Part I Global Systems and the New Dynamics

Finance, Financial Regulation, and Economic Development: An International Perspective

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Until recently, the financial sector was a relatively neglected area of the theory and practice of modern economic development. Finance did not have a glamorous image. It was neither heavy industry nor high technology. It was largely invisible and seemed unimportant.

Experience gained since the mid-1980s, along with developments in theory and empirical evidence, have placed finance in a more central position with respect to economic development—and properly so. While finance is ubiquitous and plays a central role in the allocation of scarce resources in any economy, it also has special attributes and special problems. For all these reasons, finance deserves detailed attention.

Finance Is Special

Finance is important for economic development in a number of ways. It also suffers from the problem of asymmetric information.

Finance Is Ubiquitous

In any economy, virtually all individuals, enterprises, and governments need finance, even if it is only self-finance. Individuals need finance to save resources for future uses or to borrow resources for current uses. Enterprises need finance to bridge the gap between production and sales and to acquire resources for investment and future growth. Governments need finance to bridge the gap between expenditures and taxation revenues. And all the participants in an economy need a payments system to lubricate their mutual transactions.

Finance Is Central

The need for and ubiquity of finance places it in a central role in the allocation of scarce resources, that is, the allocation of savings and investment. Efficient channeling of a society's savings into investments with high social returns will augment economic growth; inefficient allocations will represent a waste of scarce resources and forgone opportunities for growth.

This chapter is an expanded version of a presentation at the World Bank's Summer Workshop on "Challenges for the 21st Century," on July 6, 1998. Please note that rather than provide a running series of citations, I have provided a brief bibliography at the end of the chapter.

¹ These investments would include resources devoted to private sector plant and equipment, public sector infrastructure, and individuals' human capital, as well as to the research and development that will underlie technological change.

The Problem of Asymmetric Information

Unlike many other transactions, finance involves an inherent time dimension: an immediate transfer of resources (a loan or financial investment), accompanied by a promise of repayment, and then a subsequent repayment. In a society in which individuals are motivated by the prospects of gain, lenders will expect to be repaid, with added returns for waiting, for risk, and for specialized knowledge.² They are unlikely to lend without reasonable prospects for repayment and returns.

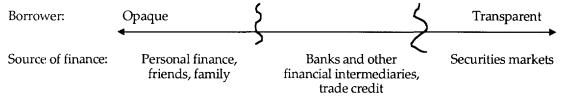
However, the gap between the time of the loan and the time of the repayment creates potential problems of asymmetric information: borrowers are more likely to know their own prospects for repayment than are lenders, which can generate the problem of adverse selection; and after receiving a loan, borrowers may change their behavior in ways that adversely affect their prospects for repayment, which is the problem of moral hazard. These potential problems create strong incentives for lenders to gather information about prospective borrowers and to monitor their actions during the period in which the loan is outstanding.

Information (or its absence) is therefore crucial to the process of finance, and has an important influence in shaping the types of institutions that are likely to arise in an efficient financial sector; the functions that these institutions will perform; the types of financial instruments that will arise; and who is likely to receive finance, from whom, in what form, and under what conditions.

The Opaqueness-Transparency Paradigm

A convenient way to explore the implications of asymmetric information for an efficient financial sector is to imagine that potential borrowers (individuals, enterprises, governments) can be arrayed along a spectrum of informational opaqueness or transparency with respect to their prospects for repayment (figure 1.1).

Figure 1.1. The Spectrum of Informational Opaqueness or Transparency



Source: Author.

On the left side of figure 1.1 are highly opaque parties. Many individuals, especially young adults and owners of new, small enterprises, would fall into this category. Their prospects for repayment are poor or murky, and they will have difficulties in obtaining finance. They will usually have to rely on selffinance or on friends or family, who may have special information or may have particular ways to enforce repayment or may be willing to forgo some repayment (that is, provide concessional finance).³

On the right side of figure 1.1 are highly transparent parties. In this category would be large, wellknown governments or companies, for example, the government of the United States or the General Motors Corporation. Their repayment prospects are relatively clear and good, and they can obtain finance from the general public by issuing securities that are then traded on securities markets. Various kinds of

² This chapter will usually refer only to lenders and borrowers, but the problems and processes described apply more generally to other types of financial relationships, such as between an equity investor and the managers of the enterprise in which the investor holds an ownership position.

Today in the United States, many such individuals can also obtain modest amounts of finance through the use of credit

cards, something that would have been impossible 30 years ago.

financial facilitators will be involved in these securities markets—securities brokers, securities dealers and market makers, securities underwriters and issuers, rating and evaluation agencies, accountants, financial advisers, publishers of financial publications—who will facilitate the issuance, trading, and evaluation of these securities.

In between are borrowers who are at an intermediate level of transparency and who can obtain finance from financial intermediaries and, in the case of enterprises, through trade credit, that is, from input suppliers who are willing to wait a limited amount of time, such as 30 days, before demanding payment. Financial intermediaries are institutions that hold primarily financial assets (for example, loans or securities), whose primary activity is investing in those assets, and who obtain the funds for these investments by issuing liabilities (such as deposits or other debt) on themselves. Included in this category would be banks and other depository institutions (for instance, savings institutions and credit unions), insurance companies, pension funds, mutual funds (unit trusts), commercial finance companies, consumer finance companies, and local money lenders. These institutions are information specialists that have the skills and resources to obtain substantial amounts of information about prospective borrowers, and that can therefore say "yes" knowledgeably to potential borrowers with good prospects for repayment and "no" to those with poor prospects for repayment. They can also monitor borrowers after lending to them so as to ensure repayment.4 The loans from these institutions are likely to be relatively short term in nature (though renewable), secured (where possible), and callable. As for trade credit, suppliers may be able to develop expertise with respect to their customers by monitoring their customers' business practices and thereby determining which of them are good risks for limited extensions of credit.

The boundaries in figure 1.1 that demarcate the realms of securities markets, financial intermediaries, and less formal sources of finance are fuzzy and porous, and will be significantly influenced by the state of technology, which has tended to move the boundaries to the left. For example, the dramatic improvements in data processing and telecommunications technologies of the past three to four decades have greatly improved the ability of financial sector participants to gather and process information rapidly and inexpensively. In the United States these improvements have permitted the securitization of assets that three decades ago would have been considered the exclusive domain of financial intermediaries. It has also allowed banks and other financial intermediaries to issue credit cards, and thus provide finance to individuals who three decades ago would have relied on less formal sources of finance.

Two important determinants of a borrower's informational opaqueness or transparency, especially when the borrower is an enterprise or government, are the entity's age and size. These characteristics provide the axes in figure 1.2. With age comes an observable track record with respect to reliability generally and also specifically with respect to any past credit experiences. With size comes the scale that makes worthwhile a lender's investment in the sunk costs of an informational investigation and the subsequent extension of credit. Thus, as portrayed in figure 1.2, young and small enterprises will largely be confined to the realm of less formal finance. As an enterprise grows older and/or becomes larger, its track record and scale may make it eligible to qualify for trade credit or for finance from banks or other financial intermediaries. Finally, still greater age or size may allow it to qualify for the securities markets. The boundaries that demarcate these realms in figure 1.2 are again fuzzy and porous, and improved data processing and telecommunications technologies have tended to push the boundaries toward the origin, thereby allowing younger and smaller entities to access financial intermediaries and then the securities markets at earlier stages than was previously possible.

A major exception is mutual funds, many of which are designed to invest in long-term debt and equity securities.

⁴ Also, by making multiple loans to multiple borrowers, a financial intermediary will be able to diversify its portfolio, and thereby reduce its overall risk from nonrepayment by any individual borrower.

Securities markets

Banks and other financial intermediaries, trade credit

Personal finance, friends, family

Size

Figure 1.2. Two Determinants of Opaqueness or Transparency

Source: Author.

Implications of the Opaqueness-Transparency Paradigm

The implications of the informational opaqueness-transparency framework are profoundly important for the structure of an efficient financial sector and for the appropriate role of governments and international agencies such as the World Bank.

The Structure of an Efficient Financial Sector

In an economy where most enterprises are small and young, financial intermediaries, such as banks and bank-like institutions, ought to be important for efficient finance. They are the sophisticated, efficient gatherers and assessors of borrower information. Even though securities markets for developing countries have attracted a great deal of attention in the past decade, they are suitable only for the largest and oldest enterprises in an economy, because only these enterprises will be transparent enough for nonspecialist investors/lenders.⁶ Consistent with this view, as most household savers are likely to be unsophisticated and relatively poorly informed, financial intermediaries such as banks and other depositories, insurance companies, and pension funds will be the best vehicles for their savings. Governmental assurances and prudential regulation will still be necessary even for these institutions to reassure and protect their uninformed and unsophisticated liability holders (that is, depositors).

The provision and encouragement of standardized accounting information, enforced by trained accountants and auditors, will make potential borrowers more transparent and comparable, and will

⁶ Note that even in a highly developed economy such as that of the United States, only approximately 10,000 enterprises have publicly traded securities. The remaining smaller enterprises—numbering more than 20 million—must obtain their finance from financial intermediaries or from less formal sources.

thereby make the tasks of financial intermediaries and securities markets easier and more efficient. Furthermore, greater clarity and appropriate balance with regard to the rights of borrowers and lenders, especially concerning conditions of bankruptcy and insolvency, will encourage greater efficiency of finance. The more easily lenders can recover their funds in the event of a financial failure by a borrower, the more willing the former will be to lend in the first place.

In the same spirit, greater clarity and appropriate balance with regard to the rules of corporate governance (including the rights of stockholders in relation to managers, the rights of debt holders in relation to stockholders, and the rights of minority stockholders in relation to majority stockholders) will encourage greater efficiency of finance. Finally, greater clarity in regard to the rules of securities issuance and trading will reassure potential investors, and thereby encourage greater efficiency in finance.

The Appropriate Roles for Government

Where financial intermediaries are subject to runs (for instance, by depositors), or where their liability holders are at a clear informational disadvantage (for example, banks and other depositories, insurance companies, defined benefit pension plans), governments should maintain a strong system of prudential (safety and soundness) regulation. Effective prudential regulation must have the following components with respect to the regulated institutions: a transparent accounting system based on market value; adequate, risk-based capital requirements that are based on the market value accounting framework and that are forward-looking; sensible rules on risk limitations; insistence on the financial and managerial competency of owners and managers; a clear understanding that owners (stockholders) of insolvent institutions lose their investments; clear authority for intervention and enforcement of the rules; and adequate numbers of well-trained and well-paid prudential regulators (examiners and supervisors).

Formal government insurance arrangements to protect the liability holders (depositors and others) of these regulated financial institutions are worthwhile.⁷ Risk-based premiums should accompany such insurance.

Underlying all these arrangements should be a central bank that is seen as a reliable lender of last resort to solvent depository institutions.

Furthermore, governments should encourage banks and other financial intermediaries to be efficient lenders. This would include promoting education in such areas as credit evaluation, portfolio management, hedging, and the properties and uses of derivatives. In addition, governments should more generally foster a climate and infrastructure that promotes transparency and efficiency in finance, including a transparent accounting system based on market value; a clear commercial code, with contract enforcement mechanisms; clear bankruptcy arrangements and procedures; clear corporate governance arrangements; clear securities issuance and trading arrangements; and an open system (subject to prudential considerations) of entry to and exit from the financial sector.

Governments should eschew credit allocation and intervention efforts, protection of incumbent financial institutions, and the creation of barriers to entry into the provision of financial services.

These suggested roles contrast with the past policies of many governments. Although most governments of developing countries have stressed the roles of banks in their financial sectors, until relatively recently, they tended to view banks as tools of government policies—with regard to credit allocation and nationalization—rather than as efficient allocators of credit. They generally permitted only a few, protected banks to operate in their economies, and those banks were under tight governmental control and influence. Credit evaluation skills were not encouraged. Prudential regulation skills, tools,

⁷ Such insurance has been regularly provided on a de facto basis by virtually all governments, even when no formal insurance arrangements are in place.

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⁸ Note that the governments of industrial countries have not been immune to the temptations of credit allocation. The United States, for example, has a plethora of regulatory provisions, tax breaks, and specialized financial institutions that are the embodiments of legislative efforts at credit allocation.

and institutions were not developed. Transparent accounting standards were not encouraged for financial intermediaries or for enterprises more generally.

Simultaneously, because securities markets were less susceptible to direct government influence in the allocation of credit, they were discouraged and often portrayed as "gambling dens." Arrangements and institutions that would have encouraged the use of securities markets through transparent accounting, clear corporate governance rules, clear commercial codes, clear bankruptcy procedures, and clear securities issuance and trading arrangements were not encouraged and did not develop.

In sum, many governments generally had little interest in and did not pursue the goal of developing an efficient financial sector. Those attitudes have been slowly changing during the past two decades, with some governments showing greater interest in efficient financial sectors and the steps that they can take to foster that efficiency.

The Appropriate Roles for International Agencies

International agencies can help national governments develop the private and public institutions needed for efficient financial sectors. Providing education and training will be important. The agencies can also help national governments share information and informally coordinate their efforts.

Furthermore, international agencies can serve as international lenders of last resort. However, lending to institutions that are fundamentally solvent and that primarily need modest amounts of liquidity and time is quite different from lending to institutions (or governments) that need major changes in policies, as well as massive amounts of liquidity and time, for an effective recovery. Lending under the latter set of circumstances will involve the international agencies in political imbroglios that they may be poorly equipped to handle.

Formal international harmonization efforts are generally not necessary. Effective national prudential regulation should be able to prevent virtually all instances of international financial contagion. Formal harmonization, for example, through a formal organization, creates the risk that the organization will become a vehicle or screen for international protectionism. However, under some circumstances harmonization may serve as the basis for reducing protectionism or competitive subsidization, as through the General Agreement on Tariffs and Trade and the World Trade Organization, or encouraging beneficial standardization.

Conclusion

Finance is important, but an efficient financial sector does not arise easily or automatically. It requires a substantial amount of unglamorous infrastructure. Sensible government policies have a major role to play in developing a strong and effective prudential regulation system and in fostering a climate and framework for general informational transparency. International agencies can assist in these efforts.

In sum, efficient finance requires considerable effort on the part of private and public entities, but the benefits surely exceed the costs.

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