

Bank-Based and Market-Based Financial Systems: A Comparative Analysis of Financial Structure and Capital Market Development in Emerging Economies

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Abstract

Financial systems differ widely in how they channel savings into investment. In bank-based systems, of which Germany and Japan are the usual examples, banks gather savings, allocate credit and monitor the firms they lend to. In market-based systems, typified by the United States and the United Kingdom, securities markets play a larger role in raising capital, pricing risk and exercising corporate control (1,2). Supporters of bank-based finance point to the information that banks acquire through long-term lending relationships and to their capacity to mobilize capital in the early stages of industrialization (3,4). Supporters of market-based finance stress the information that prices convey, the wider range of risk-sharing instruments available and the discipline that markets impose on managers, while noting that powerful banks may extract rents from the firms that depend on them (2,3). This article compares the two systems on information production, risk sharing, corporate governance and their contribution to economic growth. Cross-country evidence indicates that the overall level of financial development and the quality of legal protection for investors explain growth better than the mix of banks and markets (1,5,6). The article argues that emerging economies should give priority to legal and institutional foundations and a sound banking sector, and should expect the role of securities markets to grow as incomes rise (7).

Keywords: Financial structure; bank-based systems; market-based systems; capital markets; securities markets; economic growth; investor protection; emerging economies.

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A financial system mobilizes savings, allocates capital, monitors how it is used and allows risk to be shared and traded. Economies perform these functions through different combinations of institutions. In some, banks are the dominant channel, and relations between firms and their lenders are close and long-lasting. In others, firms raise more of their external finance by issuing securities, and investors trade claims on firms in deep and liquid markets (1,2).

The question of which arrangement better supports economic development has a long history. Gerschenkron argued that banks played a leading role in the industrialization of late-developing European economies such as Germany, where they mobilized capital on a scale that individual investors could not (4). Later work examined the costs of bank power and the benefits of securities markets, and from the late 1990s a body of cross-country research tested these arguments against data from many countries (1,8,9).

The debate is especially relevant for emerging economies that are building capital market infrastructure while relying mainly on banks for corporate finance. Decisions on how to regulate banks, whether to promote stock exchanges and how to protect investors depend on an understanding of what each part of the financial system contributes. This article reviews the functions of the financial system, examines the bank-based and market-based models in turn, considers the legal foundations of finance and compares the two systems before discussing the implications for emerging economies.

The Role of the Financial System in Economic Development

A financial system reduces the costs of acquiring information, enforcing contracts and making transactions. In doing so it affects how much is saved, where savings are invested and how efficiently capital is used (1). Levine and Zervos examined this link across a large sample of countries and found that both stock market liquidity and banking development in 1976 were positively associated with economic growth, capital accumulation and productivity growth over the following eighteen years (9). Because the two measures entered their regressions independently, the results suggested that banks and stock markets provide different services.

Rajan and Zingales approached the question at the level of industries (10). They argued that if finance matters for growth, industries that depend more on external funds should grow faster in countries with more developed financial systems. Their evidence supported this prediction, and it did so in a way that is harder to attribute to reverse causation than simple cross-country correlations. Both studies established that the depth of the financial system matters. The remaining question was whether its structure, the relative weight of banks and markets, matters as well.

Bank-Based Financial Systems

Relationship Lending and Information Advantages

The case for bank-based finance rests on the ability of banks to produce information about borrowers. A bank that lends to a firm over many years learns about its management, its projects and its cash flows, and much of this knowledge cannot be obtained from public sources (3). Because the bank captures the return on this information through continued lending, it has an incentive to invest in acquiring it. Securities markets face a free-rider problem in this respect, since information produced by one investor is quickly revealed through prices to all others (2).

Close relationships also allow banks to monitor borrowers and to renegotiate when firms run into difficulty. Rajan noted that an informed bank can make flexible decisions that prevent a firm's projects from failing, which dispersed bondholders would be unable to coordinate (3). Allen and Gale emphasized a further advantage: banks can smooth risk across time by building reserves in good years and drawing on them in bad years, a form of insurance that markets provide less effectively (2).

Historical experience adds weight to these arguments. In Gerschenkron's account, banks in late-industrializing economies also took equity stakes, sat on company boards and directed capital towards heavy industry at a time when securities markets were too small to finance large-scale investment (4).

Limitations of Bank Dominance

The information that makes banks effective lenders also gives them power over the firms that borrow from them. Once a relationship is established, the bank knows more about the firm than any competing lender does, and the firm cannot easily switch to another source of finance. Rajan showed that the bank can use this position to extract a share of the firm's profits, which weakens the firm's incentive to invest in profitable projects (3).

Banks also tend to be conservative. As lenders, they receive a fixed return and bear losses when projects fail, so they have reason to prefer safe, established firms with collateral over innovative projects with uncertain returns (1). Where banks hold equity or board seats, they may side with incumbent management and discourage restructuring. In economies with weak supervision, close links between banks and firms can also become a channel for connected lending and the misallocation of credit (1).

Market-Based Financial Systems

Price Signals, Risk Sharing and Corporate Control

Securities markets aggregate the views of many investors into prices. Allen and Gale argued that this makes markets well suited to financing new industries and technologies, where informed opinions differ and no single lender is well placed to judge the prospects of a project (2). Market prices also give managers and investors a continuous public signal of how the firm is valued.

Markets provide a wide range of instruments for sharing risk. Investors can diversify across many firms, adjust their exposure through trading and hold claims suited to their own preferences. Allen and Gale described this as cross-sectional risk sharing, which markets perform well, in contrast to the intertemporal smoothing that banks provide (2). Liquid markets also allow investors to commit

capital to long-term projects while retaining the ability to sell their claims, which Levine and Zervos identified as an important channel between stock markets and growth (9).

Markets contribute to corporate governance as well. Share prices reflect managerial performance, executive pay can be tied to them, and poorly managed firms can be taken over by acquirers who expect to run them better (1).

Limitations of Market-Based Finance

Market-based finance depends on conditions that are costly to create. Investors will only buy securities if they can obtain reliable information about issuers and are protected against expropriation by insiders. This requires accounting standards, disclosure rules, effective courts and securities regulation (8). Where these conditions are weak, markets remain small and illiquid, and prices carry little information.

Markets can also be volatile, and liquidity can encourage investors to sell at the first sign of difficulty instead of monitoring and supporting management. The free-rider problem in information production means that dispersed investors may underinvest in researching firms, particularly smaller and younger ones for which public information is scarce (2). Takeovers, the most direct form of market discipline, are expensive and function well only where legal rules and financial depth support them (1).

The Legal and Institutional Foundations of Finance

La Porta, Lopez-de-Silanes, Shleifer and Vishny shifted the debate by examining the legal rules that protect investors (8). Studying 49 countries, they found that the legal protection of shareholders and creditors varied systematically with the origin of a country's legal system. Countries with English common law origins generally offered the strongest protection, and those with French civil law origins the weakest, with German and Scandinavian civil law countries in between. Where legal protection was weak, ownership of firms tended to be more concentrated, which they interpreted as a substitute for legal rights.

This finding suggested that the distinction between bank-based and market-based systems may partly reflect deeper differences in law. Strong protection of minority shareholders supports equity markets, while strong creditor rights support lending. On this view, the structure of a financial system is largely a consequence of its legal environment, and legal reform may be a more direct route to financial development than attempts to favour banks or markets (1,8).

Comparison of Bank-Based and Market-Based Systems

The two systems differ in how they produce information about firms. Banks produce private information through relationships and use it to lend and monitor, while markets produce public information through prices and trading (2,3). Bank lending works best where borrowers are opaque and information is hard to verify, whereas market finance suits firms that can disclose information credibly and projects on which informed investors disagree, such as new technologies.

They also share risk in different ways. Banks smooth risk over time and can renegotiate with firms hit by temporary shocks, while markets let investors diversify and choose the risks they hold (2). Governance works through different channels in the two systems. In bank-based systems, monitoring is carried out by lenders with privileged access to information and, in some cases,

board representation. In market-based systems, discipline comes from prices, disclosure, executive incentives and the possibility of takeover (1). Bank monitoring can turn into rent extraction and protect incumbent managers from challenge (3), and market discipline depends on legal protection and liquidity that many countries lack (8).

On economic outcomes, the evidence is consistent. Levine classified a broad sample of countries by financial structure and found that neither bank-based nor market-based systems were associated with faster growth once the overall level of financial development and the effectiveness of the legal system were taken into account (1). Beck and Levine reached the same conclusion using industry-level data: industries dependent on external finance grew faster in countries with better-developed financial systems and more efficient legal systems, but not in countries with a particular balance of banks and markets (5). The comparative studies collected by Demirgüç-Kunt and Levine likewise found that financial structure did not explain differences in growth, while the size and activity of the financial system did (6).

These results support what Levine termed the financial services view (1). The quality of the services a financial system provides, such as evaluating firms, mobilizing savings, monitoring managers and sharing risk, matters more than whether banks or markets provide them. The legal system matters because it determines how well any institution can perform these services.

Implications for Emerging Economies

The relative importance of banks and markets does, however, change as economies develop. Demirgüç-Kunt, Feyen and Levine found that as countries grow richer, both banks and securities markets expand relative to the size of the economy. The association between economic output and bank development becomes weaker, while the association with securities market development becomes stronger (7). Banks appear to matter most at lower levels of income, and markets gain in importance as economies mature.

This pattern has direct implications for emerging economies. In the early stages of development, when firms are small, accounting information is limited and legal enforcement is uneven, banks are better placed than markets to evaluate and monitor borrowers (3,7). Policy should therefore give priority to a sound and competitive banking sector, with effective supervision to prevent connected lending and the concentration of risk.

At the same time, the foundations of market-based finance take many years to build. Disclosure standards, protection of minority shareholders, enforcement of contracts and a reliable securities regulator cannot be created at the moment when an economy first needs a large equity market (8). Emerging economies that invest in these foundations early will be better prepared when firms outgrow bank finance and when domestic savings, including pension assets, create demand for long-term securities.

Discussion

The debate over bank-based and market-based systems was originally framed as a contest between two models, each associated with a group of successful industrial economies. The cross-country evidence does not support declaring either model the winner. Countries with either structure have grown quickly or slowly, and what separates the fast from the slow is the depth of their financial systems and the quality of the legal rules that support them (1,5,6).

Structure still matters in a narrower sense, since banks and markets provide different services and each can offset some of the other's weaknesses (2). The practical question for policymakers is which services are most needed at a given stage of development and which institutions can deliver them under the existing legal conditions. For most emerging economies, the answer points first to banks and to the legal and supervisory framework that governs them, and later to securities markets as incomes, savings and institutional capacity grow (7).

There is also a risk in pursuing market development for its own sake. A stock exchange established without adequate disclosure rules and investor protection is likely to remain thin, prone to manipulation and of little use to firms seeking capital (8). Investment in legal and regulatory foundations is less visible than the launch of new trading platforms, but the evidence suggests that it has greater effect on financial development (1,8).

Conclusion

This article has compared bank-based and market-based financial systems. Bank-based systems produce private information, monitor borrowers closely and smooth risk over time, but they give banks power over firms and may favour established borrowers over innovative ones. Market-based systems aggregate information through prices, offer broad risk sharing and discipline managers through takeovers and incentive pay, but they depend on strong legal protection and liquid markets (2,3,8).

The cross-country evidence indicates that the overall development of the financial system and the quality of the legal environment matter more for economic growth than the balance between banks and markets (1,5,6). The relative importance of markets tends to rise with income (7). For emerging economies, the most effective strategy is to strengthen legal protection for investors and creditors, build a sound and well-supervised banking sector, and develop the institutions that securities markets require so that they can take on a larger role as the economy grows. Further research should examine how these findings apply to individual emerging economies, using country-level data on credit allocation, market liquidity and the enforcement of investor rights.

References

1. Levine R. Bank-Based or Market-Based Financial Systems: Which Is Better? *Journal of Financial Intermediation*. 2002;11(4):398–428.
2. Allen F, Gale D. *Comparing Financial Systems*. Cambridge, MA: MIT Press; 2000.
3. Rajan R G. Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt. *Journal of Finance*. 1992;47(4):1367–1400.
4. Gerschenkron A. *Economic Backwardness in Historical Perspective: A Book of Essays*. Cambridge, MA: Belknap Press of Harvard University Press; 1962.
5. Beck T, Levine R. Industry Growth and Capital Allocation: Does Having a Market- or Bank-Based System Matter? *Journal of Financial Economics*. 2002;64(2):147–180.
6. Demirgüç-Kunt A, Levine R, editors. *Financial Structure and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development*. Cambridge, MA: MIT Press; 2001.
7. Demirgüç-Kunt A, Feyen E, Levine R. The Evolving Importance of Banks and Securities Markets. *World Bank Economic Review*. 2013;27(3):476–490.

8. La Porta R, Lopez-de-Silanes F, Shleifer A, Vishny R W. Law and Finance. Journal of Political Economy. 1998;106(6):1113–1155.
9. Levine R, Zervos S. Stock Markets, Banks, and Economic Growth. American Economic Review. 1998;88(3):537–558.
10. Rajan R G, Zingales L. Financial Dependence and Growth. American Economic Review. 1998;88(3):559–586.