of incentives under which managers operate should be closely and permanently aligned with the interests of investors. This is, in my view, a very productive area for future research for academics and regulators alike.

Let me conclude by two points about Central Banks.

First, they have a natural interest in the efficiency and stability of the financial system. Asset prices are a key channel through which monetary policy is transmitted to the real economy. The ability of the financial system to absorb shocks smoothly was supported by more predictable and transparent monetary policies in many countries. Stable and low inflation helped to reduce the financial system's sensitivity to shocks.

Second, for this reason, they have to monitor closely the process of financial innovation. Different approaches, involving both the public and the private sector, should be combined to enhance transparency, such as (i) the improvement of financial standards and supervisory regulation, (ii) an improvement of data reporting on OTC markets (bonds, derivatives), (iii) efforts to foster better disclosure from financial institutions, (iv) promotion of stronger market discipline. It is my strong belief that this can be done without impeding the efficiency and agility of modern finance, which is so important for our growth and future prosperity.

⁶ O. Cousseran and I. Rahmouni (2005) "The CDO market-Functioning and implications in terms of financial stability", Financial Stability Review n°6, Banque de France.