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Financial Development: A Broader Perspective

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Abstract

This paper seeks to add to the current debate about financial development and growth in the emerging world by looking at how different financial systems evolve: how and why financial structures change during various stages of development, how best to measure them, and seeing what practical policy lessons can be drawn from historical experience. Some financial structures may be better suited to growth at certain stages of development but they may be less well suited in other circumstances. In the search for optimal financial structure, rather than attempt to adopt another country's particular structure it may be more fruitful for today's emerging world to concentrate more on addressing the needs of savers and borrowers in each individual system. A major lesson for the emerging world from past financial development is that there are risks involved in transitioning from one framework to another. Too fast a change increases the danger that all the necessary regulatory, supervisory and educational changes may not keep pace with the financial changes. This can increase the susceptibility to instability and reduce resilience to shocks.

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1. INTRODUCTION

Although the latest bout of financial turmoil has sparked renewed interest in the desirability of financial development, and the optimal size and structure of the financial system, the debate over the relationship between financial development and economic growth has, of course, been active for many years. This topic has been of intense relevance for emerging economies, particularly against the backdrop of increased capital flows in recent years. Exposure to high capital flows carries both potential benefits and risks, and the ability to deal with these flows successfully will depend partly on the level of sophistication of the domestic financial system.

In turn, it can be argued that openness to international capital flows can, under certain circumstances, encourage the broadening and deepening of domestic financial systems. Often, but not always, the growth of the financial system will also be associated with the emergence of a dominant—or even several dominant—financial centers.

This chapter aims to contribute to these broader debates by looking at how different financial systems evolve; how and why financial structures change during various stages of development; how best to measure them, that is, setting a framework for further analysis; and seeing what practical policy lessons can be drawn out of the historical experience of financial development. Analysis suggests that while some financial structures may be better suited to growth at certain stages of development, they may be less suited to change and innovation. Thus they may hamper growth at other stages or be more prone to—or less resistant to—shocks and the instability that follows. So, for example, there may be models of financial structure better suited to the development of infrastructure, or yet other alternatives that allow for more effective technological diffusion. The potential for variety and individuality should not be neglected.

It is also important to consider not just the demand for financial intermediation in an economy but also its supply. The history of financial development seems to be littered with gaps in the provision of financial services, not all of which have been filled either quickly or robustly. Unsurprisingly, therefore, government involvement has been evident at many levels in financial development throughout history, sometimes as a direct result of the failure of the private sector and sometimes when the primary, or at least immediate objective, does not seem to be consistent with the most technically efficient allocation of capital.

There can also be the danger of developing financial systems that are merely "convenient" from a regulatory perspective but can lead to *suboptimal* financial intermediation. As the last few years have demonstrated, the aims of regulatory emphasis can change quite substantially, as perceptions about risks inherent in financial intermediation change and as challenges to the "conventional wisdom" grow stronger. As the International Monetary Fund's John Lipsky recently noted, "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."[1]

To address these issues, the first part of this chapter attempts to set out an up-to-date framework for classifying financial development, looking not just at the size of the financial system over time but also at the composition of instruments and institutions, the structure of financial flows, and the interplay of markets. These all have important regulatory implications and affect factors such as transparency, risk, and remuneration.

The second part of the paper illustrates some of these theoretical considerations with examples of the problems that have arisen during financial development in the past. The

1. Lipsky (2009).

discussion draws on the experiences of a wide range of countries (and studies) and examines how these problems have been resolved or what unwelcome or unintended consequences there have been.

The final part of the study draws some conclusions about financial structure for the developing world in terms of avoiding pitfalls, dealing with mistakes and thinking about areas for further study.

2. FINANCIAL DEVELOPMENT: THINKING AND APPROACHES

2.1 Financial Development and the Real Economy

The correlation between financial development and economic growth is under constant examination by economists and policymakers alike. In particular, there continues to be considerable debate over the causal link between the two. The literature on this subject is, naturally, closely linked to that on "endogeneity" in economic growth.

In broad terms, there can be said to be three camps. The first proposes that financial evolution *depends on* real growth, with the range of financial instruments and institutions responding to needs as they arise.

The second position suggests that financial development *precedes* economic growth, encouraging economic activity by offering new products and initiatives. Schumpeter (1933) regarded finance as being one of two key elements. Gurley and Shaw (1960) emphasized the importance of the role of finance in growth, Goldsmith (1969) came close to asserting that financial systems actively promoted real growth, and Gerschenkron (1962) considered that finance played a key role in the process of development, particularly for countries in a relatively backward situation.

The third view is that finance and real activity accompany each other in a *simultaneous, interactive* way, each responding to signals from the other. But there is some argument to be made that the relative importance of finance grows as GDP increases. As Wai and Patrick wrote, "In general, financial development proceeds concomitantly with economic development, with finance playing an increasingly important role."[2]

More recently, King and Levine (1993) acknowledged those scholars who are wary of drawing links between finance and growth.[3] However, in their own work, they have gone on to develop more sophisticated methods for measuring the linkages between financial development and growth. In particular, by examining a longer-term data set, they have been able to demonstrate more forcefully than others (such as Goldsmith 1969) the apparent causal effect of finance on growth:

> The link between growth and financial development is not just a contemporaneous association. Finance does not only follow growth; finance seems importantly to lead economic growth. Furthermore, a positive association between contemporaneous shocks to financial development and economic growth does not fully account for the finance-growth link. When countries have relatively high levels of financial development, economic growth tends to be relatively faster over the next 10 to 30 years."[4]

2. Wai and Patrick (1973).

3. For example, Lucas (1988) claimed that the linkages between financial and economic developments could be "overstressed."

4. King and Levine (1993, p. 730).

However, as Rajan and Zingales have pointed out, this process is diverse and complex.[5] They demonstrate that on a range of measures, many countries were more financially developed in 1913 (after the first great wave of financial globalization) than they were in 1980. In their "interest group" theory of financial development, a "stalling"—or even a reversal—of financial development may occur when "incumbent" groups, which fear the competitive impact of financial deepening, erect barriers to change.

History is littered with examples where the structure of the financial system and its operation are considered to have helped or hindered growth. Adam Smith, for example, observed that the expansion of Scottish trade in the eighteenth century owed something to the establishment of the two public banks.

2.2 How Best to Measure Financial Systems

Over the last fifty years, the literature on the measurement of financial systems has grown substantially. One of the earliest attempts to quantify size and change in the financial system was Goldsmith's financial interrelations ratio (FIR), which was also an early attempt to move from stock to flow indicators in financial measurement.[6] The FIR—the ratio of the market value of the flow of instruments to total tangible wealth—did indeed confirm the long-term tendency for financial and economic growth to go in parallel, although Goldsmith remained uncertain of the direction of causality.

Goldsmith identified three basic stages of financial development. The first consists of countries with a low FIR, typically in Europe and North America in the mid-eighteenth to mid-nineteenth century, for example. The second group has a similarly low FIR but a much bigger role for government and government-owned institutions, for example, Germany or even Russia in the late nineteenth century. The third group possesses a much higher FIR, typified by a much higher ratio of equities to debt, a higher share of financial institutions or financial assets, and a relative decline in the share of banking institutions compared to other financial institutions; this might be described as the current "Anglo-Saxon model."

The FIR in Britain, for example, was around 0.35 in 1880, increasing to 1.70 by the 1960s. In the United States it went from less than 0.5 in the 1880s to around 1.27 in the 1960s. Goldsmith's analysis has been criticized in recent years over its shortcomings. [7] However, he did recognize the FIR's limitations when it came to analyzing why systems developed in particular ways, saying that "the study of financial structure involves, of course, more than the classification of financial instruments and of institutions into rather broad and rough categories."[8]

Another early approach to financial measurement was to think about the mix of financial instruments that bridged the gap between borrower and lender at the optimal level of risk, return, and maturity. This involves a more direct examination of the fundamentals of the financial system: intermediation, reallocation of current savings, asset transformation, easing the transfer of ownership and control of the stock and flow of wealth, and transformation of maturities.

Gurley and Shaw were early proponents of attempts to measure the flow and stock of primary and secondary financial instruments in relation to national income. [9] Their work raised questions about the distribution of spending between sectors relative to the

5. Rajan and Zingales (2009).

6. Goldsmith (1969).

7. See, for example, Levine (1997).

8. Goldsmith (1969, p. 35).

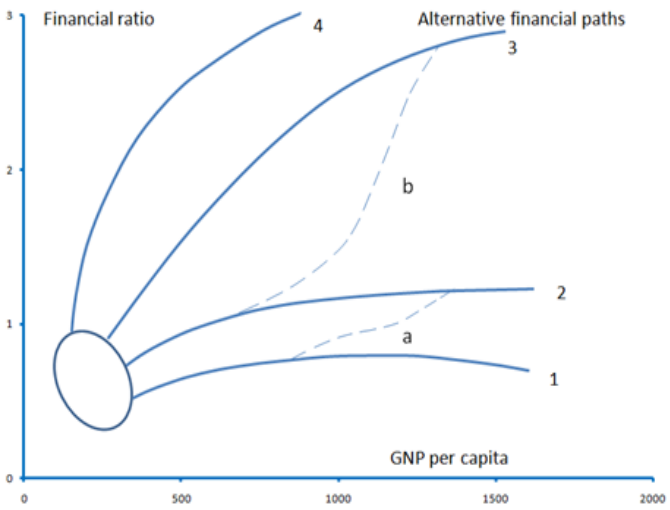
9. Gurley and Shaw (1960).

distribution of income, or savings, and also focused attention on the *form* of economic development and its interrelationship with financial structure.

Gurley's financial ratio—the ratio of total financial assets to GNP—is limited in that it compares stocks to flows.[10] However, his results correlate with Goldsmith's findings, suggesting a relationship between the rise in per capita income and the size of the financial system. However, Gurley was also keen to stress that there were different paths to achieving growth. For example, some economies might make minimal use of financial markets and may rely more on central planning and the pooling of funds. In such systems, the tax structure could be used to channel funds, and he even suggests inflation as a means of affecting the generation and flows of funds. He suggests, in addition, that it may even be rational for a country that has embarked on a particular course for financial development to stick with it for a prolonged period rather than attempt to transfer to a different development path.

Gurley's analysis is presented in Figure 1, which shows these illustrative paths for financial development. He suggests that path 3 would be typical of the United States, whereas paths 1 or 2 would be more representative of centrally planned economies, or inflationary or fiscally orientated systems, as these tend to rely on smaller financial superstructures. Path 4 might be typical of an economy such as Switzerland, which specialized in the development of its financial sector.

Figure 1: Financial Paths Based on Gurley's Analysis[a]



Note: [a] Solid lines represent alternative financial paths; dotted lines represent shift in paths (a, gradual; b, sudden). See text for explanation of numbers.

Source: Gurley (1967, p.69).

The choice of financial development from these paths will vary over time and, as the last few years have shown, will be subject to social and political pressure. Moreover, technological advances can affect the viability of choices, the most recent of these, obviously, being computerization.

In the figure, the dotted lines *a* and *b* illustrate that it is possible for countries to shift from their previously established paths. This might be a relatively gradual and protracted process (*a*) and therefore less disruptive and less prone to abuse. However, it also may be more sudden (*b*) and more distorting and violent.

More recent studies have sought to update the analysis of financial structure and make it more sophisticated and rigorous. King and Levine build on the approach of several studies

10. Gurley (1967).

through the 1980s and early 1990s, which confirm the correlation between real per capita income growth and the average level of financial development, using data over the 1960–89 period.[11]

They also seek to examine the process of intermediation more subtly by looking at the specific channels through which financial development and growth operate. In keeping with Gurley's observations that the pace of financial development goes through various phases, King and Levine's results are summarized under growth headings: very slow, slow, fast, and very fast. Their findings show that as countries move in stages from very slow to very fast, there is indeed a corresponding increase in financial depth, the importance of banks relative to the central bank, the fraction of credit allocated to the private sector, and the ratio of private sector credit to GDP.

Conversely, Arestis, Demetriades, and Luintel focus on the link between real growth and stock market development.[12] Their emphasis on time series analysis rather than cross-country analysis leads to the observation that long-run causality may change and that long-run relationships tend to show substantial variation.[13] Their study also points to the need for careful consideration of the sequencing of financial development, both in relation to the real economy and with regard to the structure of the financial system itself. There may even be arguments for maintaining some degree of financial repression at various stages until other prerequisites are in place for a sustainable shift to a new structure without too much disruption.

More recently still, other studies have sought to return more closely to first principles, withdrawing from the banks-versus-markets debate and refocusing on the ultimate purpose of a financial system—to bring savings into contact with opportunities for "productive" investment. These studies, therefore, link the structure of growth to the structure of the financial intermediation process. Some recent studies also have sought to link financial systems more directly to their functional efficiency in serving the needs of the real economy.[14]

Closely linked to this approach, and related to the debate on systemic risk and sector analysis, would be an analysis of financial systems based on flows of funds. This method highlights the links between the financial system and the surpluses and deficits within the real economy.

At different phases of the growth cycle, these surpluses and deficits may vary widely, and in cases where domestic savings may be in short supply, the external sector may be the provider of capital. Such flow of funds types of analyses can be very useful for tracking and perhaps predicting where the pressure points in the intermediation process might arise. Such methods might also allow a more sophisticated level of analysis of the financial system by breaking it down by instrument. As the European Central Bank said in 2009, "In particular, these types of tools allow the early identification of risks that may not be easily recognisable when the focus of analysis is only on measures of leverage and volatility within individual sectors."[15]

Overall, therefore, financial measurement techniques may have become more sophisticated over the years, but in essence they continue to address the same issues: the types of financial instruments and how they have arisen (*instrumental factors*); the form and

[11]. King and Levine (1993).

[12]. Arestis, Demetriades, and Luintel (2001).

[13]. One of the criticisms of the current literature on financial structure in developing countries is that it is too focused on cross-country analysis, neglecting some of the more country-specific issues. See, for example, Staritz (2008).

[14]. For example, see Lin, Sun and Jiang (2009).

[15]. European Central Bank (2009, p. 156).

organization of financial intermediaries and markets (*structural factors*); how institutions actually operate, kinds of credit granted, and types of resources generated (*operational factors*); and—finally—*process-related factors*, that is, what has been the interplay of forces shaping the financial system.

3. FACTORS AFFECTING THE SUPPLY OF FINANCIAL SERVICES

Consistent within the theme here of going "back to basics," it is worth noting that the factors influencing developing financial systems today have resonance with developments in the "developed" world between roughly 1800 and 1950. Therefore, this section provides a brief overview of the key factors affecting financial structure. More important, it attempts to relate past experience with some of these issues to their current relevance for the emerging world.

In some cases it is a matter of judgment and no doubt argument as to how certain factors should be characterized, and some factors have tended to receive more attention than others. For example, studies of financial history tend to be dominated by analysis of how shocks have affected financial development. Similarly, a good deal of attention has been focused lately on the comparison between the late nineteenth century era of financial globalization and the increased capital flows of the last thirty years.[16]

Table 1 groups these factors under two main headings: first, those that have always been deemed crucial to financial development, and second, those factors that seem to have more bearing on issues facing the emerging world now (although, in one form or another, they also applied in earlier phases of financial development).

Table 1: Factors in Financial Development: Then versus Now

Then	Now
Type of economy	Incentives for innovation
Stage of development	Financial infrastructure
Macroeconomic shocks	Access to global investors
Social and political influences	Fiscal and exchange rate regimes
Legal and regulatory constraints	
Individuals	

3.1 Type of Economy

Different economies with particular biases and factor endowments tend to put different demands on their financial sectors and thus affect their structure. For example, agricultural economies might have quite limited requirements, ones heavily geared to the seasonal and erratic nature of the business.

Cameron suggests that one reason why the Austrian financial system did not develop ties with industry to the same degree that Germany did was because Austria had no Ruhr Valley; thus it had little or no heavy industrial sector requiring capital on a much greater scale than could be provided by mutual, cooperative, and private banking institutions.[17] Economies that are more trade and commerce orientated would be more likely to develop arm's-length financing, letters of credit, bills and acceptances, insurance provisions, and merchant banking facilities.

[16]. See, for example, Obstfeld (2009) and Eichengreen and Bordo (2002).

[17]. Cameron (1967).

3.2 Stage of Development

Many less-developed countries today pursue growth strategies in parallel with agrarian change. At the same time, many attempt to construct and encourage an appropriate financial system consistent with broader macroeconomic aims. The contrast with the eighteenth and nineteenth centuries, of course, is that there were no precedents then, and the concept of planning financial development through growth phases was much less evident. There were examples of national pushes for growth (for example, Germany starting in 1870), but on the whole, such changes occurred on a more piecemeal and ad hoc basis.

Few economies remain wedded to a particular structure for a very long time. As the structure of growth changes, so do the needs of financial intermediation. Sometimes the transition between stages is gradual; sometimes it is violent. One early (now criticized) view of the importance of the stage of development to the structure of finance and policy was Gerschenkron's idea that the structure of the financial system was a function of "relative backwardness".[18] The later an economy industrialized relative to Great Britain, the more its financial structure was dominated by institutional factors aimed at increasing the supply of capital. This could include large-scale government involvement. His analysis has been somewhat criticized on a number of fronts, not least with regard to the difficulty of actually defining stages of development. His work also seems to be based on a narrow range of case studies and does not hold up well to scrutiny.[19]

Nevertheless, as economies move between phases of growth driven by, for example, agriculture, trade, investment, or consumption, the nature of the demand for financial services changes. More sophisticated economies tend to require greater choice, such as for housing finance and insurance services.

But the argument is by no means straightforward, and there may be occasions when an apparently "unsophisticated" system both suits the need of the economy and is perhaps the only viable option available. Goldsmith (1969) noted that in the 1945–60 period, FIRs were significantly higher in the United States and Britain than in Germany. However, one of the factors behind Germany's successful postwar recovery was undoubtedly the role of the banking system and its ability to take a long-term view of financing the corporate sector. Would a higher FIR in the postwar period, reflecting more involvement of nonbanking intermediation, have actually hindered growth during the "golden age"? Much would have depended on exactly how the financial pie could have been enlarged, and in this particular case, it is quite possible that there was no truly viable alternative.

But the appropriateness of the structure will change over time. Some years ago, the Bundesbank acknowledged that perhaps the bank-dominated system that served Germany so well in the postwar period was less well suited in an environment of much higher and more mobile capital flows.[20] As the World Bank's chief economist recently noted in a paper on optimal financial structure, "There exists some optimal financial structure for the economy at every stage of development."[21]

3.3 Macroeconomic Shocks

Shocks, which seriously affect an economy's fundamentals, can come in various forms. Bouts of severe or hyperinflation have been a common destabilizing factor, whether in Germany in 1923, Argentina in the 1980s, or Zimbabwe in the last few years. This can wipe

[18]. Gerschenkron (1962).

[19]. See, for example, O'Brien (1986).

[20]. Gessler Commission (1979).

[21] . See Lin, Sun, and Jiang (2009).

out savings, redistribute economic power, strongly affect liquidity preferences, cause currency instability, and, of course, undermine confidence generally.

Wars and war financing can greatly affect financial stability, and for years afterwards, they affect institutions' ability to intermediate due to constraints on their balance sheets. Sometimes new institutions are created for the purposes of facilitating public financing in the wake of the fiscal strain war can put on an economy (for example, the Caisse de Dépôts et Consignations in France, established in 1816).

History shows that severe business cycles can affect the banking system's attitudes to types of financing for a prolonged period afterwards. Some argue that the 1873–75 depression in France left so many banks with devalued corporate securities on their books that they shied away from such financing for many years afterwards. It is unclear whether today's recession will lead to changes as structurally important as those of the 1930s (such as the long-enduring Glass-Steagall Act in the United States).

Fraud can also have an impact on intermediation. For example, recent cases such as Bernard Madoff's Ponzi scheme have certainly had an impact on the public response to the latest financial crisis, although it's harder to say what the longer-term fundamental effects on regulation and the financial structure might be. A classic, historical example of the impact of fraud again comes from France. In the aftermath of John Law's irregular method for financing government debt through the Mississippi Company bubble (1719–20), the use of the word "banque" in the title of banking institutions became unpopular.[22] Combined with the financial problems of the French Revolution, there developed a tendency for financial institutions to adopt other names such as *crédit, caisse, comptoir,* and *société*.

3.4 Political Pressures

Political forces can have a great bearing on financial structure.[23] This influence could take the form of a command-type economy, with a large proportion of financing occurring via government or government-controlled institutions. This would include the overriding of market mechanisms by state planning and bureaucracy. It could determine political structure, for example, the existence of a federal structure of government or transforming from a federal structure to a more unified structure. Some observers felt that the move toward a customs union in nineteenth century Germany presaged the 1870 shift toward national cooperation and the push for growth. Politics can be an important influence in terms of the ownership and therefore objectives of financial institutions. The waves of nationalizations a number of countries experienced at various stages were not always the result of a financial shock but rather a response to shifting political attitudes. For example, the nationalizations in France under Mitterrand were more of a political statement compared to the recent trend of government involvement in banks today.

This factor is worth considering, especially in the wake of the current financial crisis. There has been a widespread political backlash against large parts of the financial system. This has brought forth a welter of proposals on capital regulation, liquidity and leverage controls, governance, and remuneration issues, and has provoked fundamental questions about the social usefulness of significant parts of the financial system.

It remains to be seen how this reaction and subsequent regulatory and supervisory responses fundamentally affect financial structure and the behavior of borrowers and lenders. It may be, for example, that many of the competitive forces shaped by the new regulatory architecture may not become fully apparent until after the authorities have actually begun to implement their exit strategies. When this starts to happen, it may expose some of the less robust business models.

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[22]. For more on John Law, see, for example, Murphy (1997).

[23]. See Rajan and Zingales (2003), among others.

3.5 Social Factors

Closely associated with political factors are social factors. This can be seen in the modern day debate with regard to access, be it about financial inclusion or exclusion. In the past, many mutual and cooperative institutions were established and encouraged in order to provide basic saving and lending services for groups who either would not have had access to the more exclusive financial facilities elsewhere in the system, or for whom such facilities were less suited to their particular small, local needs. Of course, local knowledge is also a way to reduce risk.

Some countries and political systems also embraced the concept of comprehensive social security systems, often operating on a pay-as-you go basis. This arrangement would be less likely to support the growth of long-term contractual savings products and certain types of capital markets. Hyperinflation, as already mentioned, can also contain the development of long-term contractual savings markets.

3.6 Incentives for Innovation

Incentives tend to fall into two broad camps. Constrictions, unfulfilled demands, gaps in financial provision, and new technology all tend to act as positive incentives for innovation. Negative incentives tend to come in the form of tightly controlled allocation of resources, chiefly by government authorities but also possibly by entrenched or incumbent groups. Particular economic conditions may encourage innovation. A good example here has been the recent period of extraordinary low interest rates, the search for yield, and the abundance of emerging economies' savings circulating in the global economy. This recent experience has, of course, raised the question of innovation outpacing of the capacities of regulatory and supervisory authorities.

As Sundaresan notes, light-touch regulation can lead to powerful flows of innovation but also high, or even excessive, risk taking.[24] Heavy-touch regulation may stifle innovation although it could, of course, stimulate financial intermediation outside the formal financial structure.

It is also worth noting here that technological advance and innovation in other sectors may spark innovation in the financial sector. A classic example of this in the emerging world has been the growth of mobile telephone banking.

3.7 Legal and Regulatory Constraints

Legal and regulatory forces can come in many shapes and forms. Financial companies can be regulated by having their functions controlled—for example, long- versus short-term business, types of deposits they might supply, composition of portfolios they might hold, access to individual market segments restricted (for example, mortgage markets), and restrictions on the amount of loans. Institutions may even be restricted by geographic limits.

Restrictions can also be applied for regulatory and supervisory purposes, for solvency reasons, and also in support of fiscal and monetary goals. This can generate conflict if the need to build capital buffers clashes with the need to provide credit during periods of economic stress.

Some have suggested that in the United States for part of the nineteenth and early twentieth centuries, barriers to entry and constraints on the activity of banks, as a result of legislation, had a major impact. This meant that the supply of financial services simply could not keep pace with demand for those services.[25]

[24]. Sundaresan (2009).

[25]. See, for example, White (1982).

Laws relating to accounting standards, definitions, incorporation rules, bankruptcy, solvency, and transparency can all have an impact on financial structure. Some have argued, for example, that the legacy of common law in some former colonies in Asia had an important influence on their bankruptcy regimes. At the very least, changes in all of these factors will have transitional cost effects. Hence the benefits of "regulatory convenience" must be weighed against the costs of inefficient allocation of capital.

3.8 Individuals

There can be little doubt that individuals can influence financial development significantly, although care must be taken to distinguish between those whose reputations stand out because of fraud or incompetence versus those who have had a more material and long-term effect on structural developments. As mentioned above, there is no shortage of candidates for the former category in the latest phase of economic development. History, too, is littered with characters who have had an impact, usually bad, on financial development, such as the aforementioned John Law.

However, one should be careful when attributing the impact of financial changes to one person alone. For example, was the emergence of trustee banks in Scotland and cooperative banks in Germany attributable to particular clergymen in those countries, or was the involvement of those individuals "only" a contributory factor to the development of a set of institutions whose emergence was already in progress? Wall Street at the end of the nineteenth century was associated with a flurry of colorful characters, but were they merely products of underlying economic conditions, or were they, in fact, the drivers of those conditions?

A modern day example for the emerging world might be Muhammad Yunus, widely regarded as the "founder" of the microfinance movement. Was the development of microfinance an inevitable result of economic and financial pressures, or did it require the impetus of figures such as Yunus and the Grameen bank?

Politicians, in particular, often can have an impact on financial development. This can be achieved either by instituting economic goals that call forth a financial response from a hitherto reluctant financial sector, or more directly by encouraging the establishment of specific financial institutions aimed at filling perceived gaps in the intermediation process or in line with new or redrawn political objectives.

3.9 Financial Infrastructure

Fixing the so-called plumbing of the financial system, some would argue, lies at the heart of current efforts to apply efficient and effective regulation and supervision. Indeed the Group of Twenty has charged the Financial Stability Board with pressing ahead on many fronts dealing with the harmonization of definitions, standards, and calibrations. As the recent crisis has shown, the ability to value, clear, and settle in financial markets is a vital part of being able to implement successful resolution plans. A principal problem here is a lack of transparency. Transparency, of course, brings greater competition and may remove or alleviate barriers to change.

In this context, the current questions over the merits of conventional trading facilities versus the newer alternative trading platforms are partly a debate about the quality, accessibility, and flexibility of the infrastructure.

3.10 Access to Global Capital

At the turn of the nineteenth century, the issue of financial globalization was seen more in terms of deploying the surplus savings of developed regions in the (then) emerging

economies, rather than as a means to spur development of financial markets in the receiving countries. Nevertheless, the flood of capital into North and South America and parts of Asia did enhance growth and the development of financial centers. Conversely, sudden stops in capital flows also had severe effects in sparking and compounding banking and financial crises.[26]

In the context of today's emerging world, there is probably a greater realization on the part of governments that access to foreign investors, be it through banking flows, portfolio flows, or foreign direct investment flows can be of substantial economic benefit. But, in general, there probably is also a greater awareness now of the potential negative effects of fostering large-scale inward investment, both in terms of lopsided growth and the often unequal distribution of this capital, and in terms of conflicts between short-term and longer-term objectives.

3.11 Fiscal and Exchange Rate Regimes

A number of modern, emerging economies are finding that the existence of well-organized capital markets and financial structures can greatly assist in the pursuit of their objectives with regard to fiscal policies and exchange rate regimes. An example from the past was the establishment of the Caisse de Dépôts et Consignations (CDC) in France in 1816. Effectively, the CDC was set up to distance government from borrowing from the household sector by empowering it to collect up all the small deposits of post banks, savings banks, notaries, and others and use them for the purchase of government securities. The CDC became the dominant player in this market.

It could be argued that by opening more financing to market forces—as opposed to imposition of more bureaucratic rationing mechanisms—a country would improve the economic efficiency of its capital usage.. A counterargument is that at certain stages of development, it makes sense for a country that has embarked on one path of development to apply a degree of financial repression, since a rapid move to too much market openness may leave the system open to abuse.

One recent study emphasized the need to think carefully about the sequencing of financial reforms as part of a liberalization process, particularly in connection with exchange rate and tax policies.[27] It highlighted the experience of the Nordic countries in the 1980s, where this was not done: "The Nordic record of financial liberalization demonstrates that the sequencing of financial reforms, internally and externally, on the route to financial liberalization is of the utmost importance in determining macroeconomic performance. It is the key to the ruinous record of Finland and Sweden."[28] In effect, a bout of financial liberalization, combined with certain tax incentives and a fixed exchange rate regime, created a powerfully procyclical environment that was not sufficiently offset by tight enough fiscal policy.

4. WHAT IS THE FUTURE FOR FINANCIAL DEVELOPMENT, AND WHAT CAN THE PAST TELL US?

It is apparent that financial development and the determination of financial structure are not simple processes. I have identified eleven elements above, and clearly, depending on classification, many more could be added. What, if any, lessons could future policymakers draw from history? Some of these lessons are dealt with below.

[26]. See, for example, Eichengreen and Bordo (2002).

[27]. See Chen, Jonung, and Unteroberdoerster (2009).

[28]. Chen, Jonung and Unteroberdoerster (2009, p. 34).

4.1 Is There an Optimal Size and Structure for the Financial System?

This question has taken on an added dimension given the current debate about "socially reasonable" financial intermediation.[29] No matter what measures are used, there is a great variation in the size of the financial system between countries at similar stages of development and within countries at different stages of development. There are also clearly periods when the pace of growth is beyond any previously experienced, and there will be occasions when the size of the financial system, the volume of financial instruments exchanged, the numbers of people involved, and even perhaps the share price performance of its quoted financial companies are out of keeping with any previous experience.

However, it is very hard to say with certainty if there is an optimal size or what it might be. If one definition of the optimal size is that all borrowers and lenders find access to financial intermediation on their preferred conditions, then there may never be an optimal size, as this will always be changing and there will always be leads and lags involved in the adjustment process.

Perhaps a more fruitful approach is to think instead about the degree to which the financial system is suited to the current needs of the real economy, and whether it addresses the tasks that it faces adequately and with a risk profile acceptable to that society. Part of the current debate is about finding out where that balance lies. Clearly this is an area where further research is required.

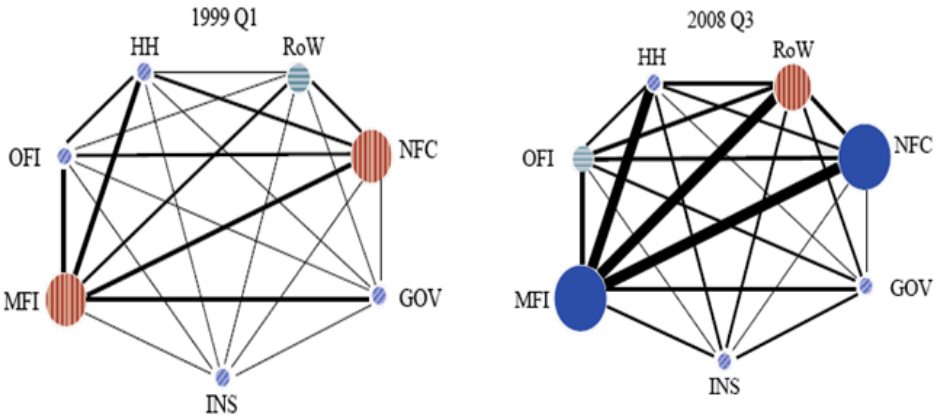
One possible approach in this regard, and one that helps identify the burden placed on the financial system in terms of both the supply of and demand for funding, is to develop more comprehensive flow of funds analyses. Such work depends upon data availability, and more studies are being pursued along these lines as the information flows improve, especially in the emerging world. Flow of funds studies, looking at the financial surpluses and deficits of economic sectors within the economy and between the domestic economy and outside economies, can also be used in the context of network analysis and investigations into systemic risk analysis because they help identify phases of growth in the financial system that are out of step with historic experience. This is of use to policymakers and regulators.

In its June 2009 Financial Stability Review, the European Central Bank highlighted the benefits of such an approach within the context of the euro area.[30] As can be seen in Figure 2, the size in financial surpluses and deficits (as indicated by the size of the nodes in the graph), and the volume of flows between the sectors (as indicated by the thickness of the lines) within the euro area grew substantially between 1999 and 2008.

[29]. See, for example, Turner (2009).

[30]. European Central Bank (2009).

Figure 2: Euro Area Flow of Funds, 1999 versus 2008[a]



Note: [a] The thickness of the lines shows the size of the gross balance sheet exposures (assets plus liabilities) between two sectors. The size of the circle illustrates the amount of gross exposures within sectors. NFC, nonfinancial corporations sector; MFI, monetary financial institutions sector; OFI, other financial intermediaries sector; INS, insurance sector; GOV, government sector; HH, households sector; RoW, rest of the world.

Source: European Central Bank calculations and *Financial Stability Review June 2009* (European Central Bank 2009). Reproduced with permission from the European Central Bank.

4.2 What Is the Best Way to Deal with Gaps in Financial Provision?

The issue of access to financial services is currently much talked about and clearly is one of the key areas for ongoing research. This raises the issue of how best to plug gaps in the supply of financial services. However, this is not necessarily an easy task. One way to begin approaching the problem is by looking at information asymmetries between borrowers and financial intermediaries.

A recent paper by Columba, Gambacorta, and Mistrulli summarized some of these issues: "Informational asymmetries between small firms and banks may be so pronounced that profitable investment opportunities are not financed. Small enterprises may mitigate this problem by posting collateral or building close relationships with lenders. Nevertheless, these solutions are of little help to firms which have little collateral or credit history."[31]

The paper notes that, in response, borrowers may then join together and share a joint responsibility for default. Such mutual guarantee schemes may help firms achieve joint responsibility and improve their access to credit. History suggests that this should not be discounted as a viable financial model. For example, mutual guarantee institutions have proved common and successful (for a variety of historical reasons) in Germany, France, Spain, and Italy.

The value of these sorts of institutions becomes even more apparent when one considers that, post crisis, a variety of "developed" world countries are looking to more local or mutually based systems. For example, recent reports suggest that pension funds are turning away from traditional forms of finance and embracing low-risk microfinance.

The key to ascertaining the efficiency or effectiveness of a financial system rests on the degree to which it performs the functions of asset transformation and intermediation. When barriers to intermediation arise, either on the lending or borrowing side, they often call forth measures that create further rigidities at a later date.[32] Is it important then that a system be

[31]. Columba, Gambacorta, and Mistrulli (2009, p. 1).

[32]. For example, the financial policies that were suitable for postwar France were in need of change by the 1960s.

able to evolve in a framework where restrictions on the nature of business assets and liabilities are kept to a minimum, consistent with regulatory and prudential objectives?

There can be occasions when the creation of a directly controlled government agency has great merit when the existing system is unable to meet one or some of the tasks imposed upon it. This is usually most appropriate when there is a wide gap between the maturity of the funds available versus the maturity of loans desired, that is, when there is a need to use short-term resources for long-term lending.

4.3 It Is Possible to Assign Broad Categorizations to Financial Structures? Is It Worth Trying?

A number of analysts have tried to label financial structures: "Anglo-Saxon," "East Asian," "Continental," "Scandinavian," ad infinitum. These run the gamut from the basic bank-dominated universal model to the specialist model; government-dominated financing, informal or shadow intermediation, or formal intermediation; market-based classifications, such as centralized versus decentralized (over-the-counter) markets and the (arguably) less regulated private equity and venture capital–hedge fund type systems. But is this categorization necessarily worthwhile?

Once again the broad brush of history tends to indicate that while many financial systems exhibit strong characteristics similar to one type of system or another, particularly in earlier stages of development, the mix of institutions and instruments tend to broaden and deepen as those economies evolve.

Nonetheless, there can be very dominant, common features among even well-developed economies. This goes beyond institutional structure and can, for example, include attitudes to liquidity or borrowing. It is still true to say that savings and cooperative banks are a major component of the German banking sector (and that of other European countries). Some economies have a much bigger (relatively) contractual savings industry, and some developed countries continue to have a significant weight of government or government-sponsored financial intermediaries.

In a recent speech, Charles Goodhart referred to the susceptibility of the "Anglo-Saxon" financial model in the latest crisis in contrast to the "Asian model," which at least in this crisis has held up much more robustly.[33] Goodhart characterizes the Asian model as representing a readiness to keep a significant part of the financial system under state control, with private banks being predominantly family owned or part of an industrial combine or some combination of both.[34] Lending is more allied to central planning, but innovation, on the other hand, may be stifled.

The premise of the Anglo-Saxon model is that public sector intervention is economically inefficient, perhaps dampens the growth of external control mechanisms (for example, transparency and market forces), and thus may adversely affect management selection. Hence the Anglo-Saxon model is more associated with market forces but may also require more activist regulation. The so-called Asian model has a more straightforward regulatory architecture and therefore tends toward less regulatory arbitrage.

Given that one result of the recent financial crisis has been the huge intervention by public authorities in some of the Anglo-Saxon model economies, Goodhart muses on the possibility of convergence between the two systems as the Anglo-Saxon one reels from the current crisis. Of course, much of this intervention is an emergency response, a lot of which will be unwound, and does not in most cases involve a fundamental shift in attitude toward

33. See Goodhart (2009).

34. The industrial combine, of course, was also a very common form in many parts of Europe in the nineteenth century.

ownership issues. But there is some debate in the West about the role of the public sector versus the private sector. At the microlevel, there is some refocusing on more traditional channels of credit, such as credit unions and cooperatives, since some groups are being excluded from the more formal financial sectors.

4.4 Are Financial Systems Converging?

Forty years ago, there was also a considerable debate about what the correct or most efficient financial structure should be. The Gessler Commission in Germany examined the universal bank model.[35] Similarly, in the 1970s, the U.K. commissioned the Wilson Committee Report to look into, among other issues, a lack of competition on deposit taking (which was felt to be stifling innovation) and whether or not the financing needs of small and medium-size nonfinancial institutions were being adequately met.[36] There was much debate about the merits of the universal banking system versus the then specialist U.K. banking system, as well as speculation as to how much convergence there would be between the two types.

Now, in contrast, these sorts of debates are focused on what type of system the *emerging* world should be aiming for. Some evidence suggests that there *is* a narrowing of the gap in the structure between developed and emerging financial systems. One need only observe that papers are being published now on the development of derivatives markets in sub-Saharan Africa to appreciate that there is, in some of the literature, an implicit assumption that emerging markets should develop more "Western" financial systems, even if the actual convergence has been minimal so far.

4.5 What Is the Role of "Financial Centers," and Are They a Priority Objective?

Having one's own strong and competitive financial center is sometimes seen as indicative of economic and political importance and hence as being a desirable policy objective in its own right. A study of financial history tends to show that the combination of factors that leads to the successful and durable establishment of a major financial center takes a very long time to develop. It is not just the economic weight of the country in which the aspiring center is sited that is important; it is also the financial structure and surrounding legal and regulatory structure and reputational record that underpins a country's importance as a portal for finance.

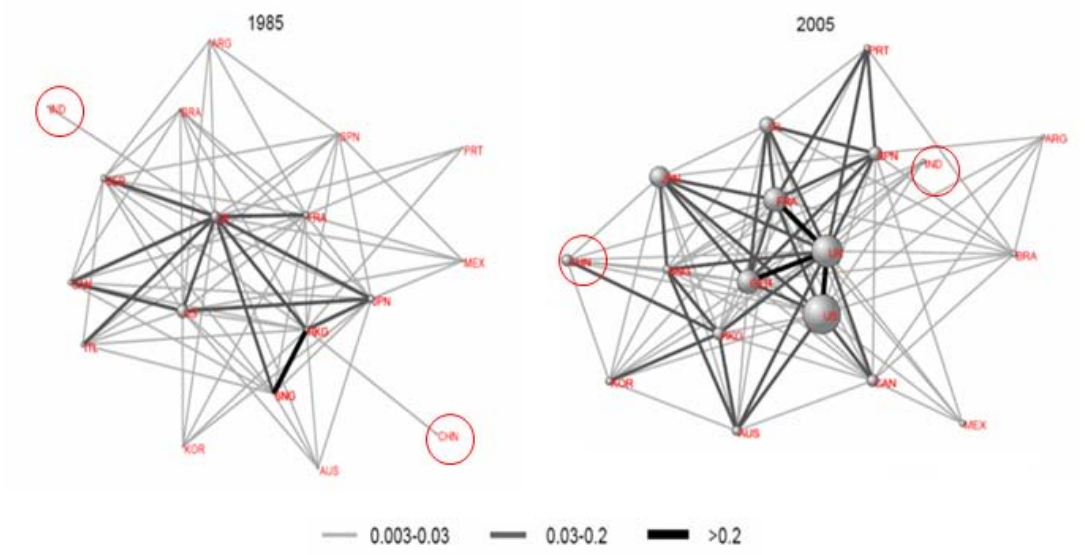
Recent analysis of international capital flows has confirmed the increasing role of financial centers in the developing world and the increased importance of capital flows between emerging economies (the South-to-South capital flows).[37] As shown in Figure 3, People's Republic of China (PRC) and India are barely represented in the graph for 1985, whereas by 2005 their financial centers carry much greater weight and are much more interconnected with other financial centers. Given that the developing world has weathered this financial crisis more robustly than many Western countries and that growth in the emerging world is set to continue to outpace that of the developed world for some years to come, it is logical to expect the importance of financial centers in the developing world to increase. But this will require continued effort to develop all the factors that add to the attractiveness of a financial center.

35. Gessler Commission (1979).

36. See Wilson Committee (1980).

37. See, for example, Haldane (2009).

Figure 3: Global Flow of Funds, 1985 versus 2005[a]



Note [a]: Nodes are scaled and in proportion to a country's gross external stocks; the thickness of the lines is proportional to the bilateral external financial stocks relative to the nodes' combined GDP.

Source: Haldane (2009). Reproduced with permission from the Bank of England.

Perhaps, rather than making the achievement of a large financial center a primary objective, it makes more sense to focus instead on matching the structure of the financial system to needs of the economy it serves and perhaps, too, to ways of dealing smoothly with high levels of global capital flows. History tends to suggest that large financial centers will evolve in their own time when these conditions are met.

5. CONCLUSION

Despite the obvious historic correlation between financial development and higher GDP levels, it does not necessarily mean that emerging economies *should* be seeking to emulate all aspects of Western financial structure. A variety of factors influences the structure of a financial system, and these usually have a gradual impact over many years. It may be more useful for developing economies to focus, at a more "micro" level, on which financial instruments and institutions can service the demands of their domestic economy. An illustrative analogy might be the experience of the developing world in pursuing import substitution policies in the 1950s through 1970s. Now generally viewed with skepticism, these programs sought to introduce the infrastructure, firms, and dynamics of industrialized economies via government policy (sometimes through financial repression as well), regardless of whether they were appropriate for the economy at the time.

Perhaps the major lesson for the emerging world from a consideration of types of financial structures should be more focus on the transition from one phase to the next and the risks and pitfalls associated with such transitions. With reference to Figure 1, a trajectory such as *a* may be gentle enough to accommodate all the necessary political, regulatory, supervisory, and educational adjustments whereas one such as *b* might outrun the development of the rest of the real economy and be more susceptible to instabilities.

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