

1. Policy Issues and Prospects

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I. Introduction

The present volume examines the high interest rate policy intended to stave off a currency crisis, banking policies for weathering a financial crisis, and corporate restructuring policies for revitalizing economic activity. Theoretical analyses were done using a wide range of analytical frameworks such as the overshoot model of exchange rates, time inconsistency, the agency approach for corporate finance, and comparative studies of financial systems.

This chapter reviews the issues that have been at the center of debate over economic development and finance, providing an overview of policy issues ranging from problems concerning the management of the macroeconomy to matters of banking policy. The intent of this broad perspective is to give the reader a clearer understanding of the questions that the succeeding chapters in this study will deal with.

Section II, which follows, will review the function of the financial sector in the economy. Section III gives a review of the relationship between economic growth and finance. Section IV will discuss the significance of financial liberalization intended to foster the efficiency of the financial sector; it will also look at the destabilization of the financial system that such liberalization policies can induce. Following on this, Section V will discuss the vulnerability of the financial system and policies for preventing financial crises, taking up the problems of bank runs and moral hazard in bank management and the

equally troublesome problem of macro shocks. Mismanagement of the macroeconomy can be one cause for macro shocks, and Section VI discusses a problem in the management of the macroeconomy known as the macroeconomic trilemma. Based on the foregoing sections, Section VII will look at the various policy issues of developing countries focusing on how extensive and interrelated these are; it argues that the way policies are combined is important. Finally, when studying financial and monetary issues, Section VIII points out the need to consider the particular characteristics of the financial systems in developing economies, which can be quite different from those of the developed economies.

II. The Function of the Financial Sector

The significance of the financial industry can only be realized within the context of the other industries in the economy. Thus when studying the role of the financial sector, one has to view the economy in its entirety first, and then look at the function of the financial sector within that wholeness.

In the modern economy, (1) The division of labor in the society and the exchange of goods and services play a vital role. Instead of one person (or one enterprise) making all of the goods he needs, people become specialized in making specific goods for exchange; that way they can make more goods. (2) Through the circulation of savings and investment, productivity can be raised and maintained at higher levels. (Here investment means that going into capital investment and other physical assets.) If there were no replacement investment or investment into new capital goods, probably in thirty years time a nation's GDP would fall to zero. (3) Economic development is made possible by technological innovation which comes through the accumulation of knowledge and R&D. This enables the production of more goods and services with less inputs, and such activity is needed if totally new and previously nonexisting goods and services are to be created. For all the above, the financial sector provides a most important service in supporting the economic activity of the other industrial sectors of the economy.

A. Settlement function

Specialization and the division of labor bring about the need for the exchange of goods and services, and one of the important functions of the financial sector is to provide the means of settlement, i.e., money. Barter transacting (the exchange of a good for another good without the medium of money) is also possible, but in modern society almost all goods and services

are exchanged through the medium of money (cash and bank deposits).

Important in the function of settling accounts is the concept of liquidity. Liquidity is the easiness of exchanging (something) with other goods, services or financial assets. For example, cash is extremely liquid in contrast to real estate like land or buildings which has low liquidity. Something with high liquidity is a natural medium for settling accounts. For example wage and salary payments are often paid into bank savings accounts. Just imagine how inconvenient it would be if a worker's salary were paid in land equal to the value of his salary. Therefore, highly liquid cash and bank deposits have become the natural means for settling accounts.

B. Financial Intermediation

When savings exceed investments, it is called an excess of savings; when the opposite is true, it is an excess of investment. At different times enterprises as well as individual households experience these excesses. But on average households tend to have an excess of savings while enterprises an excess of investment. Therefore there has to be some sort of intermediary between the excess savers and the excess investors to keep up the circulation of funds. Such intermediation is another important function of the financial sector, and it is called financial intermediation.

When this intermediation is done by banks, it means gathering deposits from a large number of depositors and lending this money to companies as a source of capital investment or to individuals as housing investment. Intermediation where banks stand in the middle as the collectors and the lenders of funds is called indirect financing. The underwriting business of securities companies, which involves mediating in the sale of new corporate stocks and bonds, is also financial intermediation. However, in this case, although these companies sometimes temporarily purchase the newly issued stocks and bonds, ultimately they are sold to ordinary investors. In this way, the investor as the provider of the funds forms a direct ownership or lending/borrowing relationship with the enterprise as the ultimate user of the funds. Therefore this financial intermediation in the sale of corporate stocks and bonds is called direct financing and is distinguished from indirect financing which is conducted through the intermediation of banks.

C. Assets Transformation

The transformation of assets means changing the character of assets, such as their risk, maturity, liquidity, and units of transaction. For example, the character of bank deposits is low risk, short maturity, high liquidity, and

usually small-scale. But bank loans that are made using the funds from bank deposits have a different character. They carry the credit risk of the borrower, have mid- to long-term maturity, have low liquidity, and are usually large-scale.

Technological innovation and the creation of new industries can produce substantial benefits once they have been successful, but they also have a high possibility of failure. In order to collect sufficient funds for these kinds of ventures, there have to be financial services such as investment trusts which can diversify investment risks. Also it will take time before the financing and equity participation in these new businesses start to produce profits, so they are essentially low in liquidity, meaning they cannot quickly be realized. However, if something like investment trusts can be bought and sold, then investors can secure a certain degree of liquidity. (Of course liquidity is the highest when financial institutions collect deposits and lend the funds out, but it is difficult to finance extremely high risk ventures with such funds.) In this manner, by providing services to transform assets, the financial sector makes it easier to pursue technological innovation and create new industries.

In performing the above function, an important responsibility of the financial sector is the management of risk, production of information, and monitoring loans. Risk management includes reducing the risk of losses arising from bad loans (the management of credit risk), reducing the risk of losses caused by interest rate fluctuations (the management of interest rate risk), and providing for unexpected withdrawals of bank deposits (the management of liquidity risk). Information production means ascertaining what ventures look promising for investment, and monitoring borrowers is necessary to make sure they use the loaned funds properly. In all of these tasks economies of scale are at work. When a lender has made a large number of loans, if one goes bad it has little overall effect on the lender (risk is diversified). And rather than having a large number of petty creditors trying to watch over and monitor a number of individual borrowers, it is much more efficient to delegate such monitoring responsibility to a small number of large-scale creditors. The same can be said for the production of information. Thus it is rational to turn over such tasks to specialized financial institutions.¹

III. Finance and Economic Growth

Through the various functions discussed above, the financial sector is interconnected with real economic activity and plays a role in smoothing this activity. There is now an accumulation of theoretical and empirical research

on finance and economic growth. This accumulation of research has increasingly brought to the fore the importance of the financial sector in the economy.

Theoretical studies have shown (and this point will be dealt with in more detail in Chapter 3, Section II) that the financial system provides the economy with the necessary liquidity (or strictly speaking, it economizes the usage of liquidity) and directs more funds to long-term investment thereby promoting economic growth (Diamond and Dybvig 1983; Bencivenga and Smith 1991; Bencivenga Smith and Starr 1995).

It has also been shown that the financial system assists a variety of economic entities in the management of risk. Above mentioned economization of liquidity is achieved by financial intermediaries through the diversification of liquidity risks (Diamond and Dybvig 1983). Moreover, by controlling the risks associated with production, it becomes easier for these institutions to invest from a long-term perspective (Levine 1992; Saint-Paul 1992; Devereux and Smith 1994; Obstfeld 1994).

Studies also indicate that the financial system contributes to economic development by solving (or mitigating) the problem of information asymmetry. If, for example, the financial system can provide information to potential investors about more efficient entrepreneurs and investment plans, the amount and efficiency of investment increases which promotes economic development (Greenwood and Jovanovic 1990). Likewise the provision of information about promising new technology promotes economic development (King and Levine 1993b).

From empirical studies it has been confirmed that development of the financial sector promotes the growth of the economy. While it has been known for some time that there is a positive correlation between the development of the financial sector and the growth of the economy, the causal relationship of the two had not been clearly understood. However, since the pioneering research by King and Levine (1993a, b), many studies have been carried out confirming that growth of the financial sector causes growth of the economy. (For a survey of the theoretical and empirical research, see Levine [1997]; for the empirical research since then, see World Bank [2001].)

Following this theoretical and empirical confirmation of financial-sector development promoting economic growth, research interest turned to examining the relationship between differences in financial systems and economic growth and efficiency. Much of this research has compared bank-based financial systems, where banks in particular play a major role as financial intermediaries, with market-based financial systems, where the financial market (particularly the stock and bond markets) plays a major role (Allen and Gale 2000).

In Chapter 3 of this volume, a model analysis is performed on this compari-

son of financial systems. The analysis makes a strong case that when a developing country is in the early stage of economic development, policies to foster a bank-based financial system can be justified on the basis of institution-building costs; however, the system is susceptible to currency or financial crisis.

IV. The Theory of Financial Liberalization

As is apparent from the foregoing sections, the financial sector performs many important functions in the economy, and for this reason policies to foster this sector need to be incorporated into economic development strategies. However, for a time after World War II the importance of fostering the financial sector was not sufficiently recognized, and for several decades it was encumbered by restrictive policies.

Following World War II governments in developing countries were advised to actively intervene in the economy. Through regulations and the nationalization of banks, governments used the financial system for taxation purposes and for providing subsidies to designated sectors of the economy.

In order to direct subsidies to designated industrial sectors, banks were forced to lend at very low interest rates to designated protected sectors. In a similar way, forced lending went into low-interest home loans to encourage household home ownership, and into debt-ridden state-owned enterprises to maintain employment. And to support their deficit financing, governments forced banks to buy government bonds at low prices and imposed high reserve requirements.

Such direct, systematic government intervention in the financial sector became known as “financial repression.” It curtailed the autonomy that banks had over their business operations and decision making. Deposit interest rate was also regulated and kept low. It taxed depositors to accumulate financial resources which the government at its own discretion funneled as subsidies to designated industrial sectors. To avoid taxes, depositors reduced the amount of their bank accounts. For banks there was no need to have good judgment about the quality of lending. As a result, financial repression led to the stagnation of bank intermediation functions and the inefficient allocation of financial resources (McKinnon 1973; Shaw 1973; World Bank 1989).

To rectify the policy approaches that led to financial repression, a “theory of financial liberalization”² arose which argued that liberalizing the financial sector would promote the development of the sector which would bring about the growth of the economy. Such liberalization, it was argued, would facilitate the creation of a competitive market environment, and in such a market the

volume of financial intermediation and efficiency would rise (Shaw 1973). Also the fragmented financial market would move toward integration which would lower financial costs, increase investing, and make the rates of return on investments more uniform across industrial sectors and among enterprises (McKinnon 1973). This in turn would lead to a rise in the rate of investment and in marginal productivity and thus to a rise in economic growth.³

The importance that the theory of financial liberalization puts on the development of the financial sector is fundamentally correct, and many countries have put its arguments into practice. Along with the developed economies, from the 1970s developing countries also embarked on financial liberalization. Over time the interventionist policies of earlier governments were phased out; interest-rate controls, preferential lending regulations, entry barriers into financial businesses, regulations on international financial transactions—these and other measures of financial repression were abolished.

However, financial liberalization in practice brought along its own problems. The biggest was that liberalized financial systems were more prone to financial crises than the old illiberal systems had been. Countries continued to introduce financial liberalization policies even into the 1990s, but the progress of these policies has been very uneven. Liberalization since the latter half of the 1970s has brought on bank failures in many countries and exposed banking systems to crisis and collapse (Sundarajan and Baliño 1991; Vittas 1992; Caprio et al. 1994). An analysis of 69 countries which included the advanced countries was conducted by Caprio and Klingebiel (1996, pp. 9–10) and revealed that from the 1970s until the time of the survey there had been 80 instances of bank insolvencies, and the financial systems in 58 countries had experienced crises. When incomplete data from countries with transition economies was included, bringing the survey up to 90 countries, then more than 100 instances of bank insolvency were found.

The mixed results of financial liberalization indicate that although development of the financial sector, as advocated by financial liberalization theory, has been the correct course to pursue, there has been insufficient recognition of the inherent vulnerability of the financial sector and the need for policies to deal with this vulnerability.

V. Financial System Vulnerability

A. Vulnerable to Bank Runs

As stated above, one of the important functions of financial institutions, especially banks, is financial intermediation. As financial intermediaries, banks

provide relatively safe assets, i.e., deposits, and assume relatively risky assets, i.e., loan. Therefore, economic shocks that cause fluctuations in the value of bank loans may destabilize the financial system.⁴

Shocks that cause fluctuations in the value of bank loans can be divided into macro shocks, where risks cannot be dispersed, and idiosyncratic shocks where risks can be dispersed. Looking first at idiosyncratic shocks, which have no statistical correlation with one another, the risk of fluctuations in the returns on lending can be diversified by spreading lending over a large number of firms (Diamond 1984). But even if a bank has dispersed its lending over a sufficiently large number of firms, there always remains the possibility that a sudden unforeseen run on deposits could bring the bank down.

Diamond and Dybvig (1983) assumed that (1) returns on long-term investments are high, but they are low if such investments are terminated early; (2) depositors may be compelled to liquidate their deposits in a short period of time (liquidity risk). Whether or not individual depositors will need to withdraw their deposits is an assumed uncertainty, which means that there is the possibility that depositors will prematurely cancel their bank accounts. Because of this risk, banks cannot undertake long-term investments which have higher rates of return. However, this risk can be reduced when the number of depositors is large in which case banks can quite accurately estimate the amount of withdrawals from bank deposits. Banks can then hold back enough liquidity (such as cash) to cover the amount of estimated withdrawals, and all of the remaining amount from deposits can be used to finance long-term investments which will provide higher rates of return. In this way banks are able to fulfill simultaneously the two needs of supplying liquidity and supplying funds for long-term investment.

However, what happens if many more depositors than the bank estimated want to withdraw their money all at once? The bank has to prematurely terminate that amount it has put into long-term investments and use it to meet deposit withdrawals. But this means receiving lower rates of return on investment than had been expected, and in a worst case situation the bank could suffer a capital deficit. Because of this possibility, when many depositors start to withdraw their money, those who normally would not have withdrawn their money will also hastily withdraw their deposits for reasons of safety. This is because the bank may not have enough funds remaining to pay the last depositors wanting to take out their money. In this sense banks are inherently weak against bank runs; and because of this, it does not matter how substantial or insubstantial the cause for a bank run, once a run on deposits has begun, it becomes rational behavior for all depositors to become involved and rush to withdraw their money. Thus something as insubstantial as a groundless rumor

can cause a bank run. Moreover the failure of a single bank can cause a chain of bank runs which lead to a collapse of entire banking system.

B. Moral Hazard

The term moral hazard originated in the insurance business where it has long been noticed that people become more complacent about fire prevention after they have taken out fire insurance. In the field of corporate finance it is known that stockholders in limited liability enterprises which hold debts tend to become lax about the danger of business failure, and the greater the borrowing the greater the tendency for this behavior to happen. This is because under the limited liability, when a company becomes insolvent, the stockholders cannot be held financially responsible for more than the amount of their own equity participation. This creates an incentive to borrow large amounts and invest in high-risk, high-return ventures where the danger of failure is high but the rewards of success are very large. This is because their profits are very high when they are successful, but their losses are limited if they fail.⁵

In the case of banks, their borrowing (i.e., deposits) is extremely large. Therefore the banking business can be susceptible to moral hazard. With ordinary companies creditors can control for this danger by strengthening monitoring. But with banks where deposits are protected by deposit insurance and banks are implicitly protected by government policies, depositors (i.e., the banks' creditors) can hardly be expected to oversee and supervise bank behavior. For this reason moral hazard can occur; bank management can put a growing amount of bank assets into high-risk high-return loans, which will increase the possibility of bank failure.

Financial liberalization can make moral hazard a more serious problem. Liberalization increases the intensity of competition among banks and pushes down profitability. It also lowers the walls separating the banking business from other nonbank financial institutions, and this aspect also increases competition and lowers profits. These changes have taken away the excess profits that banks used to enjoy. Hellmann, Murdoc, and Stiglitz (1997) call these excess profits "franchise value."

According to their argument, if franchise value can increase the value of the bank as a going concern, then this factor can be expected to restrain excess risk taking by banks. From the viewpoint of bank management, the opportunity cost of losing banking business rises as high as franchise value (if they conduct other business, they cannot earn as much excess profit as in the banking business). Fearing the loss of business, bank managers become conservative about assuming risks, and in this way moral hazard can be avoided.

In recent years a “franchise value hypothesis” has been put forward which seeks to maintain the soundness of bank business operations while at the same time recognizing the need to improve the government’s ability to regulate banks.⁶

For developing country governments with insufficient regulatory capability, this hypothesis of restraining risk burden through franchise value is a very attractive argument. In developing countries with limited ability to regulate the banking sector, it is difficult to enforce prudential regulations and the disclosure of information, and a mid- to long-term timeframe will be needed to accumulate the required human resources and set up the related legal framework needed to solve this problem.

However, the hypothesis also contains a number of problems which have to be solved. Limiting competition weakens market discipline leading to welfare loss because inefficient banks are allowed to survive. Moreover, there can be collusion between banks and regulatory authorities. Thus, for franchise value to work as a restraint on excess risk burden, there has to be more than just having the regulatory authorities collect information about the business operations of banks; there also needs to be a separate mechanism set up that watches over the behavior and honesty of the regulatory authorities. In essence what is needed is a framework that brings discipline to the regulatory authorities themselves, as well as discipline to the bank shareholders through the creation of franchise value.⁷

C. Macro Shocks

Although prone to moral hazard, it is also argued that the banking industry has within itself the means to restrain this hazard. Diamond (1984) argued that by dispersing their lending across a sufficiently large number of diverse borrowers, banks could reduce their loan-assets risk to the smallest degree possible and thereby prevent moral hazard.

However, risks that can be reduced in this way are those specific to individual companies. Macro risks, those that affect the profitability of all companies (the whole economy) simultaneously, cannot be reduced by the dispersion of lending. As the amount of aggregate lending increases, the level of risk also grows. Some examples of macro shocks are such things as government mismanagement of the macroeconomy, a sudden rise in foreign interest rates, or the collapse of exchange rates (a currency crisis). They are events that affect the entire economy and which are difficult for individual economic entities to avoid.

Suppose for example that a bank’s lending has been given in small amounts

to companies working in a variety of industries such as steel, chemicals, electric machinery, and automobile manufacturing. In a normal economic environment (meaning there are no macro shocks), if the performance of the steel industry were to slip while the other industries remained healthy, it would be highly unlikely that the bank would suffer a huge loss on its overall lending. This is the reduction of risk through the dispersion of investment. However, if a government mismanages macroeconomic policy, or if there is a currency or financial crisis, there can be a slump in the business performance of all the industries, and in this situation the dispersion of investments will not be effective in protecting the bank's loans. This is the situation with a macro shock.

In a banking crisis the financial system's account-settlement mechanism stops functioning and financial intermediation stagnates causing a severe negative impact on the overall economy.⁸ For this reason, it is imperative that a repeat of such crises be avoided. Researchers have learned a number of lessons from the failures experienced in financial liberalization during the 1970s and 1980s.⁹ For example, the mismanagement of financial liberalization among the countries in South America, known as the "Southern Cone experiments," made it clear that there has to be macroeconomic stability, because there is no way even efficient banks can avoid macro shocks.¹⁰

An important element in protecting banks against runs is the function of a central bank as "lender of last resort," and in most countries this has come to be recognized as one of the roles of a central bank. Regulations pertaining to the soundness of the financial sector (prudential regulations) are important for dealing with the problem of moral hazard,¹¹ and there are also the standards set down by the Bank for International Settlements (BIS) which provide reference for developing countries. But few standards of reference have been established and little systematic research has been done concerning measures for dealing with macro shocks. One reason for this is because analysis of bank behavior has been in the field of microeconomics, and the study of macro shocks and their effects has tended to be taken out of the field.

It is widely accepted, however, that bank behavior can be a factor for causing a macro shock. The now well-established expression "credit crunch" is used to describe a change in bank behavior that has an adverse impact on economic activity. When bank financial conditions deteriorate because of growing bad loans, banks become reluctant to lend, and this becomes the cause for an economic slowdown and an impediment to recovery. While opinions are divided among researchers over how serious a problem a credit crunch was in the different economies of Asia in the aftermath of the currency crisis (Domac and Ferri 1998; Ghosh and Ghosh 1998; Ferri and Kang 1999;

Kim 1999), it is quite certain that such a contraction of credit at the start of the crisis worsened conditions. Following the initial rapid deterioration of the economies, however, there was a fall in demand for financing, and it may be that a borrowing contraction rather than a credit crunch became an important factor for prolonging Asia's economic slump. In a post-crisis study, Demirguc-Kunt, Detragiache, and Gupta (2000) argue that after the currency crisis, the economies in Asia began to recover even without an accompanying expansion of credit. The model analysis in Chapter 6 of this volume indicates that companies in difficult financial straits try to avoid relying on bank credit as a means for procuring funds. Thus it is highly possible that a reluctance to borrow rather than a reluctance to lend was a major cause for the credit contraction after the crisis.

By recognizing that either the behavior of banks or the behavior of companies can have impact on the macroeconomy, it can be seen that macro shocks and the changes in the microeconomic behavior of banks and companies that these shocks induce have a circular interaction that can lead to a spiral worsening of the economy.

In addition to these, government mismanagement of the macroeconomy will also cause unintentional fluctuations in the macroeconomy (i.e., macro shocks) which can bring on a financial crisis. Financial liberalization, particularly liberalization of international financial transactions as part of a program to liberalize the financial sector, can make management of the macroeconomy more difficult and lead to a macro shock. The next section will look at this aspect as it is related to the macroeconomic "trilemma."

VI. The Macroeconomic "Trilemma"

The macroeconomic trilemma¹² is the argument that a government cannot achieve all three policy objectives of maintaining a stable exchange rate, independent monetary policy, and full convertibility (liberalizing the international transaction of capital). Two of the three can be achieved, but one always has to be given up. This can be thought of as something of a macroeconomic game of musical chairs. There are three players but only two chairs.

For policymakers it is a matter of choosing from three alternatives depending on which one of the objectives is given up. If they choose to give up maintaining a stable exchange rate, then they have to deal with a floating exchange rate system. For countries with small domestic economies that depended greatly on importing and exporting (such as Malaysia where the total value of imports and export is as much as 200 per cent of GDP in 1998),

this can be an unpleasant choice. If policymakers choose to give up independent monetary policy, should a situation like a currency crisis arise which puts severe downward pressure on exchange rates, interest rates will have to be raised to intolerably high levels even if only temporarily. This of course will have an extremely bad impact on the domestic economy, and such a situation is often the trigger setting off a financial crisis. If policymakers choose to give up full convertibility, it means introducing restrictions on the international transacting of capital (or “capital control”). But capital control raises government administrative costs, which opens the way for corruption and a black market. It also means that the country should expect a fall in the inflow of foreign capital. This can be a problematic outcome for a developing country that needs more capital for economic development.

The trilemma means that a government cannot pursue a stable exchange rate policy without accepting restrictions in another area. Because policymakers have to tolerate one of the three evils: fluctuating exchange rates, fluctuating interest rates, or capital controls, if they want to avoid fluctuating exchange rates, they will have to choose between tolerating interest-rate fluctuations or having to delay liberalizing capital transactions.

The trilemma for policymakers is that whichever choice they make, they will have to sacrifice something; there is no panacea. Which choice is best and which sacrifice is least adverse will depend on the country and its situation. For a long time after World War II, international capital movement was only on a small scale, and the problem of the trilemma was not greatly discussed. But this changed particularly during the 1990s when the volume of international capital flow rose quickly, much of it pouring into a number of developing countries.

VII. The Difficulty of Combining Policies

The existence of this trilemma adds to the difficulties facing developing countries when trying to combine and coordinate economic policies. Figure 1-1 brings together the views of international macroeconomics, macroeconomics, financial economics, and development finance theory, and diagrams the inter-relationship of policy problems that developing countries must deal with. When viewed through the trilemma, it means that policymakers are forced to make the choice of tolerating either fluctuating exchange rates, fluctuating interest rates, or capital controls. If they allow exchange rates to fluctuate, that can be a cause for a supply shock to the macroeconomy.¹³ If they accept fluctuating interest rates, they will lose independence of monetary policy

which is an important device of macroeconomic policy. Both of these have an adverse impact on the stability of the macroeconomy. If policymakers decide to accept capital controls, this will reduce the amount of foreign capital that can be used for economic development. It also runs counter to financial liberalization policy which is meant to strengthen the operations of the financial system. If raising the efficiency of the financial sector is the only consideration, then abolishing capital controls and promoting the sector's integration into the world market will increase the volume of funding to the economy, and it can also be expected to accelerate competition in the financial sector.¹⁴

Financial liberalization is certainly valid as a theory, but when policies based on this theory are dogmatically applied without consideration of the vulnerability of the banking sector, it can lead to a financial crisis. For example, when the economy is suffering the effects of a supply shock such as a currency crisis, it is wise to avoid any policy which could raise banking-sector vulnerability. Unfortunately, in Indonesia in November 1997 such a situation developed into a bank run against the entire banking system, which definitely worsened the country's economic instability, because the government carelessly suspended the operation of several inefficient banks in the midst of the currency crisis (Radelet and Sachs 1998a, b). In short, governments have to avoid the folly of combining policies with mutually negative synergies and can give rise to a vicious circle.

To cope with the outbreak of a financial crisis, policymakers have to put into effect measures that will produce positive synergies. For example, by combining economic recovery policy with financial restructuring policy can the greatest synergies be manifested. However, because a recovery of the economy takes away the will to carry out economic restructuring, there are those who argue that economic recovery should be deferred until after restructuring has been carried out. This is hardly realistic, however, because financial restructuring, especially the disposal of nonperforming loans, is extremely difficult while the economy remains depressed.

It is important to recognize the importance of the trilemma and to understand that "there is no perfect choice." Viewed the other way around, it means that there are various ways of dealing with the same problem. To cope with the East Asian currency crisis, for example, the IMF's approach was to favor high interest rate policy. On the other hand, Malaysia in September 1998 decided to impose capital controls which attracted a good deal of attention and criticism. Meanwhile there were economists who argued that the only thing necessary for overcoming the crisis was to let exchange rates drop (meaning introducing a totally free floating exchange rate system) (Sachs 1997). Each of these approaches was one of the choices within the trilemma and a valid choice.

When choosing which policy is the most appropriate for dealing with the current problems of the economy, it is better if policymakers take a case-by-case approach. Chapter 2 in this volume looks at the problems that high interest rate policy caused during the Asian currency crisis and shows that it was not the best choice for coping with the situation.

A very important point when applying policies is to keep a sense of balance between economic theory and policy perspective. Economic theory is insightful and instructive, but its focus is sometimes on a very limited area. On the other hand, managing policy in the real world requires an all-encompassing perspective. Academic research is divided into specialized fields, but when dealing with the actual policy issues facing developing countries, policymakers must take this compartmentalized academic knowledge and apply it to the policy issues with comprehensive understanding. Also in economic theory there are vogues. When certain theories are prevailing, the study of certain problems gets overemphasized while research on other important issues languishes.

As the review in the Section V indicated, most of the concern in the debate over the vulnerability of the financial system has been over the question of “What is the best way to prevent a financial crisis?” Meanwhile, the question of “What is the best way of overcoming a financial crisis after it has broken out?” has not attracted much research. With this in mind, Chapters 4–6 in this volume examine the problems of dealing with financial crises from an ex post perspective which is how policymakers have to confront them in the real world.

VIII. The Specific Characteristics of Financial Systems in Developing Economies

When studying the economic problems of developing countries, researchers need to take into consideration the characteristics of their economies that are different from those of the developed countries. For example, differences in initial conditions when a country embarks on economic development can matter when considering policy consequences.¹⁵

At the initial stage of liberalization, there are some important differences between developed and developing countries; these include the financial conditions of banks, the skill and knowhow of banks and regulatory authorities, the development of the legal system, and the fineness of information about borrowers. If the capital adequacy ratio of banks is low when liberalization is carried out, bank shareholders will probably take excessive risk, which will

increase the possibility of banks incurring capital deficits.

Under financial repression, banks were not compelled to build up skills and knowhow, and in many banks credit screening became careless, and there was insufficient monitoring of borrowers. Restrictions on bank autonomy and bank regulations that were at the discretion of the government reduced the importance of accumulating knowledge and human capital through the experience of doing business in financial intermediation, and they became underlying reasons for the failure of financial liberalization (Ikeo 1996a). But even when banks have the needed human and physical capital, at the initial stage immediately after the start of liberalization, banks may suffer from a deficiency of information available about the credit worthiness of borrowers and the state of their past loans. With no information, banks have no other choice than to lend at high rates of interest that cover risk. This may cause them to select adverse borrowers (those of bad quality), which is known as “adverse selection.”

Financial repression removed the opportunity for governments and their regulatory authorities to accumulate the skills and knowhow needed for financial administration. Under financial repression, nonperforming loans could be liquidated through the rents collected by the government, therefore there was no need for regulatory authorities to assess the quality of bank assets. Moreover, regulations limiting competition narrowed the scope of the market where banks could operate, which made it easier to assess the quality of bank assets than under free market transactions. Like the banks, in countries where financial repression continued longer, the administrative ability of the regulatory authorities developed less; there was less accumulation of skills and knowhow. This made it more difficult to assess the quality of bank assets accurately, and to introduce corrective measures in a quick and precise way.

When liquidating a failed bank, the interests of the various stakeholders have to be reconciled, but if the legal system is underdeveloped, which is a characteristic of developing countries, this can retard the start of corrective measures and raise the costs of liquidation. In order for regulatory authorities to perform their expected functions, the legal standing of these authorities have to be clarified, and they need to be shut off from political intervention and from law suits by stockholders and other bank interest groups.

Chapter 5 of this volume deals with government policies to rescue banks. It examines the problem of moral hazard and the concern that bank bailout policies lead to such hazard. The chapter shows that differences in the preparedness for financial crises and differences in their anticipated macro shocks require that there be different approaches for dealing with the problem of moral hazard.

The existence of an informal financial market is another characteristic that is widely seen in developing countries. It can take a variety of forms ranging from mutual financing, and money lenders, to financing among relatives and acquaintances. At one time among researchers the existence of an informal financial market simply indicated that a financial system was immature. But there has been a reexamination of this perception from the standpoint of the economics of information, and it is now seen that this market also functions as a mechanism for overcoming such problems as the asymmetry of information, the absence of means for enforcing contract compliance, a deficient insurance market, and high transaction costs (Braverman and Stiglitz 1982; Kotwai 1985; Bell 1988; Hoff and Stiglitz 1990; Bardhan and Udry 1999). Nevertheless, an informal financial market cannot substitute completely for a formal financial market (World Bank 2001, Chap. 1), and it is significant for economic development that the financial sector be fostered in order to bring about the integration of a fragmented financial market.

But even with integration, the problem of asymmetrical information still is a major concern. Integration makes the market larger, and the scope of economic transactions expands from inside to outside the community. It becomes more difficult for transactors to obtain information and enforce contract compliance, and there is a greater possibility that borrowers will default. In small-scale entities like farming villages or local ethnic Chinese business groups, it is possible to obtain nearly perfect information and close to unlimited liability when transactions are limited to within the community, and these act as a strong safeguard against problems like moral hazard.¹⁶ However, when the scope of transactions expands beyond the community, the fineness of information deteriorates, legal penalties against default become weaker, and the liability of a borrower becomes more limited. Therefore, if no conscious effort is made to obtain information about borrowers and oversee loans, if penalties for defaulting are not clearly codified, then the expanded scope of transactions that comes with the economic development of a society will weaken the framework of control that disciplines the behavior of borrowers.

Furthermore, on the matter of financial policy, there is also the argument that the short-term financial market in developing countries is not developed, and because this market has to be the basis for implementing financial policy, its underdevelopment limits the effectiveness of this policy.¹⁷ This characteristic of developing economies can also be a factor for destabilizing the macroeconomy (Kunimune 1998a).

Notes

This chapter with revisions and updates is based on the following studies: Kunimune (2000d) and Kōzō Kunimune and Seirō Itō, “Sōron” [Introduction], in Watanabe (1998). I would like to express my appreciation to Mr. Itō as coauthor who gladly consented to the revisions of our article for use in this volume.

- 1 Freixas and Rochet (1997) is a detailed study of the role played by banks.
- 2 Concerning the theory of financial liberation, see Fry (1995) and Kunimune (1997).
- 3 Within the context of the endogenous growth theory, economic growth will rise when the greater part of capital accumulation goes into investment projects in the order of the highest rates of return.
- 4 If the risk associated with financial intermediation can lead to bank failures, one can wonder why banks that carry out the important task of settling accounts are permitted to undertake intermediation. If banks were separated into those that invested in safe assets like government bonds and those that undertook the risk-prone function of financial intermediation, such failures would be less likely to arise.
 Unlike banks that undertake both financial intermediation and account settling, banks that handle only account settlements are called “narrow banks.” If such banks hold safe assets marketable on the secondary market, such as government bonds, that are of the same amount as the amount of their deposits, they can avoid insolvency and liquidity problems. For a discussion of narrow banks, see for example Goodhart (1987).
- 5 See Black and Scholes (1973) and Jensen and Meckling (1976). As debt ratio increases, the tendency becomes greater to invest in high-risk, high-return ventures. This is because the payoff function for residual claimants is convex.
- 6 For example, Rojas-Suaréz and Weisbrod (1995, p. 8) say that the source of franchise value for commercial banks in developing countries is in providing means of payment. Reasons for this include the fact that the value of the bank’s deposits are backed by the bank’s exclusive access to the discount window privileges of the central bank, and because of the lack of trust in other means of payment.
- 7 There is also the concern about the distortion effects in long-term resource allocation. Although the franchise values hypothesis shows that it is possible to improve static resource allocation, in the dynamic sense it fails to give sufficient consideration to the accumulation of human resources within banks, the accumulation of knowledge for the development of new products, and the accumulation of production factors.
- 8 When a banking crisis becomes inevitable, it decreases the money supply which adversely affects economic activity (Friedman and Schwartz 1973). Moreover, in a banking crisis, the production of information stops, and small and medium-

sized firms as well as individuals without established reputations and credit ratings have difficulty in obtaining financing. This is the nonmonetary effect of a banking crisis (Bernanke 1983).

- 9 See, for example, World Bank (1989) and the references therein; also Lindgren, Garcia, and Saal (1996). There are many comprehensive analyses of earlier financial crises in advanced countries; see, for example, Kindleberger (1991), Calomiris and Gorton (1991).
- 10 However, in the time of a banking crisis, it is hard to determine which of the shocks is the important one. About the only sure thing that past experience shows is that banks with an accumulation of nonperforming loans because of the poor dispersion of idiosyncratic risks can easily find themselves deep in excess debt because of a macro shock. Therefore, when dealing with the matter of macro shocks, it is vital to question the correctness of government macroeconomic policy, and equally important to ask banks how much effort they are making to disperse idiosyncratic risk and what incentives there have been for them to make this effort.
- 11 See Dewatripont and Tirole (1994).
- 12 Also called the “irreconcilable trinity” and “inconsistent trinity,” this problem has long been known in the field of international macroeconomics (see for example Wallich 1972). Following the Asian currency crisis, Krugman (1998, 1999) and others focused renewed attention on this trilemma.
- 13 However, the strong-dollar weak-yen effect acted as a supply shock to the ASEAN economies which followed a system of pegging local currencies to the U.S. dollar. Thus even a fixed exchange rate system cannot always completely stop supply shocks that come in from the outside.
- 14 World Bank (2000, Chap. 4), which goes into this issue much more deeply, maintains that governments should give their approval to the entry of foreign banks into the domestic economy. But in the opinion of this author, there needs to be a more thorough and careful debate about the desirability of such policy.
- 15 See Caprio (1994) for an analysis focusing on the conditions at the initial stage of liberalization. Caprio points out the possibility that a rise in interest rates due to the interest-rate liberalization will raise bank loan portfolio risks, that lending will decline when there is an insufficient accumulation of information, and that nonperforming loans will accumulate when there is insufficient human capital.
- 16 In recent years there has been a large amount of research that has studied the efficiency of rural finance focusing on the asymmetry of information and contract compliance. See, for example, the studies in *World Bank Economic Review*, September 1990.
- 17 See for example Masuda (1998), Agenor and Montiel (1996).