Structuring a Deposit Insurance System from the Asian Perspective

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Introduction

Deposit Protection: Theory and Historical Development

The crisis that hit Asia not too long ago has brought to light the need for increased prudence and soundness in the financial sector, as well as for tools with which governments can adequately assess the conditions of financial institutions. The stability of the financial industry is central to a country's development and well-being, and deposit protection is a key component of that stability.

This study proposes a theoretical and practical approach to setting up and running a deposit protection system in Asia and, while making no claims to exhaustive treatment of the subject, suggests answers to the most frequently asked questions.

Explicit deposit protection was first conceived in the United States in answer to the recurring problem of bank failures throughout the 19th and 20th centuries. The states first insured bank obligations in 1829 when New York adopted an insurance plan. Over the next 30 years, five other states followed New York's lead. Although these plans were generally successful, they died out after 1866 when most state-chartered banks became national banks. Insurance of bank obligations resumed only in the early 20th century. Between 1907 and 1917, eight states set up deposit guarantee funds. Unlike the earlier state systems, however, these foundered, particularly in the agricultural depression following World War I. The increase in the number of bank failures spawned by that depression placed extreme financial stress on the insurance funds. By the mid-1920s, all the state insurance programs were experiencing difficulties, and by 1930, none remained in operation.

In the aftermath of the stock-market crash of 1929, more than 1,000 commercial banks failed annually between 1930 and 1933. In 1933, when panic in the banking sector reached a peak, around 4,000 commercial banks had their operations suspended. Bank runs became common and increasing numbers of banks were unable to meet withdrawals. Public confidence in the banking sector collapsed. Failing to inject sufficient liquidity into the banking system, the Federal Reserve System sharply raised its rediscount rate to stem the ensuing outflow of gold. Public opinion distinctly favored the adoption of a federal plan to protect bank depositors. But there were voices that advised caution. A system of deposit protection would be unduly expensive and would also unfairly subsidize poorly managed banks. Nonetheless, public opinion ruled Congress, and in 1933 the Federal Deposit Insurance Corporation (FDIC), recognized as the basic model for a deposit protection scheme, was created.

Sixty-eight economies now have deposit protection schemes. Each has evolved differently, depending on its country's history and culture. In some countries, joining the deposit protection agency is mandatory; in others, the decision is voluntary. Some countries use the prepaid funding method, while others use pay-as-you-go funding. Deposit protection agencies are public institutions in some countries, but privately run in others. (See Tables 1 and 2.)

From a theoretical standpoint, deposit protection to guarantee deposit withdrawals is part of the financial safety net for financial intermediaries which typically involves short-term lending by the central bank to assure the liquidity of banks. A deposit protection scheme protects depositors from losing their deposits in case a financial institution fails. This protection can avert panic among depositors in a financial crisis and prevent that panic from spreading to healthy financial institutions and endangering them as well.

Deposit protection is something like a complex (callable put) option (Allen and Saunders 1993). Financial institutions purchase the right to surrender their remaining assets and charter to the deposit protection agency in exchange for payments to protected depositors (the equivalent of a put option). The deposit protection agency, on the other hand, can exercise its power by closing the financial institution if it

Table 1: Economies with Explicit Deposit Protection Systems, 1999

Africa (10)	Asia (9)	Europe (32)	Middle East (3)	Western Hemisphere (14)
Cameroon	Bangladesh	Austria	Bahrain	Argentina
Central African Republic	India	Belgium	Lebanon	Brazil
Chad	Japan	Bulgaria	Oman	Canada
Congo, Republic of	Korea	Croatia		Chile
Equatorial Guinea	Marshall Islands	Czech Republic		Colombia
Gabon	Federated States of Micronesia	Denmark		Dominican Republic
Kenya	Philippines	Estonia		Ecuador
Nigeria	Sri Lanka	Finland		El Salvador
Tanzania	Taipei,China	France		Jamaica
Uganda		Germany		Mexico
		Gibraltar		Peru
		Greece		Trinidad
		Hungary		United States
		Iceland		Venezuela
		Ireland		
		Italy		
		Latvia		
		Lithuania		
		Luxembourg		
		Macedonia		
		Netherlands		
		Norway		
		Poland		
		Portugal		
		Romania		
		Slovak Republic		
		Spain		
		Sweden		
		Switzerland		
		Turkey		
		Ukraine		
		United Kingdom		

Source: Garcia (1999).

Table 2: Regional Distribution of Explicit Deposit Protection Schemes, 1999

		Membership		Funding		Management		
Region	**Number**	**Compulsory**	**Voluntary**	**Funded**	**Unfunded**	**Official**	**Private**	**Joint**
Africa	10	4	6	10	0	3	1	6
Asia	9	5	4	9	0	8	0	1
Europe	32	30	2	24	8	11	9	12
Middle East	3	3	0	2	1	1	0	2
Western Hemisphere	14	13	1	13	1	10	2	2
Total	**68**	**55**	**13**	**58**	**10**	**33**	**12**	**23**

Source: Garcia (1999).

fails to meet certain stipulated conditions (the equivalent of a call option).

Recent Trends in Deposit Protection

With the flourishing of global economic activity and more open financial transactions, countries have felt the need for deposit protection and have accordingly revised their existing systems or introduced new ones. Furthermore, as deposit protection must be transparent, countries, without exception, have established explicit deposit protection schemes. During the 1970s and 1980s, various factors such as depressed real

estate markets plunged many countries into financial crises, resulting in the insolvency of many financial institutions. Deposit protection thus became essential to the stability of the financial system. In particular, the breaking down of economic borders and barriers between countries has so intensified competition that countries have realized that to remain competitive in the financial industry, they must strengthen their deposit protection schemes. Argentina, for example, had abolished its system of deposit insurance in 1992 in favor of giving preference to the claims of small depositors to the assets of a bank in liquidation, but bank runs during the Mexican crisis forced it to announce a new system of deposit insurance in April 1995.

The deposit protection system could extend its exposure to all types of financial institutions. This proposal was prompted by the blurring of the distinction between banking and nonbanking organizations as a result of innovations in technology and information services and financial consolidation through subsidiaries or affiliates. Some have expressed concern that the additional costs associated with the expanded coverage could outweigh the additional benefits. However, it is generally believed that extended deposit protection would provide a credible guarantee of the stability of the financial system, especially in times of severe financial distress.

Worldwide, deposit protection is moving toward harmonization and standardization. The European Union (EU), for one, has issued a directive (Directive 94/19/EC of the Parliament of the Council of May 1994 on deposit guarantee schemes) calling for the gradual harmonization of deposit protection systems, in line with EU's goal of economic unification. What had started as a mere recommendation, which was up to the member countries to adopt, became a directive for lack of visible progress. In summary, the directive provides for the following:

- Deposits in branches of financial institutions operating in EU member countries are protected according to the deposit protection scheme of the home country rather than the host country.
- The minimum guarantee level on deposit amounts has been set at 20,000 European currency units and a coinsurance system keeps the loss to the depositor below 10 percent of the deposit amount.
- Deposits and depositors to be protected are defined.
- EU member countries are required to maintain at least one explicit deposit protection scheme, in which membership is mandatory for all depository institutions.
- Branches of financial institutions operating in nonmember countries must provide the same standard of deposit protection as that applied in member countries.
- Protected deposits must be paid within three months if a financial institution becomes unable to meet withdrawals.

Evidently, therefore, significant efforts are being made to minimize the differences between the countries' deposit protection systems and thus guarantee fair economic activities.

Major Functions of Deposit Insurance

Meaning and Purpose of Deposit Insurance

Deposit insurance is the promise to repay principal and interest which are fixed in nominal terms. More generally, it refers to the obligation of a credit institution under law and the terms of a contract to repay any credit balance left by the depositor in an account or resulting from normal banking transactions, as well as any debt contracted by the credit institution and evidenced by a certificate it has issued.

Deposit insurance aims to achieve the following: (i) to protect the small depositor, who is normally not privy to information about the management of financial institutions; (ii) to keep the financial system stable and make the financial industry and financial transactions more efficient by averting bank runs; (iii) to provide a fair and competitive market for financial

institutions that differ widely in size, regional concentration, nationality, and other respects; and (iv) to clarify the responsibilities and rights of depositors, financial institutions, and the government and to minimize the burden on the taxpayer in case of bank failures.

Deposit protection protects the ordinary small depositor who transacts in the financial system on the basis of trust. It does not protect institutional investors or those involved in large financial transactions or engaging in securities-related financial transactions who can readily gather information about the financial market and take appropriate action.

Deposit protection prevents bank runs and thereby heightens the efficiency of financial transactions and preserves the stability of the financial system and the financial industry as a whole, despite the insolvency of weak financial institutions. Isolated cases of insolvency do not spread to relatively sound banks. Deposit protection, moreover, obviates the need to check the managerial soundness of financial institutions before transacting, thus lowering transaction costs.

The aim of deposit protection is to provide a fair and competitive environment for financial institutions. The common view is that large banks are "too big to fail" and that governments have no choice but to back them up, and that deposits held with the branch office of a foreign bank can be covered by the deposit protection system of the bank's head office. Therefore, if deposits are not appropriately protected, financial institutions cannot compete fairly.

The deposit protection scheme clarifies the responsibilities and rights of depositors, financial institutions (those who are obligated to make payments on deposits), and government (the designer of the financial framework). Such a definition of rights and responsibilities assumes paramount importance in view of the significant impact of the financial system on the economy as a whole.

Deposit protection minimizes the burden that the general public might otherwise have to shoulder if the financial system were to become unstable in the absence of deposit protection.

Pros and Cons of Deposit Protection

Deposit protection guarantees depositors' cash withdrawals from their deposits and stabilizes the financial system by preventing contagion, or the spread of bank runs. The interests of small and unsophisticated depositors are thus protected. The public is confident that depositories can meet demands for cash and that the deposited funds retain their value even if an institution becomes insolvent.

Without such a guarantee, depositors might understandably try to withdraw their funds from a depository in financial trouble while they still can. Even institutions that are otherwise solvent may not have the cash to meet excessive withdrawals and, unable to convert their investments into cash quickly enough to satisfy depositors, may be forced to close down.

Deposit protection offsets to some extent the disadvantage suffered by small and unsophisticated depositors versus larger and more sophisticated depositors and other general creditors when it comes to obtaining information to protect their deposits (information asymmetry).

Inherent in deposit protection, as in all types of insurance, is the problem of moral hazard. Providing protection to a risk-taking financial institution may encourage it to take greater risk with depositors' money because it can pass negative consequences on to the deposit protection agency. Regulators, for their part, may lack the will to exact remedial action by unsound financial institutions because there is little or no threat of market discipline.

There are, of course, conflicting arguments for and against the regulation of financial systems. Proponents of financial laissez-faire, led by such scholars as Dowd (1996), argue that if free trade can be seen as desirable, then so are free transactions in the area of finance; government regulations on the financial system must therefore be abolished. Problems in the application of financial laissez-faire do

not justify financial regulation, the proponents insist. They tag government-run deposit insurance systems as the prime cause of banks' lower Bank for International Settlements (BIS) capital adequacy ratios (CARs) and of the problem of moral hazard. To protect depositors, in their view, "market forces" should be used instead

On the other hand, Benston and Kaufman (1996), while agreeing that financial laissez-faire is desirable, assert the inevitability of financial regulation—thoughtful regulation that hews closely to market principles. Depositors must have the protection provided by a deposit insurance system, and the government alone, not the private sector, has the resources to run such a system and absorb the costs of bank failures. Therefore, appropriate regulations should be put in place to ensure that banks comply with acceptable BIS capital adequacy standards, as in the financial laissez-faire approach.

Dow (1996) and other scholars who believe that financial laissez-faire incorrectly assumes that the fundamental instability in the financial sector can be removed and that government regulation of banks is justifiable suggest a third approach. In their view, economic functions are, by nature, based on uncertainties and the financial sector is structurally weak and prone to instability. Thus, government regulation through the central bank and a deposit insurance system is required to minimize such volatility. Financial supervisory authorities in Japan and the US have recently eased various financial regulations to increase financial efficiency, and strengthened prudential regulations to ensure financial stability. These developments can be seen to follow the line of argument of the limited regulation approach.

DEVELOPMENTS IN DEPOSIT PROTECTION

Deposit protection schemes have been continually studied and modified to correct the problem of moral hazard. Regulatory concerns have prompted a widespread search for ways in which managers of financial institutions can be made to bear at least some of the costs of their high-risk investment strategies. The trend has been toward stronger regulation and market discipline to control risk taking.

Prompt corrective action is required for troubled institutions. The regulator takes increasingly severe corrective action as an institution's equity-to-capital ratio progressively declines. Institutions that are not well capitalized are restricted in their deposit-gathering activities, and those that remain critically undercapitalized for a given period are closed down.

Market discipline appears to hold the greatest potential for controlling risk taking. Haircut (which sets an upper limit on protected deposits) and coinsurance (which limits the proportion of protected deposits) schemes impel depositors to exercise some care in choosing a depository institution. Colombia, Czech Republic, Iceland, Ireland, Italy, Poland, Portugal, and United Kingdom provide coinsurance (Garcia 1996).

Risk-based assessment uses market information in an attempt to create an actuarially fair contract, given the risk associated with the portfolio of each institution. Around 10 countries, including Canada (as of early 1999), Italy, Sweden, and US operate a differential, risk-based premium system.

Deposit protection requires the resolution of institutional failures at the least cost to the deposit protection fund. The deposit protection agency must therefore conduct a cost analysis of the various alternative solutions and pursue the least expensive alternative. The agency is less likely to keep an institution open after it has failed. For this reason, depositors, managers, and shareholders must themselves pay more attention to the financial institutions they deal with, to avoid losses.

Alternatives to Deposit Protection

The principle of market economics assumes that depositors protect themselves. The government enables depositors to do so by disclosing information on all financial institutions and other means. The Reserve Bank of New Zealand, for instance, intro-

duced a new disclosure regime in 1993, in a shift in emphasis from supervisory rule to greater reliance on market discipline. By withdrawing the implicit government guarantee for deposits, the Reserve Bank sought to avoid the impression that the government had a role in underwriting banks or protecting depositors from bank failures. Disclosure was meant to nudge bank management into maintaining prudent banking practices and enable depositors to monitor the performance of their bank relative to that of other banks to protect their own interests (Kyei 1995).

Some observers believe that improved oversight and supervision, stronger penalties for excessive risk taking, a higher capital requirement for financial institutions, and prompt intervention to minimize losses at failing institutions can take the place of deposit protection. They argue that the dramatic development of the financial markets has minimized the risk of market failures and therefore made deposit protection no longer necessary.

Others argue that market forces would lead to an evolution away from demand deposits toward claims on marketable securities and that such claims are immune to depositor runs. The nonmarketable assets of financial institutions would be financed by nondemand deposits, nondemand debt, or equity capital and would be free from depositor runs. A related proposal would separate deposit taking from other activities of banks. This ”narrow bank” approach generally limits investments by deposit-taking banks to government securities and highly rated and low-risk instruments, and requires lending activities to be conducted in separately capitalized affiliates funded by uninsured liabilities. This approach virtually eliminates the potential for systemic instability caused by bank runs, but it would require many banks, even small institutions involved primarily in traditional lending, to create more complex and potentially expensive corporate structures. The approach may also destroy the special intermediary role of banks.

Another approach to deposit protection is to require all financial institutions to enter into a contract with a syndicate of voluntary guarantors that would guarantee the original contractual terms of deposits of the guaranteed institution. This cross-guarantee proposal would do away with the need for a deposit protection agency. One drawback of the system is the potential for conflicts of interest and collusion when participants must insure and monitor their competitors. The situation could be especially problematic in the resolution of institutional failures, when the failure or survival of an institution might be decided by its direct competitors.

Creation of a Deposit Insurance System in Asia

Need for an Explicit Deposit Protection Scheme

Crisis-hit countries have low sovereign ratings, making them prone to further crises in the free movement of short-term capital between countries. Many countries pursued economic growth in the 1990s through capital liberalization and the introduction of foreign capital. Financial institutions piled up nonperforming loans, as well as larger current-account deficits, in the process. The countries' international credibility plummeted and foreign capital flowed out. The resulting shortage of foreign exchange plunged the countries into financial crisis. In an age of increasing interdependence between nations, a financial crisis in one country is easily transmitted to others. Indonesia, Korea, Malaysia, Philippines, and Thailand all experienced this “spillover effect” while others, too, were unable to escape its consequences.

One reason for the financial crisis in Asia is the lack of prudence of financial institutions that have lost their competitive edge. Thus, a deposit protection system must be established to prevent yet another crisis and enable the region to recover from the present one. The swift disposition of unsound

financial institutions, through such a system, will help the financial industry regain its competitiveness.

Deposit protection was introduced to provide a safety net for financial systems destabilized by financial crises. For example, up to the year 2000, Korea will insure all deposits and expand the scope of insurable deposits. The deposit protection agencies that separately served the various financial sectors have also now been merged into one. Furthermore, insolvent financial institutions have been swiftly disposed of through capital injection, contributions, loans, payment of deposits, and other means. The financial authorities in Indonesia, Malaysia, and Thailand, for their part, have formally announced and put into effect deposit protection measures to improve financial stability. Depositors in Thailand are now protected through the Financial Sector Restructuring Authority (FRA)[1] and a central bank fund called the Financial Institutions Development Fund (FIDF).[2]

The need for a deposit protection system usually arises in a crisis, when depositors must be protected to ensure the stability of the financial system (as in the Philippines), or in the process of reform, in anticipation of the disposition of insolvent financial institutions (as in Korea). Deposit protection can be said to be more advantageous in the latter case as the costs involved are usually much lower than during a financial crisis.

The deposit protection system should be explicit rather than implicit, but in cases where explicit systems do not exist, governments have protected depositors of financial institutions through implicit or informal measures. A worldwide survey in 1995 (Kyei 1995) revealed that implicit schemes (55) outnumber explicit ones (47) (Garcia 1996). The basic features of implicit deposit protection are:

- The absence of a written law, such that the government is not legally obligated to provide protection, and the extent of such protection is circumscribed by previous practice or the pronouncements of government officials;
- The absence of explicit rules regarding coverage limits and form of compensation, and discretionary funding by the government in the event of failure; and
- The absence of earmarked funds for assistance.

As can be seen in many Asian countries such as the People's Republic of China (PRC), Indonesia, Malaysia, Pakistan, Thailand, and Vietnam, these implicit deposit protection schemes have inherent problems. First, they do not distinguish clearly between the protection of financial institutions and the protection of depositors. The government could therefore end up protecting insolvent financial institutions when it should be protecting only the depositors. Second, implicit schemes protect depositors by preventing the collapse of financial institutions. Managerial responsibility is rarely asked of these financial institutions, resulting in a less competitive and less efficient financial industry. Third, the cost of implicit systems falls heavily on taxpayers, whereas explicit systems normally require financial institutions to cover the costs except in an economic emergency. A recent tendency is for countries to adopt explicit systems because of these inherent problems with implicit schemes.

Deposit Protection Schemes in Asia

Only a year ago, things in Asia looked bleak. The financial crisis was at its peak and there were few indications to suggest a recovery any time in the near future. Today, however, we find ourselves looking at a whole new ballgame. The US continues to enjoy one of its longest booms in recent years, with encouragingly high growth and yet a low rate of inflation. The Korean economy has steadily climbed back, mainly because of higher exports and wholesale recovery in domestic productivity and consumption. A record growth of 9 percent is expected for 1999. PRC is still going strong and looks set to keep its growth rate in the 7 percent range. Other countries in Asia have followed suit. Based on International

Monetary Fund (IMF) projections, growth in India and Taipei,China is expected to reach around 5 percent, while record growth figures ranging from 2 percent to 4 percent are expected for Bangladesh, Malaysia, Pakistan, Thailand, and Vietnam in 1999. Only Indonesia still seems to be lagging, but it also seems to have escaped the phase of negative growth. However, one of Asia's greatest perils, high debt levels, remains an unsustainable burden which must be dealt with sooner rather than later. Japanese banks had US$114.7 billion in loans outstanding to Asia (excluding Hong Kong, China and Singapore) at the end of 1997. The 11 members of the European Monetary Union had US$132.4 billion, and the UK another US$32.3 billion.

In spite of the various signs of economic recovery in Asia, however, the countries still lack institutional mechanisms for handling crises. With only eight explicit deposit protection schemes, Asia is in a situation that is quite similar to that of Africa (although Asian financial systems are relatively more developed), and relies mostly on implicit guarantees to protect deposits.

Tables 3 to 5 present in greater detail the operations of explicit deposit protection schemes in five Asian economies.

The deposit insurance scheme in India was established in 1962 under the provisions of the Deposit Insurance and Credit Guarantee Corporation Act of 1961. Banks contribute 5 paise per Rs 100 yearly, payable in advance on a half-yearly basis (in January and July), to a fund managed by the Reserve Bank. The corporation may borrow from the Reserve Bank of India. The healthy level of the fund has been estimated at 0.50 percent of insured deposits. All types of deposits (except interbank deposits and state and foreign government deposits) are covered, including deposits in foreign currency. The maximum limit of coverage is Rs100,000[3] (approximately US$2,355) for all the accounts of the depositor in a bank in the same right and capacity.[4]

In the Philippines, the Philippine Deposit Insurance Corporation (PDIC) was set up in 1963 to reimburse depositors of failed banks and to assist distressed banks. The fund is administered jointly by the banking industry, the central bank, and government representatives. Membership is compulsory for all banks, which pay premiums based on total deposits. All deposits are covered up to a limit of P100,000 (about US$2,375). Because of widespread failures, the central bank has borne most of the losses. The PDIC Act was amended in 1992 to double the paid-in capital of the corporation from P1 billion to P2 billion, and the premium was increased from one twelfth of 1 percent to one fifth of 1 percent of total deposit liabilities. The PDIC may borrow from the central bank or designated government financial institutions and banks.

Table 3: Asian Explicit Deposit Protection Schemes for Banks: Membership and Types of Deposits Covered

Economy/Department or Agency	Start Date	Type	Types of Deposits Covered	Excludes Foreign Currency Deposits	Excludes Interbank Deposits
Bangladesh	1984	compulsory	some[a]	x	x
India/DICGC	1962	compulsory	most[b]		x
Korea/KDIC	1996	compulsory	all/most[c]	x[c]	x[c]
Philippines/PDIC	1963	compulsory	all		
Taipei,China/CDIC	1985	voluntary[d]	most	x	x

CDIC = Central Deposit Insurance Corporation, DICGC= Deposit Insurance and Credit Guarantee Corporation, KDIC = Korea Deposit Insurance Corporation, PDIC = Philippine Deposit Insurance Corporation.
[a] Bangladesh does not insure domestic and foreign government, interbank, or financial institution deposits.
[b] India insures deposits in commercial, cooperative, and rural banks except certificates of deposit and government, interbank, and illegal deposits.
[c] Korea has placed a temporary full guarantee on deposits.
[d] The deposit protection law in Taipei,China is now being revised to make the system compulsory.
Source: Garcia (1998) and other materials.

Table 4: Asian Explicit Deposit Protection Schemes for Banks: Funding, Coverage, and Premiums

Economy/Department or Agency	Funding		Coverage in US$[a] (times over per capita GDP)	Annual Premium	
	Funded	Capitalized		Assessment Base	Amount (% of base)
Bangladesh	x	na	$1,312 per depositor (4.9)	deposits	0.040
India/DICGC	x	x	$2,355 per depositor (5.9)	deposits	0.050
Korea/KDIC	x	_ [b]	$14,600 per depositor (in full until the year 2000) (1.5)	deposits and liabilities	0.050
Philippines/PDIC	x	x	$2,375 per deposit (2.1)	deposits	0.200
Taipei,China/CDIC	x	x	$38,500 per depositor (3.0)	insured deposits	0.015

na = not available.
CDIC = Central Deposit Insurance Corporation, DICGC= Deposit Insurance and Credit Guarantee Corporation, KDIC = Korea Deposit Insurance Corporation, PDIC = Philippine Deposit Insurance Corporation.
[a] At end-June 1998 exchange rates.
[b] KDIC is independent, with no capital. It did, however, receive a government grant of W10 billion (from the Ministry of Finance and Economy) to be used for initial operating expenses.
Source: Garcia (1998) and other materials.

Table 5: Asian Explicit Deposit Protection Schemes for Banks: Types of Funding and Administration

Economy/Department or Agency	Funding[a]		Administration
	Private	Government	
Bangladesh	x	Central bank	government
India/DICGC	x	Central bank and government support with parliamentary approval	government
Korea/KDIC	x	KDIC is legally authorized to borrow from the government or central bank with the approval of the Ministry of Finance and Economy	government
Philippines/PDIC	x	The government provided initial capital; the central bank makes loans and has borne losses	government
Taipei,China/CDIC	x	The government provided initial capital; the central bank makes loans	government

CDIC = Central Deposit Insurance Corporation, DICGC= Deposit Insurance and Credit Guarantee Corporation, KDIC = Korea Deposit Insurance Corporation, PDIC = Philippine Deposit Insurance Corporation
[a] Ongoing responsibility to contribute to an insurance fund or to pay ex-post assessments to compensate depositors of a failed bank. Situations where the government provided initial funding, has an obligation to supply loans, or has borne losses are also indicated.
Source: Garcia (1998) and other materials.

Depositors in Taipei,China receive implicit protection. The Central Deposit Insurance Corporation was established in 1985 under a Deposit Insurance Act. A fund was set up and capitalized by the Ministry of Finance (MOF) and the Central Bank of China (CBC). The fund is a public-sector entity whose board members are appointed by MOF and CBC. Membership is voluntary[5] among banks (including domestic banks, local branches of foreign banks, and investment and trust companies), credit cooperative associations, and farmers' and fishermen's associations with credit departments. Premiums are currently set at 0.015 percent of insured deposits. Demand, savings, and time deposits, trust funds, and other deposits approved by MOF are covered. The coverage limit is NT$1 million (about US$38,500) for each depositor.

In Korea, deposit insurance was introduced through the Korea Deposit Insurance Corporation (KDIC), which was established under the Depositors Protection Act of 1995. With the increasing possibility of failure among financial institutions because of greater competition and risks arising from globalization and the liberalization of the financial industry, the act was amended in 1997 to strengthen depositor protection and financial sector stability. Deposit protection for the various financial sectors (including banks, securities companies, insurance companies,

merchant banks, mutual savings and finance companies, and credit unions) was integrated under KDIC. The annual premium rates are 0.05 percent of the average total insurable deposits and liabilities for banks, 0.10 percent for securities companies, and 0.15 percent for merchant banks, mutual savings and finance companies, and credit unions. For insurance companies, the rate is 0.15 percent of total premium income. Protection covers demand, time, and savings deposits, premium income in insurance companies, and shares in credit unions. The coverage limit, including principal and interest, is W20 million (about US$14,600). However, until the end of the year 2000, the full amount of the deposits, even those whose principal is over W20 million, will be compensated.

In 1985, under a deposit protection scheme, a fund for the rehabilitation and development of financial institutions, FIDF, was established in Thailand for the rehabilitation of financially distressed banks which faced problems caused by fraud and speculation on real estate and unsecured insider loans. Assistance took the form of loans, acquisition of nonperforming assets, and equity participation. FIDF is administered by the government and funded through bank contributions and loans from the central bank. In 1997, the Thai Cabinet approved the Emergency Decree on Financial Sector Restructuring, which provided for the establishment of FRA. FRA is an independent body that evaluates the rehabilitation plans of finance companies and of finance and securities companies whose operations were suspended in 1997. It was created to rehabilitate suspended companies, to assist their bona fide depositors and creditors, and to administer the liquidation of the assets of the suspended companies. In an effort to ease the current crisis, the Thai government has announced a temporary payment guarantee on all deposits and liabilities held by financial institutions.

Malaysia has no explicit deposit protection scheme, but Bank Negara in the past has usually taken over failed commercial banks and reimbursed their depositors, thus providing an implicit guarantee. This guarantee, however, covers only commercial banks; other failed financial institutions, such as credit cooperatives, have been liquidated without any compensation for depositors. In the meantime, the Malaysian government has also announced that it will protect all deposits. This can be viewed as a temporary attempt to stabilize the financial system.

Without an explicit deposit protection system and the financial crisis raging, Indonesia was left with no option but to implement a swift guarantee on the deposits of small depositors to maintain confidence in the financial system. The government issued government bonds to protect the deposits in suspended insolvent banks, and these bonds were absorbed by the central bank. The Indonesian Bank Restructuring Agency (IBRA) was established to look over the management of suspended insolvent banks and an Asset Management Unit (AMU) was set up within IBRA to deal with the nonperforming loans of these banks.

Pakistan has an implicit deposit protection scheme. Bangladesh, on the other hand, provides coverage for all deposits (except interbank deposits and foreign currency deposits) with a deposit insurance fund set up under the Bank Deposit Insurance Ordinance of 1984. Membership in the scheme is compulsory for all banks which pay (semiannually) a uniform premium of 0.04 percent of deposits outstanding as of the last working day of the preceding half year. The premiums are deposited in a deposit insurance fund maintained by the central bank. The coverage limit is Tk 60,000 (about US$1,312).

Current Issues in Asian Deposit Insurance

Explicit deposit protection schemes can be categorized into deposit insurance, pay-as-you-go, and depositor preference schemes. Deposit insurance schemes are backed by deposit insurance funds built up from financial institution premiums, which provide coverage for deposits in anticipation of the inability of financial institutions to meet withdrawals.

Pay-as-you-go schemes, in contrast, begin working only when a financial institution is unable to meet withdrawals. In such a case, the deposit protection agency gathers funds from financial institutions to cover the deposits. A depositor preference scheme entails the preferential payment of deposits from the disposed assets of the insolvent financial institution.

The choice between public and private agencies in the operation of deposit protection schemes rests on considerations of trust and freedom. If the deposit protection agency is run by the private sector, financial institutions either jointly own the agency or collectively guarantee the payment of deposits. The financial institutions thus hope to escape the regulatory burden imposed by government financial authorities. Private insurers can supplement public insurers. The private insurance agency treats client claims as exogenously determined, and performs three main functions:

- Use actuarial analysis to estimate expected losses, depending on the law of large numbers to diffuse bunching of losses;
- Charge premiums to cover the sum of each client's loss, operating expenses, and a normal profit; and
- Accumulate and manage reserves large enough to cover expected losses and other contingencies.

The main advantage of a private insurance agency is that it does not place a direct burden on the government, the central bank, and, indeed, the ordinary taxpayer. To survive and gain a profit, private insurance agencies must monitor the institutions they insure, using various means. Private insurance entities are able to view each bank as a separate entity, taking into account attributes that determine the degree of risk it faces. These attributes could include the skill and experience of the bank's management or the economic health of its community and region. Also, not having to submit for public comment every proposed change in their risk measurement methods allows private insurers to search continuously for better ways of evaluating risks (England 1985). However, several disadvantages could nonetheless also arise. First, private insurers could lack the participation and trust of ordinary depositors who are likely to have less confidence in a private agency than in a public organization. Second, for the insurance agency to be more effective and reduce costs, it needs close cooperation and coordination with the supervisory function. Thus, a private insurance agency will find the going tough in terms of its effectiveness as well as costs.

Unlike private insurance, public insurance promises to back depositors' funds with full faith and credit as well as taxing power. Also, public insurance involves three, rather than two, parties: the insured financial institutions/depositories, the depositor, and a third party, the insurer/public deposit insurance institution. In public insurance, the client's claims are endogenous, because some losses result from the choices made by managers of insured depositories. Claims must be honored even when managers of insured depositories do not adopt the appropriate safeguards. In contrast, the private insurer is responsible for seeing to it that insured depositories engage in safe and sound practices, provide proper disclosure, and maintain adequate capital.

When capital supplied by the deposit protection agency is called in for the resolution of a financial institution insolvency, the deposit protection agency can be empowered with the rights of a receiver as well as the power to terminate the insured status of financial institutions. Although the receiver is usually appointed by the courts, there is increasing weight to the argument that the deposit protection agency should automatically be appointed as receiver because of the speed, expertise, and efficiency demanded during the resolution of a financial institution insolvency. PDIC in the Philippines felt this need during the resolution of a number of insolvencies among financial institutions and has customarily been appointed as receiver. In Korea, discussions and consultations regarding this matter are in progress, and

KDIC has yet to be given such status. In the US, before the creation of the Federal Deposit Insurance Corporation (FDIC), national bank liquidations were supervised by the Office of the Comptroller of the Currency (OCC), which had authority to appoint the receiver and had a permanent staff of bank liquidation specialists.[6] Liquidations of state chartered banks varied considerably from state to state, but most were handled under the state code provisions for general business insolvencies. To deal with the economic crisis, the federal government focused on returning the financial system to stability by restoring and maintaining the confidence of depositors in the banking system. When it created FDIC, Congress addressed that problem by: (i) allowing for FDIC to provide deposit insurance, initially up to US$2,500, but now up to US$100,000; (ii) giving FDIC special powers to resolve failed banks; and (iii) requiring the appointment of FDIC as receiver for all national banks. In Japan, the Deposit Insurance Corporation of Japan revised the related laws to introduce a system of financial conservatorship, with functions parallel with those of a conservator in the US.

Meanwhile, if an insured financial institution violates any laws or regulations to which it is subject, the deposit protection agency may be empowered to terminate the insured status of the financial institution. This is the case in the Philippines. If a financial institution were to lose its insured status, its reputation and credibility would suffer a severe setback, making it extremely difficult for that institution to continue operating.

Besides the deposit protection agency, an asset management corporation may be established to call in claims through the sell-off of nonperforming assets that arise during the resolution of insolvencies, as has been done in Korea and Thailand. Asset management corporations are temporary in nature, and exist mainly to ensure the swift disposal of assets. In addition, the asset management corporation is generally established as a subsidiary of the deposit protection agency. This makes it possible for the capital injected for the resolution of institutional insolvencies to be managed jointly, thus minimizing the burden on the taxpayer. Otherwise, if the injection and calling in of capital cannot be integrated, efficient capital management can be difficult indeed.

Although insured financial institutions can be restricted to banks, the blurring of the distinction between banks and nonbanks means that now all deposit-taking financial institutions may be insured. The development of the financial sector usually leads to securities companies, insurance companies, and other such financial institutions performing deposit functions. Nonbank institutions also start performing payment functions. Even if deposits in nonbank institutions were insured, a single deposit protection agency could protect deposits in all financial institutions or several deposit protection agencies could protect different deposits in different types of financial institutions. Furthermore, a single deposit protection agency may operate separate deposit protection funds for the various financial sectors. Meanwhile, any expansion in the number of insured banks requires broadening the government's safety net. Thus, where applicable, public capital will be required to protect private financial institutions.

Attributes of a Desirable Deposit Insurance System

Advances in financial liberalization and globalization demand an appropriate deposit protection scheme that takes the new economic and financial environment into account, more so since it will become increasingly more difficult for the government to operate an implicit deposit protection scheme in the new environment. Government leadership will diminish in importance as private financial institutions, exercising autonomy and creativity, push forward and take the lead. The entry and exit of financial institutions will run smoothly and the active circulation of capital worldwide will lead to the integration of financial markets. Deposit protection schemes must therefore also change to stay in tune with these new trends.

To strengthen the competitiveness of the financial industry and make financial intermediation more efficient, an environment must be created where large financial institutions can fail, while at the same time, a deposit insurance scheme must be designed to minimize the social costs involved.

From the perspective that financial institutions, and not the public, should shoulder the burden of protecting depositors, there is a need for a deposit protection scheme that is distinct from the central bank's role as lender of last resort. Some argue that the stability of the financial system can be sustained by the central bank as lender of last resort, and that there is no need for a deposit protection scheme. It should be made clear, however, that two different functions are involved here. The lender of last resort maintains liquidity at a suitable level. The emphasis is on the stability of the financial system rather than on the protection of depositors. Entrusting deposit protection to the lender of last resort could therefore result in the protection of financial institutions, not depositors.

The deposit protection scheme must be able to minimize the moral hazard of financial institutions pursuing high-risk, high-return investments. Some believe that deposit protection schemes actually create moral hazard and result in the insolvency of financial institutions and the instability of the financial system. However, moral hazard is inherent in most systems that are intended to maintain the stability of the financial system. Even the function of lender of last resort, performed by the central bank, is prone to moral hazard on the part of individual financial institutions. The task is to design a deposit protection scheme that can minimize this problem.

The deposit protection scheme must gain the confidence of depositors to reduce the social costs arising from lack of confidence. Without a deposit protection scheme, depositors would have to protect their deposits themselves. The social costs would increase. Thus, a trustworthy system that protects deposits should allow depositors to transact freely with financial institutions, reducing the social costs involved.

Losses arising from the insolvency of a financial institution must be shared equally by financial institutions, depositors, the government, and the general public, according to the size of their deposits and the level of prudence exercised by each financial institution. In an implicit deposit protection scheme, losses arising from the insolvency of a financial institution are borne by the general public, regardless of income, size of individual deposit, or size of the financial institution. Such a deposit protection scheme cannot be seen as fair.

Introducing a Deposit Insurance System in Asia

In Asia, where further financial crises are possible, even as intraregional economic activity is expected to quicken with the forces of financial liberalization, globalization, integration, and privatization, establishing and maintaining public deposit insurance agencies seem justified. It must be kept in mind that in the region, public agencies are deemed to be trustworthy and most deposit protection schemes take the form of deposit insurance. However, financial institutions could use a private deposit protection scheme alongside the existing scheme, if necessary.

The deposit insurance agency should be independent of the government, the central bank, and supervisory agencies, and maintain a relationship of mutual checks and balances with those agencies. If the central bank is not independent and the government undertakes all financial policies, it may seem unreasonable to expect the deposit insurance agency to be independent. In such a case, the independence of the deposit insurance agency should be pursued alongside the independence of the central bank and supervisory agencies.

The core function of the deposit insurance agency is the protection of depositors and the resolution of cases of insolvency among financial institutions. Deposit protection agencies must therefore be given enough powers and rights to carry out this function. The deposit protection agency should take on the

role of trustee or receiver or both in bankruptcy in order to resolve insolvencies among financial institutions professionally, swiftly, and at the least cost. Furthermore, the agency can be authorized by the courts to set up an ad hoc agency under it to dispose of nonperforming loans.

In line with the global trend toward financial integration, the deposit insurance agencies for the various industries should be gradually integrated, and this integrated agency could set up a separate fund for each industry. As Asian financial markets tend to be relatively small and financial institutions fewer in number, integration could cut costs and increase efficiency. However, as more and more financial institutions are insured, the safety net expands and the burden on the taxpayers could also increase. Care must therefore be taken to ensure that the safety net is not broadened beyond the necessary level.[7]

Status and Functions of a Desirable Deposit Insurance System

The discussion up to this point has focused on the origin of the deposit insurance function, its aims, and the need for it. The pros and cons of explicit and implicit deposit protection, and of a public versus a private insurance system, have also been considered, as have the general outlines of deposit insurance systems in many Asian countries today.

As pointed out previously, the financial crisis in Asia occurred partly because of the lack of prudence of financial institutions that had lost their competitive edge. To prevent yet another crisis and enable the region to recover from the present one, a deposit protection system must be established. The swift disposition of unsound financial institutions, through such a system, will pave the way for renewed competitiveness in the financial industry.

The establishment and maintenance of public deposit insurance agencies also seem justified in view of the forces of financial market liberalization, globalization, integration, and privatization that have taken hold of the Asian region.

While being independent of the government, the central bank, and supervisory agencies, deposit protection agencies must be given powers and rights to resolve financial institution insolvencies swiftly, professionally, and at the least cost.

This section presents the policy issues surrounding the establishment of a deposit insurance framework for Asia. It also provides examples of how India, Korea, and Philippines—countries that have explicit deposit protection schemes—have designed their systems.

Legal Status and Organization

A deposit protection agency should be established to protect depositors, with the help of a deposit insurance fund. For the deposit protection agency to operate effectively and efficiently, it must win the confidence of the public. For this reason, the agency should be a public institution.

Unlike private deposit protection agencies, the public deposit protection agency is not profit-oriented. The financial burden on depositors, financial institutions, and taxpayers is thus minimized. At relatively low cost, depositors can have their deposits well-protected, financial institutions can finance, while taxpayers can enjoy the benefits of stability in the financial system.

A steering committee of the board should be established within the deposit protection agency to make decisions and to exchange views and coordinate policies with supervisory organizations, the central bank, and other concerned institutions. The committee should include high-ranking officials from supervisory organizations, the central bank, and the related government departments. Although financial institutions should be represented in the committee, possible conflicts of interest should be prevented.

The deposit protection agency does not require capital. If it had a financial backer, its autonomy could be undermined. Initial funding may be needed to

operate the agency, but this could be achieved through contributions and endowments which the deposit protection agency should repay after a certain period. FDIC in the US was established in 1933 with a total investment of US$289 million (US$150 million from the federal government and US$139 million from the Federal Reserve System). The FDIC currently has no capital stock as the entire amount of the investment was repaid between 1947 and 1948. The Canada Deposit Insurance Corporation, in which the Canadian government invested Can$10 million when it was established in 1967, also repaid all of this investment in 1977 and now has no capital stock.

Table 6 summarizes the basic features of deposit protection agencies in India, Korea, and Philippines.

Relationship with Other Related Authorities

The deposit protection agency should be independent of other related authorities, including the central bank and supervisory organizations, but should maintain a relationship of mutual checks and balances with these authorities with which its operations are closely linked.

The deposit protection agency must be separated from the central bank for the following reasons. First, if the central bank were to operate the deposit insurance fund directly, the government would inevitably intervene in the central bank's financing of insolvent financial institutions. As a result, the independence and neutrality of the central bank's main function of

Table 6: Basic Features of Deposit Protection Agencies in India, Korea, and Philippines

India

The Deposit Insurance and Credit Guarantee Corporation (DICGC) is a public-sector entity. Its board of directors is headed by a deputy governor of the Reserve Bank of India. The board is advised by a claims committee and an investment committee headed by the Reserve Bank's nominee director on the board. The chief general manager is the chief executive. The board may also form an executive committee with the prescribed number of directors to discharge functions that are prescribed or delegated to it by the board.

The authorized capital of the corporation is Rs 50 crore,[a] which is entirely issued and subscribed by the Reserve Bank of India. Government support through the Reserve Bank is subject to prior parliamentary approval.

Korea

The Korea Deposit Insurance Corporation (KDIC) is a public entity that operates the deposit insurance system. It requires government approval for its budget and settlement of accounts. The government guarantees the payment of principal on deposit insurance bonds.

KDIC's supreme policymaking body is its management committee. The committee decides on such matters as regulations and their amendment, budgets and the settlement of accounts, and the issuance of deposit insurance bonds. Its members are the president of KDIC, the vice minister of finance and economy, the vice chairman of the Financial Supervisory Commission, the deputy governor of the Bank of Korea, and two members appointed by the minister of finance and economy, all of whom have expertise in finance, economics, or legal matters. When a decision concerns a specific category of financial institutions, a management subcommittee may be formed.

KDIC's executive officers are the president, five or fewer executive directors (currently three), and an auditor. The president of KDIC represents, administers, and directs the operations of KDIC and serves as chief executive officer. The executive directors are appointed by the minister of finance and economy at the recommendation of the president of KDIC.

The government contributed W10 billion for initial funds when the scheme was introduced.

Philippines

The government-owned and -controlled Philippine Deposit Insurance Corporation (PDIC) is a public-sector entity. With the central bank, PDIC also regulates financial institutions.

The powers and functions of the corporation are vested in and exercised by a board of directors composed of five members: the secretary of finance, the ex-officio chairman of the board; the central bank governor, an ex-officio member; the PDIC president, who is appointed by the president of the Philippines from either the government or the private sector for a term of six years and serves as vice chairman of the board; and two private-sector representatives recognized for their competence in economics, banking and finance, law, management administration, or insurance.

The Philippine government provided the initial capital.

[a] A crore is ten million rupees.

monetary control could be threatened. Second, the central bank's role as lender of last resort is to supply enough liquidity to stabilize the financial system, regardless of the insolvency of financial institutions. This is different from the function of the deposit insurance system, which specifically protects depositors. Third, if the central bank were to manage the deposit insurance fund, taxpayers would perceive the central bank to be a protector of depositors and financial institutions would depend more on its financial support. The objectives of introducing a deposit insurance system would thus be more difficult to achieve.

The deposit protection agency must be separated from other supervisory organizations for the following reasons. First, bankruptcies of financial institutions under supervision could be seen as proof of inefficiency on the part of the supervisory agency. The suspension of the operations and license of financial institutions by the supervisory agency could also destabilize the financial system. Financial institution insolvencies may likewise not be resolved at the right time, giving rise to the problem of regulatory forbearance and causing losses to the deposit insurance fund. Second, it is not proper for supervisory agencies to collect deposit insurance premiums from the financial institutions they supervise. As mentioned, the supervisory agency would not operate the fund efficiently since there is a large possibility that it would not be able to step in at the right time to minimize losses.

Table 7 outlines the relationship of deposit protection agencies in India, Korea, and Philippines, with related authorities.

Establishment of Deposit Insurance Fund

The deposit insurance fund within the deposit protection agency will comprise mainly insurance premiums prepaid by financial institutions. The deposit protection agency is responsible for making the best use of the fund at the lowest cost possible.

The deposit insurance funds may also come from the following sources: (i) insurance premium revenues; (ii) contributions from the government and the insured financial institutions; (iii) the issuance and sale of deposit insurance fund bonds; (iv) borrowings from the government, the central bank, and financial institutions; and (v) recovery of funds from insolvent financial institutions. In normal times, the major source of funds for deposit insurance should be insurance premiums. Only in times of extremely high losses should the fund use government transfers, bond issues, or the central bank.

FDIC in the US, for example, has set the appropriate amount of its deposit insurance fund (the designated reserve ratio) at 1.25 percent of insured deposits. The deposit insurance fund was about this size in the 1980s when the banking sector was relatively stable.

The deposit insurance fund should be used for the following purposes: (i) to pay insurance claims, (ii) to repay the principal and interest on deposit insurance fund bonds as well as borrowings, (iii) to provide financial assistance to insolvent financial institutions, and (iv) to cover the operating expenses of the deposit insurance agency.

Table 8 gives the basic features of deposit insurance funds in India, Korea, and Philippines.

Resolution of Financial Institution Insolvencies

The deposit protection agency makes deposit payoffs when financial institutions cannot pay their depositors. It bears the cost of the insurance claims paid minus the amount recovered from the liquidation of insolvent financial institutions.

The deposit protection agency arranges deposit transfers from financial institutions that are unable to meet withdrawals to other financial institutions. The financial institution whose deposits have been transferred is usually liquidated. In conjunction with the supervisory agency, the deposit protection agency also arranges the takeover of an insolvent financial institution by a sound financial institution under a

Table 7: Relationship of Deposit Protection Agencies with Related Authorities in India, Korea, and Philippines

India

The DICGC, which administers the deposit insurance system, is a wholly owned subsidiary of the Reserve Bank of India. The DICGC is required to submit a signed copy of the following documents to each house of parliament, the government of India, and the Reserve Bank of India: (i) audited balance sheets and accounts of the corporation for the year, together with a signed copy of the auditors' report; and (ii) the report of the board of directors on the operations of DICGC.

The government may at any time assign the comptroller and auditor-general of India to examine and report on the accounts of the corporation.

The DICGC does not regulate financial institutions. This function belongs to the Reserve Bank of India, the central bank of the country.

The corporation may request the Reserve Bank to order an inspection of the books and accounts or an investigation of the affairs of an insured bank. The Reserve Bank will then cause such inspection or investigation to be made by one or more of its officers or through such other person or agency as it may determine.

The corporation is required to furnish such statements and information relating to its business or affairs or those of an insured bank as the Reserve Bank may consider necessary or expedient. The Reserve Bank must, on a written request from the corporation, furnish any report or information at its disposal in relation to an insured bank.

Korea

KDIC is an independent organization separate from the Bank of Korea and the Financial Supervisory Commission (FSC).

While KDIC can require insured financial institutions to submit their financial reports and can investigate those institutions, it does not have the authority to examine or supervise the institutions. However, KDIC can ask FSC to conduct examinations or participate in joint examinations of the insured financial institutions, if necessary, for the protection of depositors and the stability of the financial system.

Under the guidance and supervision of the Ministry of Finance and Economy, the KDIC cooperates with FSC and the Bank of Korea to ensure the stability of the financial system. The KDIC president participates in key decisions of FSC as an ex-officio member.

In Korea, financial policymaking and supervision are functions of the Ministry of Finance and Economy, FSC, and the Bank of Korea. The Ministry of Finance and Economy has the right to charter as well as to revoke the license of financial institutions and to amend related financial acts. FSC has the right to enforce financial policies and supervise the operation of financial institutions, while the Bank of Korea takes charge of monetary policy.

Philippines

PDIC insures and regulates banks, much like FDIC, and retains a certain supervisory authority. Whenever deemed necessary, PDIC may conduct independent examinations of banks and require information and reports from them.

Whenever it is disclosed that an insured bank or its directors or agents have committed unsafe or unsound practices in conducting the business of the bank, or have violated any provisions of any law or regulation to which the insured bank is subject, PDIC submits a report on the examination to the Monetary Board of the central bank. If the practice or violation is likely to cause insolvency or substantial dissipation of the assets or earnings of the bank, or is likely to seriously weaken its financial condition, corrective action can be taken and then reported to the Monetary Board.

Before PDIC can provide funding to a closed insured bank to allow the bank to resume its operations, the approval of the Monetary Board must be obtained. PDIC must also notify the Monetary Board of financial assistance given to any bank merger.

PDIC may require an insured bank to provide protection and indemnity against insurable losses such as burglary, defalcation, or losses arising from the discharge of duties or particular acts of default of its directors, officers, or employees. The bond requirement as it refers to directors, officers, and employees of the insured bank, as well as the form and amount of the bond, is decided in consultation with the central bank.

PDIC is required to make an annual report on its operations to Congress at the start of each year. A report on the audit for each fiscal year ending June 30 is made by the auditor general to Congress. A copy of each audit report is submitted to the president of the Philippines, the central bank governor, and to PDIC at the time of submission to Congress.

purchase-and-assumption formula, and arranges mergers between insolvent financial institutions and sounder ones. If it proves difficult to find a suitable financial institution to assume the deposits of the insolvent financial institution or the financial institution itself, and closing the financial institution is likely to give rise to excessive costs, the deposit protection agency can establish a 'bridge bank." This provisional bank assumes the deposits and the insolvent financial institution itself for a set period and pays deposits, in addition to performing other necessary financial services.

Table 8: Basic Features of Deposit Insurance Funds in India, Korea, and Philippines

India

DICGC maintains two separate funds, a deposit insurance fund and a credit guarantee fund. These are funded by the premiums and guarantee fees received and are used to meet the respective claims. Another fund, the general fund, holds the capital of the corporation and is used for staff establishment and administrative expenses.

Amounts may be transferred from one fund to another fund or used for other purposes.

The Reserve Bank can advance to the corporation at its request such sums as it may require for the purposes of the deposit insurance fund, provided that the total amount outstanding at any one time on account of such advances does not exceed 5 crores.

All moneys belonging to the deposit insurance fund that are not needed by the corporation for the time being are to be invested in promissory notes, stocks, or securities of the central government and all other moneys are to be deposited with the Reserve Bank.

The corporation is not liable for any tax on any of its income, profits, or gains.

Korea

KDIC has established a deposit insurance fund (DIF) composed of the following accounts: bank account, securities company account, insurance company account (life and nonlife insurance), merchant bank account, mutual savings and finance company account, and credit union account.

Transactions between accounts in the fund, such as loans or transfer of assets and liabilities, are possible, subject to the decision of the management committee or management subcommittee. In principle, transactions are allowed only if a deficit in any one account is deemed likely to spread to other accounts. Transfers of assets and liabilities are made when a certain account has excess funds and no expenditures are expected for the time being. Loans are made to correct a temporary deficit in a certain account. The loan term is three months, with a single extension. The principal and interest are repaid by the due date.

DIF comprises premium revenues and contributions from insured institutions. Therefore, when the fund becomes too small to pay insurance claims, it would need to be replenished with compulsory contributions from insured institutions or increases in insurance premiums. However, losses arising from special circumstances like those incurred in the process of financial sector restructuring will have to be covered by public funds.

The amount paid by insured financial institutions has been set by the enforcement decree of the enabling act. However, no contributions have yet been imposed on financial institutions by KDIC. There are no limitations on the amount of bond issuance. The government can guarantee payment of principal and interest. Borrowings from the Bank of Korea, which require prior approval from the Ministry of Finance and Economy, are guaranteed by the government. The government can transfer sundry properties, such as stocks of state-run enterprises. Uses of the fund include, among others, payments of insurance claims, repayment of principal and interest on the bond, and repayment of principal and interest on borrowings.

Philippines

PDIC was established to maintain a DIF as a reserve to cover potential insurance claims. PDIC targets a fund level that is commensurate to its deposit risk exposure.

The corporation is authorized to borrow from the central bank and the latter is authorized to lend the corporation such funds as in the judgment of the PDIC board of directors are required from time to time for insurance purposes. The rate of interest is fixed by the Monetary Board below the Treasury-bill rate.

When in the judgment of the board of directors the funds of the corporation are not sufficient to provide for an emergency or urgent needs, the corporation is likewise authorized to borrow money, obtain loans, or arrange credit lines or other credit accommodation (short-term) from any bank designated as depository or fiscal agent of the Philippine government.

Whenever its capital or funds are not sufficient to meet its obligations to depositors whose deposits are insured, the corporation can issue bonds, debentures, or other obligations with the approval of the president of the Philippines. The PDIC board of directors determines the interest rates, maturity, and other requirements of the said obligations. The corporation is required to provide appropriate reserves for the redemption or retirement of these obligations.

All notes, debentures, and bonds issued by the corporation are exempt from taxation.

The money of the corporation that is not otherwise employed is invested in obligations guaranteed as to principal and interest by the Republic of the Philippines.

A permanent insurance fund in the amount of P5 million has been appropriated from the general fund to carry out such activities as the payment of insurance claims and the resolution of insolvencies. If deemed necessary, this fund may be increased to P3 billion.

If the deposit protection agency expects the closure of a financial institution to result in significant adverse effects to the financial system, it can provide direct financial assistance. This could, however, lead to undue profits for the shareholders, management, and creditors of the insolvent financial institution and its use should therefore be limited.

The financial assistance can take several forms including capital injections, contributions, loans, and purchase of securities and deposits. The form of assistance generally depends on the circumstances of the deposit protection agency and the financial institution concerned as well as the aim of providing assistance.

Financial institution insolvencies are resolved on the basis of the least-cost principle. In other words, methods such as deposit transfer, purchase and assumption, merger, bridge bank, and financial assistance can be used only if they are estimated to cost less than the deposit payoff. This least-cost principle should be laid down as a regulation.

The deposit protection agency should perform the supervisory function necessary to induce enhanced prudence in the management of financial institutions. In this way it will be possible to maximize protection for depositors and ultimately minimize insurance premiums which often place a burden on financial institutions. However, to avoid supervisory overlap, a line of cooperation needs to be established between the deposit protection agency and the supervisory agency. Meanwhile, the deposit protection agency should limit its use of on-site supervision and focus on off-site examination.

Table 9 looks at resolution methods used in Korea, Philippines, and India.

Summary

As discussed, about 68 economies now operate explicit deposit protection schemes. Deposit protection is provided differently in different countries. In some, it is done through an independent agency; in others, it is done through a branch or wing of the central bank or the finance ministry. By and large, an independent and publicly run deposit protection agency has been found to be more desirable as it increases public confidence and is able to minimize the burden on depositors, financial institutions, and the ordinary taxpayer. Canada, UK, and US have public agencies that perform the task of depositor protection.

A related topic is the need for the deposit protection agency to be free of interference from both the central bank and the primary financial regulatory agency. This separation is imperative since these bodies perform different tasks, and the failure to keep them independent of each other could give rise to several foreseeable problems. For instance, the central bank may be placed in a situation where it can no longer be independent and neutral in deciding on money control, its major policy area. The case for detaching deposit protection from the supervisory organization stems from the possibility of conflicts of interest. By its very nature of being the primary regulator of financial institutions, the supervisory organization may find it difficult to suspend the operations or revoke the licenses of institutions they supervise, since doing so may well be taken as an admission of some degree of faulty judgment on its part. The deposit insurance corporations in Canada and US remain independent of the central bank and supervisory agencies.

The primary source of the deposit insurance fund is insurance premium revenue. This may be supplemented by contributions from the government and insured financial institutions, the proceeds of bonds issued on the deposit insurance fund, borrowings, and recoveries made from the bankrupt estate of failed financial institutions. FDIC and the Canada Deposit Insurance Corporation both collect insurance premiums using risk-based valuation. Financial institutions in UK, on the other hand, are required to make a one-off contribution to the Deposit Protection Board, and the latter may subsequently levy other contributions to keep the fund at a sufficient level.

The deposit insurance fund is mainly used to make deposit payoffs. It can also be used to pay back the

Table 9: Resolution Methods in India, Korea, and Philippines

India

DICGC does not have functions or rights pertaining to the resolution of financial institution insolvencies.

Korea

The current Depositor Protection Act does not authorize KDIC to act as a receiver that recovers funds in the resolution process. After paying depositor claims, KDIC participates in the liquidation process and receives dividends from the assets of the failed financial institutions, on a pro-rata basis.

KDIC fulfills the statutory provisions of the Depositor Protection Act by providing insurance to depositors of financial institutions if deposit payments are suspended, and by extending financial assistance to institutions that have acquired or taken over insolvent institutions.

Insolvent financial institutions are liquidated once the insurance claims are paid off by KDIC. For insolvent insured financial institutions, KDIC arranges mergers, business transfers, or acquisitions. It requests the insured financial institutions to provide financial statements, and may investigate the institutions. KDIC also asks for the results of examination or joint examination of insured institutions, and the status of asset and liability transfers or liquidation of insolvent insured financial institutions, from the Financial Supervisory Commission.

KDIC is authorized to establish a resolution financial institution, a kind of bridge bank that temporarily takes over insolvent insured institutions with the approval of the Ministry of Finance and Economy. The resolution financial institution is capitalized solely by KDIC, which has the right to guide and supervise its operations. It executes the resolution process including the payment of claims and the recovery of assets.

Philippines

Whenever it is appropriate for the Monetary Board to appoint a receiver of any banking institution under existing laws, the Monetary Board gives prior notice to and appoints PDIC as receiver. The latter is empowered to bring suits to enforce liabilities or recoveries from the bank.

To prevent the closure of an insured bank whose continued operation is essential for adequate banking service in the community or for financial stability, PDIC can provide loans to the bank, purchase its assets, assume its liabilities, or make deposits in the bank.

The same assistance may also be given to a closed bank if PDIC finds that the resumption of its operations is vital to the interests of the community, or the stability of a number of banks with significant resources is threatened by a severe financial climate. The reopening and resumption of operations of the closed bank must be approved beforehand by the Monetary Board.

PDIC may provide financial assistance to any corporation acquiring control of, merging or consolidating with, or acquiring the assets of an insured bank in danger of closing, in order to prevent such closure, or a closed insured bank, in order to restore it to normal operations.

In all cases, however, PDIC, before exercising this power, must determine that the actual payoff and its liquidation will be more expensive than the exercise of this power.

The board of directors has the right to appoint examiners who are empowered to examine any insured bank on behalf of PDIC. Examiners have the power to make a thorough examination of all affairs of the bank and, in doing so, can administer oaths, examine and take and keep the testimony of officers and agents, and compel the presentation of books, documents, papers, or records necessary in their judgment to ascertain the condition of the bank. They are accordingly required to make a full and detailed report on the condition of the bank to PDIC. The board can also designate claim agents with similar powers to investigate and examine all claims for insured deposits and transferred deposits.

Each insured bank is required to make reports to PDIC at the request of the board of directors. Failure to do so within the prescribed time will result in penalties levied by PDIC. The latter has access to reports on examinations made by the central bank and reports of condition made to the central bank or its supervising departments, and provides similar access by the central bank to reports at PDIC's disposal.

principal and interest on deposit insurance fund bonds, to assist failing financial institutions, and to cover the operating expenses of the deposit protection agency. FDIC and the Canada Deposit Insurance Corporation provide financial assistance to ailing financial institutions in addition to making deposit payoffs, while the UK fund limits usage to deposit payoffs.

In the resolution of financial institution failures, the deposit protection agency can opt to make deposit payoffs, arrange deposit transfers or mergers (including purchase-and-assumption arrangements)

between the failed institution and a sound one, and inject funds into a failing institution if the failure, in the agency's judgment, could seriously undermine public confidence in the financial system. Assistance could be in the form of contributions, equity participation, or loans. The basic guideline in the resolution process is the least-cost principle: alternative methods will be used only if they will cost less than the

Table 10: Status and Functions of a Desirable Deposit Insurance System in Asia

Legal Status and Organization	Establishing a deposit protection agency	The deposit protection agency needs to be set up to protect depositors. To be operated efficiently public confidence is needed and so a public institution would be more appropriate.
	Nonprofit-oriented agency	The public deposit protection agency is not profit-oriented, thus minimizing the burden on depositors, financial institutions as well as taxpayers.
	Setting up a Steering Committee of the Board	This committee should make decisions and coordinate with supervisory organizations and the central bank.
	No capital requirement	The deposit protection agency is not an institution that requires capital. Initial funds may be needed for operation, but this should be repaid after a certain period of time.
	Need for Independence	The deposit protection agency should be independent of other related authorities, including the central bank and supervisory organizations. Instead, they should be able to check and balance each other.
Relationship with other Related Authorities	Separation from the central bank	The deposit protection agency needs to be separated from the central bank: – Independence and neutrality of the central bank's main duty(money control) could be threatened; – Central bank's function lies in liquidity supply, different from the agency's function of protecting depositors; – Central bank management of the Deposit Insurance Fund will make achieving the objectives of introducing a deposit insurance system more difficult.
	Separation from the supervisory organizations	The deposit protection agency needs to be separated from the supervisory agency: – Timely resolution may not be possible, giving rise to the problem of forbearance and a loss to the deposit insurance fund; – Not appropriate for supervisory agencies to collect deposit insurance premiums, and to operate the fund efficiently.
Establishment of a Deposit Insurance Fund	Sources of the deposit insurance fund	• Insurance premium revenues; • Contributions from government and insured financial institutions; • Issuance and sale of deposit insurance fund bonds; • Borrowings from government; and • Recovery of funds for insolvent financial institutions.
	Uses of the deposit insurance fund	• Payment of insurance claims; • Repayment of principal and interest on the deposit insurance fund bonds as well as borrowings; • Financial assistance for insolvent financial institutions; and • Operating expenses of the deposit insurance agency.

deposit payoffs. In most countries, this principle has been laid down as a regulation. In addition to the deposit protection function, the agency must perform certain supervisory functions as well.

Tables 10 and 11 give a quick roundup of the discussion in this section and show how the concepts have been applied in the developed countries.

	Function of deposit pay-off	The deposit protection agency should carry out the function of deposit pay-off when financial institutions are found to be incapable of paying their depositors.
Resolution of Insolvent Financial Institutions	Purchase-and-assumption or bridge bank	The deposit protection agency arranges deposit transfer, purchase-and-assumption, or mergers between insolvent financial institutions and sound ones when deemed required can establish a bridge bank.
	Direct financial assistance	If significant adverse effects are expected in the financial system, the deposit protection agency can provide direct financial assistance. However, such assistance should be limited as undue profits could be gained by shareholders, management, and creditors of insolvent financial institutions.
	Form of assistance	(i) capital injection; (ii) contributions; (iii) loans; (iv) purchase of securities, deposits, etc. The form of assistance is decided based on circumstances of agency and financial institutions as well the aim of providing assistance.
	Least cost principle	The decision on how to resolve an insolvent financial institution is based on the least-cost principle, i.e. they are selected if they are estimated to cost less than the deposit pay-off. This least-cost principle should be laid down as a regulation.
	Supervisory function	The deposit protection agency should perform the supervisory function to enhance the prudence in the management of financial institutions. This will maximize protection for depositors and minimize insurance premiums. Cooperation and coordination required with other supervisory agencies to avoid supervisory overlaps.

Table 11: Status and Functions of Deposit Insurance Systems for Banks in Developed Countries

Item	Canada	United Kingdom	United States
Name of Deposit Protection Agency	Canada Deposit Insurance Corporation	Deposit Protection Board	Federal Deposit Insurance Corporation
Year of Establishment	1967	1982	1933
Legal Status and Organization			
• Public/Private	Public	Public	Public
• Agency Capital Requirement	No capital	No capital	No capital
Relationship with other Related Authorities			
• Need for Independence	Independent (retains supervisory rights over insured financial institutions)	Independent (deposits the deposit insurance fund in the Bank of England)	Independent (retains supervisory rights over insured financial institutions)
Establishment of a Deposit Insurance Fund			
• Sources of the deposit insurance fund	• Insurance premium revenues • Borrowings: can borrow up to Can$6 billion from the Consolidated Revenue Fund (CRF) • Payment of insurance claims	• Contributions – one-off initial contribution by each contributory institution – when necessary, supplemented by the levy of further and special contributions • Borrowings: can borrow up to £20 million from the Bank of England • Payment of insurance claims	• Insurance premium revenues (risk-based) • Bank Insurance Fund (BIF): can borrow up to US$50 billion from the Treasury, the Federal Financing Bank (FFB) – as of end of 1997 • Savings Association Insurance Fund (SAIF): can borrow up to US$16.9 billion from the Treasury, the Federal Home Loans Banks (FHLB) – as of end-1997 • Payment of insurance claims
• Uses of the deposit insurance fund	• Financial assistance for insolvent financial institutions • Operating expenses of the deposit insurance agency	• Operating expenses of the deposit insurance agency	• Financial assistance for insolvent financial institutions • Operating expenses of the deposit insurance agency
Resolution of Insolvent Financial Institutions			
• Function of deposit pay-off	Performs this function	Performs this function	Performs this function
• Direct financial assistance	Financial assistance to merger financial institutions, loans to insolvent financial institutions, payment guarantees, etc.	None	Temporary direct management of insolvent financial institutions whose assets and liabilities have been transferred to sound financial institutions. Direct financial assistance to financial institutions experiencing managerial difficulties.
• Supervisory function	Right to demand necessary information from insured financial institutions and right to supervise some insured financial institutions.	None	Right to supervise and perform prompt corrective action on some insured financial institutions

Management of a Desirable Deposit Insurance System

This section presents further details concerning the actual operation of a deposit insurance system. The related policy issues are meant to serve as reference for Asian countries. Examples of how India, Korea, and Philippines have been operating their respective systems are provided.

Insured Institutions

Financial institutions that can take out membership in the deposit protection agency are deposit-taking institutions, such as banks. Securities companies and insurance companies that take deposits can also become members of the deposit protection agency. As the boundary of operations between banking and nonbanking financial institutions becomes obsolete, it will no longer be necessary to restrict membership to certain financial institutions. However, the expansion of membership, which means the widening of the safety net by a public institution, may increase the burden on taxpayers. Financial institutions that do not take deposits need not be included in the deposit protection scheme. The EU also restricts its deposit protection membership to deposit-taking institutions.

Eligible financial institutions should be compelled to join the deposit protection agency. Compulsory membership will broaden the pool of deposit insurance, thus achieving the law of large numbers and risk dispersion. In addition, the phenomenon of adverse selection, in which only insolvent financial institutions join the deposit protection agency (as is the case in the voluntary membership system), could be avoided. Furthermore, mutual supervision among financial institutions will be strengthened. Of course, the compulsory membership system could hinder the competitiveness of financial institutions by restricting their autonomy. About 90 percent of those countries with explicit deposit protection schemes, including Canada, Denmark, Finland, France, Iceland, India, Ireland, Japan, Luxembourg, Mexico, Nigeria, Norway, Philippines, UK, and US have a compulsory membership requirement.

If membership in the deposit protection agency is compulsory, it is quite important to set a strict basis for dismissal in order to prevent insolvent financial institutions from inflicting losses on sound financial institutions, as well as to minimize the fund's losses. (Dismissed institutions may rejoin the agency after improving their management. Otherwise, they will lose public confidence, leading to bankruptcies.) However, sudden suspension of deposit insurance could harm depositors. Therefore, deposit insurance should be made available for a certain period before the dismissal. The Canada Deposit Insurance Corporation, for example, informs financial institutions of the suspension of deposit insurance 30 days before the actual date of suspension and protects their deposits for the next two years under the same terms and conditions.

Foreign financial institutions that take deposits, including branch offices and overseas subsidiaries, may join the agency.

Table 12 gives a rundown of insured institutions in India, Korea, and Philippines.

Coverage of Deposits

Deposits in domestic currency in a country's domestic market are insured. Interest agreed to be paid upon the signing of contracts is also protected.

Interbank deposits (including those made by the deposit protection agency) are excluded from protection because financial institutions, which hold more information than regular depositors, should share the burden of bank runs. This could further strengthen checks and balances among financial institutions. Foreign-currency deposits are also excluded because there is a limit to the guarantee of foreign-currency supply. Also, foreign-currency depositors are believed to be capable of protecting their own deposits. It will, however, be necessary to protect foreign-currency

Table 12: Insured Institutions in India, Korea, and Philippines

India

The deposit insurance system extends to the whole of India, and covers the deposits of all commercial banks, regional rural banks, and cooperative banks (in states whose State Cooperative Societies Act contains an enabling provision empowering the Reserve Bank of India to wind up the affairs of the cooperative banks).

DICGC registers every new banking company as an insured bank as soon as possible after it is granted a license. In other words, India has an obligatory membership system.

The registration of a banking company as an insured bank is deemed canceled if it has been prohibited from receiving fresh deposits, has been ordered to be wound up, has transferred all its deposit liabilities in India to any other institution, has been amalgamated with any other banking institution, etc.

Korea

In Korea, the Depositor Protection Act was revised in April 1998 to integrate the previously scattered protection functions under KDIC. Financial institutions insured by KDIC now include banks, securities companies, insurance companies, merchant banking corporations, mutual savings and finance companies, and credit unions. Investment trust companies, however, are excluded from coverage.

Although state-owned banks are not likely to become insolvent, they have been included for reasons of impartiality and for the early establishment of the deposit protection scheme.

To protect small depositors, who lack the ability to collect information, insurance companies that deal mainly in reinsurance and guarantee insurance are excluded from coverage.

Membership is compulsory, even for foreign deposit-taking financial institutions, but KDIC does not yet have the right to terminate the insured status of financial institutions.

Philippines

Membership is compulsory in the Philippines, and PDIC insures the following deposit-taking banks: expanded commercial banks or universal banks, commercial banks, thrift banks (savings and mortgage banks, private development banks, and stock savings and loan associations), rural banks, and specialized government banks.

If a bank violates a cease-and-desist order or fails to correct practices or violations within the prescribed period, PDIC terminates the insured status of the bank.

deposits as economic liberalization accelerates. All bond-type financial products and non-real-name deposits are excluded from protection.

Deposits by nonresidents should be protected in the same manner as deposits made by residents. Likewise, branch offices and overseas subsidiaries of foreign financial institutions and domestic financial institutions should be treated equally. The protection of deposits held by overseas branch offices and subsidiaries of domestic financial institutions will be based on the deposit protection scheme of the host country.

Deposits held by the central and local governments should be excluded from protection by the deposit protection agency and from the calculation of insurance premiums. Since government deposits are to be protected by the government itself according to the related laws, their exclusion from protection by the deposit protection agency will lessen the burden of insurance premiums on financial institutions.

The amount of insurance claim payments payable to individual depositors is equivalent to the total balance of insured deposits (total insurable deposits minus liabilities such as loans) held by the depositor in the failed insured financial institution. Deposits in the form of pensions should be dealt with separately as they are different in character.

Among deposits held by nonbank financial institutions, such as securities companies and insurance companies, only those deposits deemed to fall under the pure meaning of deposit should be protected. Normally, most of their deposit-based debt cannot be classified as deposits. Therefore, deposits to be protected must be clearly defined to prevent any unnecessary expansion of the safety net.

Table 13 summarizes the coverage of deposits in India, Korea, and Philippines.

Table 13: Coverage of Deposits in India, Korea, and Philippines

India

The scheme provides insurance cover for all accounts of a depositor in the same right and capacity (current, savings, and fixed deposits, etc.) in an insured bank in India, including all its domestic branches. Foreign currency nonresident accounts are also covered. There are restrictions with respect to the residency of the depositor.

Deposits held outside India are not covered. Neither are deposits made with foreign operations of insured institutions. Interbank deposits are also excluded.

Korea

The following deposits are covered by KDIC:

Banks	Deposits, installment savings, money in trust whose principal has been guaranteed, certificates of deposit (CDs), repurchase agreements (repos) issued before 25 July 1998, debentures issued by banks, development trusts, and deposits in foreign currency are insured from 19 November 1997 to the end of year 2000 to promote the stability of the financial system. Not covered: repos issued after 25 July 1998.
Securities Companies	Savings deposits, cash and deposits for investment purposes, repos issued before 25 July 1998, deposits for subscription, and cash collateral for short sales are insured between 19 November 1997 and the end of the year 2000 to promote the stability of the financial system. Not covered: repos issued after 25 July 1998 and equities such as shares and bonds.
Insurance Companies	Premium income from individual and surety contracts, premium income from resignation and surety contracts, and premium income from fidelity and surety contracts issued before 1 August 1998, and corporate and surety contracts are insured between 19 November 1997 and the end of the year 2000 to promote the stability of the financial system. Not covered: reinsurance, guarantee insurance contracts signed after 1 August 1998.
Merchant Banking Corporations	Deposits from bills issued, deposits from cash management accounts (CMAs), and deposits from secured bills sold are insured. Not covered: repos and equities such as shares and bonds.
Mutual Savings and Finance Companies	Deposits, installment savings, and deposits from secured bills sold are insured.
Credit Unions	Deposits, installment savings, and shares are insured.

Philippines

The deposit insurance system covers all types of financial institutions. Interbank deposits and foreign-currency deposits are also covered. Claims on these accounts are collectible in foreign currency as well. There are no restrictions with respect to the residency of the depositor. Checking, savings, time, and foreign-currency deposit accounts are insured.

The deposit insurance system does not cover deposits made in the foreign operations of insured institutions. PDIC insures only deposits made in the member banks' operations within the Philippines.

Insurance Claims

Insurance claims refer to the coverage provided by the deposit protection agency when an insured financial institution is unable to meet withdrawals. The ceiling on insurance claims refers to the maximum amount payable by the deposit protection agency. The reason for the limited coverage lies in the need to reduce the moral hazard of financial institutions in their pursuit of high-risk, high-return investments, as well as to minimize damage to the deposit insurance fund.

While the ceiling on insurance claims should be raised to achieve the actual purpose of the deposit protection scheme, the depositor preference principle should be applied in order to reduce the burden on the deposit insurance fund. If the ceiling is low, it will be difficult to prevent bank runs on deposits. Moreover, depositors will tend to split up their holdings among a large number of financial institutions, ultimately increasing the social costs. On the other hand, a high ceiling will increase the burden on the deposit

insurance fund, leading to high deposit insurance premiums and a more frenzied pursuit of high-risk, high-return investments.

The ceiling on insurance claims will vary according to each country's situation. It could, however, be based on a certain multiplier of per capita gross domestic product (GDP) or on the amount exceeding a certain proportion of total depositors. The total deposits held by a depositor in the same financial institution, up to a set ceiling, are protected. A rough rule of thumb typically recommended by the International Monetary Fund (IMF) for appropriately limiting coverage is one or two times per capita GDP. Examples of countries where insurance claim ceilings are a proportion of per capita GDP (number of times of per capita GDP) are as follows: Bangladesh (4.9); Brazil (3.4); Bulgaria (1.5); Canada (2.0); Colombia (2.2); Croatia (3.5); Finland (1.2); France (2.7); India (5.9); Italy (6.3); Jamaica (3.5); Japan (2.1); Korea (1.5); Lebanon (0.9); Norway (7.5); Peru (1.8); Philippines (2.1); Switzerland (0.5); Taipei,China (3.0); Trinidad and Tobago (1.8); Uganda (7.1); United Kingdom (1.5); and United States (3.5).[8]

Coinsurance, which protects a certain percentage of deposits in the form of insurance claims, needs to be reviewed. According to this method, depositors monitor the prudence of financial institutions closely, thereby reducing the likelihood of unsound management in financial institutions. However, if not introduced at an early stage of the establishment of the deposit protection scheme, this method becomes increasingly difficult to put in place because of resistance from depositors.

As the timing of insurance claim payments can affect the possibility of bank runs on deposits, insurance claims must be paid out with a minimum of delay. If some time is required to pay out insurance claims, an advance may be paid to the depositor, which may then be deducted from the insurance claim at a later date.

Table 14 deals with the payment of insurance claims in India, Korea, and Philippines.

Insurance Premiums

Insurance premiums refer to the premium payments made by financial institutions according to the probability of that institution becoming unable to meet withdrawals. There are, of course, studies on the theoretical calculation of insurance premiums using a put option model (Merton 1977; Ronn and Verma 1986). However, no country has yet used such a method. Insurance premiums could also be set by considering the likelihood of failure and estimating the cost that the deposit protection agency would have to pay if the financial institution becomes insolvent. Again, this method has not yet been used.

Insurance premiums are based on a flat or a differential rate. Flat rates, for which a fixed percentage of deposits is designated, are easier to estimate and less expensive to administer, and are therefore prevalent among countries with explicit deposit insurance systems. But a differential rate is more effective in preventing moral hazard and instituting prudential management. As differential rates are more complicated, however, it is best to start with a flat rate and to shift to a differential rate after the deposit protection framework has been in place for some time. FDIC in US introduced differential, risk-based premiums in 1993 and several countries have followed suit, including Canada in early 1999. These countries are, however, still outnumbered by countries using flat-rate assessment.

Both insured and insurable deposits are used to calculate insurance premiums. Insurable deposits include the amounts in excess of the ceiling on insurance claims. Estimating premiums on the basis of insurable deposits raises the problem of paying premiums on large deposits which are not protected. However, because the computation is simple and full compensation is sometimes possible, this method has its proponents. Countries that base their premiums solely on insured deposits include Canada; Germany; and Taipei,China. India, Korea, Philippines, and US base their premium calculations on insurable deposits.

Table 14: Insurance Claim Payment in India, Korea, and Philippines

India

The insurance ceiling is Rs100,000 (about US$2,355) per depositor for deposits maintained in the same right and capacity in a bank.

Under the scheme, in the event of liquidation, reconstruction, or merger of an insured bank, every depositor of that bank is entitled to repayment of deposits held by the depositor in the same right and capacity in all branches of that bank up to a monetary ceiling of Rs100,000.

When a bank is reconstructed or merged with another bank and the scheme of reconstruction or merger does not entitle the depositor to get credit for the full amount of the deposit, DICGC pays the difference.

After settling a claim, the liquidator/transferee bank is required to repay DICGC, by virtue of the rights of subrogation, the recoveries made by the liquidator/transferee bank out of the assets of the insured bank in liquidation/merger.

Korea

KDIC pays insurance claims filed by depositors of insolvent insured financial institutions in the following types of situations:

Type I — Claims arising from the suspension of repayment of deposits in insured financial institutions as ordered by the Financial Supervisory Commission. KDIC must decide whether or not to pay the insurance claims within two months of the suspension of repayments.

Type II — Claims arising from the cancellation of the license of an insured financial institution by the Ministry of Finance and Economy, a stockholders' resolution to dissolve a financial institution, or the declaration of bankruptcy by a court of justice. In such cases, KDIC is required to pay insurance claims.

Insurance claim payments are made on both the principal and interest, and the amount is determined by adding the deposited amounts owed by the institution and subtracting the total liability amounts owed by the depositor. The amount of insurance claim payments payable to individual depositors is equivalent to the total balance of insured deposits held by that depositor in the failed insured financial institutions, up to a maximum amount of W20 million.

However, for insurance claims made before the end of the year 2000, the full amount of the deposits, even those over W20 million, will be repaid to maintain the stability of the financial system. For deposits received after 1 August 1998, only the principal will be repaid.

In the case of suspended repayment of deposits, advance payments may be made against claims filed by depositors of insolvent insured institutions in order to cover their immediate living expenses when the resolution of insurance claim payments is likely to take time. Any amount paid as advance payment cannot exceed W20 million per depositor and will be deducted from future insurance claim payments.

When KDIC reimburses insurance claim payments, it may purchase the depositor's rights to any claims. At the request of depositors, KDIC is required to make approximated payments corresponding to an estimated value of the depositor's claims multiplied by the approximated ratio.

Whenever KDIC decides to make insurance payments or advance payments, or purchase a depositor's rights, it must issue public notices to notify depositors of the time and procedure of payment.

Philippines

The term "insured deposit" means the net amount due to any depositor for deposits in an insured bank (after deducting for offsets), excluding any part in excess of P100,000.

Such net amount is determined according to regulations prescribed by the PDIC board of directors, and adding together all deposits in a bank maintained in the same capacity and the same right for the depositor's benefit either in the depositor's own name or in the name of others. An owner/holder of a negotiable certificate of deposit is entitled to these same rights only if the owner's/holder's name is registered as such in the books of the issuing bank.

Since financial institutions charge their insurance premiums to the deposit protection system, there is less need for them to maintain liquidity reserve ratios at the levels normally prescribed by the central bank to cover unexpected withdrawals. Lower liquidity reserve ratios can therefore be set.

Table 15 summarizes the various issues related to insurance premium assessment in India, Korea, and Philippines. Tables 16 and 17 give a quick roundup of the discussion in this section and describe how the various concepts have been applied to deposit protection schemes in the developed countries.

Table 15: Insurance Premiums in India, Korea, and Philippines

India

Insurance premiums are levied by DICGC at a rate fixed with the prior approval of the Reserve Bank of India.

Premiums are levied at a fixed rate on the total assessable deposits of an insured bank. Assessable deposits exclude interbank deposits and deposits kept by foreign, central, and local governments.

The current premium rate is Rs0.05 yearly for every Rs100 deposited with an insured bank. Any dispute as to the amount of premium due from any insured bank is decided by the central government and its decision is deemed final.

Korea

Financial institutions insured by KDIC are required to make premium payments. Insured banks must remit premium payments to KDIC within one month after the end of each quarter of the business year. Insured nonbank financial institutions must remit premium payments to KDIC within three months after the end of every business year. The annual premium rate for each financial institution depends on the financial state of the institution and, in any case, should not exceed a prescribed limit on premium rates. The insurance premium rate is currently flat. The annual premium rates are as follows:

Banks	0.05% of the average on total insured deposits and liabilities
Securities Companies	0.10% of the average on total insured deposits and liabilities
Insurance Companies	0.15% of the total premium income
Merchant Banking Corporations	0.15% of the average on total deposits and liabilities
Mutual Savings and Finance Companies	0.15% of the average on total deposits and liabilities
Credit Unions	0.15% of the average on total deposits and liabilities

KDIC is authorized to impose differential premiums for different financial sectors in view of the financial status of the insured financial institutions. It plans to introduce risk-based premiums after the financial market recovers and sufficient data on risk evaluation have been accumulated.

Philippines

The assessment rate is determined by the PDIC board of directors but should not exceed one-fifth of 1 percent yearly. The semiannual assessment of each insured bank is one-half the assessment rate, multiplied by the assessment base, but in no case can it be less than P250.

The assessment base for each semiannual period is calculated by averaging the assessment base of the bank as of the end of each half-year.

If an insured bank fails or refuses to pay any assessment that it is required to pay, and does not correct such failure or refusal to pay within 30 days after written notice has been given by PDIC, its insured status is terminated by the PDIC board of directors.

Conclusion

Deposit protection is a guarantee that all or part of the principal amount and the interest accrued on protected accounts will be paid. It dates as far back as the creation of depositories. Because they are vulnerable to withdrawals, depositories can rarely exist without deposit protection, explicit or implicit. About 68 economies now have deposit protection schemes. Each has evolved differently, depending on its country's history and culture.

Deposit protection to guarantee deposit withdrawals is part of the financial safety net for financial intermediaries which typically involves short-term lending by the central bank to assure the liquidity of banks. A deposit protection scheme protects depositors from losing their deposits in case a financial institution fails.

Inherent in deposit protection, as in all types of insurance, is the problem of moral hazard. Providing protection to a risk-taking financial institution may encourage it to take greater risk with depositors' money because it can pass negative consequences on to the deposit protection agency.

Some observers believe that the dramatic development of the financial markets has minimized the risk of market failures and therefore made deposit protection no longer necessary. Others argue that market forces would lead to an evolution away from demand deposits toward claims

Table 16: Management of a Desirable Deposit Insurance System in Asia

Insured Institutions	Eligibility for membership	Deposit-taking institutions, including banks, securities, and insurance companies, are eligible to take out membership. However, overexpansion of membership, which means the expansion of the safety net, may increase taxpayers' burden.
	Compulsory membership	Eligible financial institutions should be compelled to join the deposit protection agency. Compulsory membership will broaden the pool of deposit insurance, thus achieving the law of large numbers and risk dispersion. Around 90 percent of countries with explicit deposit protection schemes require compulsory membership.
	Dismissal of financial institutions	A strict basis for dismissal is required to prevent insolvent financial institutions from inflicting losses on sounder ones and to minimize the fund's losses. Those dismissed should be able to rejoin after improving their management. Deposit insurance should be made available for a certain period before the dismissal.
Coverage of Deposits	Included	• Deposits (less liabilities) in domestic currency in the country, • Interest agreed to be paid upon the signing of a contract, • Deposits of nonresidents, and • Deposits in branch offices and subsidiaries of foreign financial institutions.
	Excluded	• Interbank deposits, • Foreign-currency deposits (can be covered depending on the globalization status), • All bond-type financial products and non-real-name deposits, and • Deposits held by the central and local governments.
	Others	• Deposits held in the form of pensions are dealt with separately; • For deposits held by securities and insurance companies, only those deposits that are deemed to fall under the pure meaning of deposit should be protected.
Insurance Claims	Depositor preference principle	While the insurance claim ceiling should be raised to achieve the actual purpose of the deposit protection scheme, the depositor preference principle should be applied in order to reduce the burden on the fund.
	Ceiling	The ceiling on insurance claims could be based on a multiplier of per capita GDP or on the amount exceeding a proportion of total depositors. IMF rule of thumb for limiting coverage: one or two times per capita GDP
	Coinsurance	Coinsurance, which protects a certain percentage of deposits in the form of insurance claims, must be reviewed, although this method is difficult to put in place if not introduced at an early stage of the establishment of the scheme.
Insurance Premiums	Calculation	The flat-rate method should be used first, followed by the differential-rate method. The flat-rate method, which designates a fixed percentage of deposits as the premium, is relatively inexpensive to calculate and cheaper in terms of other administrative costs; is easier to introduce and to run; is used by a majority of countries; but is not as effective as the differential-rate method in controlling the moral hazard of insured institutions. The differential-rate method bases premium rates on the prudence of financial institutions, can effectively prevent moral hazard of financial institutions and can induce prudential management; but is very complicated to calculate and therefore requires expertise in the management of insurance premiums. As Asian countries tend to have a small number of financial institutions operating in the same area and lack accurate data with which to judge the prudence of financial institutions, differential rates will need more time to introduce.
	Insurable/ insured deposits	Insurance premiums are calculated on the basis of insurable and insured deposits. Insurable deposits include the amount exceeding the insurance claims ceiling. Calculating premiums according to insurable deposits raises the problem of premiums being paid on large deposits which are not protected.
	Lower liquidity reserve ratio	As insurance premiums on financial institutions are charged to the deposit protection scheme, the required liquidity reserve ratio set by the central bank to meet unexpected withdrawals can be lowered.

Table 17: Management of Deposit Insurance Systems for Banks in Developed Countries

		Canada	United Kingdom	United States
Insured Institutions	Membership	Compulsory: All federally and provincially incorporated deposit-taking institutions and Quebec Savings Bank Voluntary: Other banks and savings-and-loans unions	Compulsory	Compulsory: National banks, state member banks, federal mutual savings banks, federal savings-and-loans association Voluntary: Other banks and savings and loans unions
Coverage of Deposits	Included in coverage	• Savings deposits • Ordinary deposits • Current deposits • Fixed deposits • Traveler's checks, etc.	• Deposits	• Current deposits • Savings deposits • Fixed deposits • Deposits in trust
	Excluded from coverage	• Deposits in foreign currency • Fixed deposits of over 5 years • Corporate bonds • Securities issued by the Ministry of Finance	• Deposits in foreign currency • Deposits by financial institutions • Certificates of Deposit • Security-backed deposits • Fixed deposits of over 5 years • Deposits held overseas	• Bank debentures • Deposits held overseas • Offshore accounts
Insurance Claims	Ceiling on insurance claims	Can$60,000 per person	90% of deposits up to £20,000 per person	US$100,000 per person
	Coinsurance	Does not exist	Exists	Does not exist
Insurance Premiums	Calculation of insurance premiums	Risk-based rate Maximum: 1/3 of 1% of insured deposits	On demand[a]	Risk-based rate 0%–0.27% of total domestic deposits

[a] The banking industry pays partly by a fee when banks join the deposit protection scheme and partly on the basis of an industry levy when a call is made. The extent of the levy is determined by the eligible liabilities base of the institution.
Sources: British Bankers' Association; Garcia (1998, 1999).

on marketable securities and that such claims are immune to depositor runs. The need for a deposit protection system usually arises in a crisis, when depositors must be protected to ensure the stability of the financial system (as in the Philippines), or in the process of reform, in anticipation of the disposition of insolvent financial institutions (as in Korea). Deposit protection can be said to be more advantageous in the latter case as the costs involved are usually much lower than during a financial crisis.

Deposit insurance aims to achieve the following: (i) to protect the small depositor, who is normally not privy to information about the management of financial institutions; (ii) to keep the financial system stable and make the financial industry and financial transactions more efficient by averting bank runs; (iii) to provide a fair and competitive market for financial institutions that differ widely in size, regional concentration, nationality, and other respects; and (iv) to clarify the responsibilities and rights of depositors, financial institutions, and the govern-

ment and to minimize the burden on the taxpayer in case of bank failures.

In Asia, where further financial crises are possible, even as intraregional economic activity is expected to quicken with the forces of financial liberalization, globalization, integration, and privatization, establishing and maintaining public deposit insurance agencies seems justified. It must be kept in mind that in the region, public agencies are deemed to be trustworthy and most deposit protection schemes take the form of deposit insurance.

The deposit insurance agency should be independent of the government, the central bank, and supervisory agencies, and maintain a relationship of mutual checks and balances with those agencies. If the central bank is not independent and the government undertakes all financial policy, it may seem unreasonable to expect the deposit insurance agency to be independent. In such a case, the independence of the deposit insurance agency should be pursued alongside the independence of the central bank and supervisory agencies.

The core function of the deposit insurance agency is the protection of depositors and the resolution of cases of insolvency among financial institutions. Deposit protection agencies must therefore be given enough powers and rights to carry out this function.

In line with the global trend toward financial integration, the deposit insurance agencies for the various industries should be gradually integrated, and this integrated agency could set up a separate fund for each industry. As Asian financial markets tend to be relatively small and financial institutions fewer in number, integration could cut costs and increase efficiency. However, as more and more financial institutions are insured, the safety net expands and the burden on the taxpayers could also increase. Care must therefore be taken to ensure that the safety net is not broadened beyond the necessary level.

Considering the financial condition and accumulated expertise in the Asian countries, the following discussion points to a desirable direction for countries intending to establish and operate deposit protection systems. This paper proposes a theoretical and practical approach, and, without claiming exhaustive treatment of the subject, suggests answers to the most frequently asked questions.

Central to any deposit insurance system is the deposit insurance fund. Its primary source would be insurance premium revenue, supplemented by contributions from the government and insured financial institutions, the proceeds of bonds issued on the deposit insurance fund, borrowings, and recoveries from the estate of failed financial institutions. The fund will be used mainly for deposit payoffs. It can also be used to pay back the principal and interest on bonds issued on the fund, to assist failing financial institutions, and to cover the operating expenses of the deposit protection agency.

In the resolution of failed financial institutions, the deposit protection agency can make deposit payoffs, arrange deposit transfers or mergers (including the appropriate formula for purchase and assumption) between the failed institution and a sound one, and inject funds into a failing institution whose failure, in the agency's judgment, could seriously undermine public confidence in the financial system. The assistance could take the form of financial contributions, equity participation, or loans. Resolution follows the least-cost principle: alternative methods will be used only if they will cost less than the deposit payoffs.

All deposit-taking institutions, including banks, securities companies, and insurance companies, should be allowed to take out membership in the deposit insurance agency. In fact, compulsory membership is advisable in order to enlarge the deposit insurance pool and thereby disperse risk, in accordance with the law of large numbers. To prevent insolvent financial institutions from damaging the fund, they should be dismissed from coverage but allowed to rejoin after improving their financial condition.

Deposit protection should cover deposits in domestic currency, deposits by nonresidents, and deposits in branch offices and subsidiaries of foreign

financial institutions. Generally excluded from protection are interbank deposits, foreign-currency deposits, all bond-type financial products, and deposits held by the central and local governments.

Most countries have capped insurance claims to minimize the moral hazard of financial institutions pursuing high-risk, high-return investments, which could damage the deposit insurance fund.

Insurance premiums are calculated on the basis of a flat or a differential rate. Flat rates are easier and less expensive to use, and are therefore prevalent among countries with explicit deposit insurance systems. But a differential rate is more effective in preventing moral hazard and instituting prudential management. As differential rates are more complicated, however, it is best to start with a flat rate and to shift to a differential rate after the deposit protection framework has been in place for some time.

Both insured and insurable deposits are used to calculate insurance premiums. Insurable deposits include the amounts in excess of the ceiling on insurance claims. Calculating premiums on the basis of insurable deposits raises the problem of paying premiums on large deposits which are not protected.

Since financial institutions charge their insurance premiums to the deposit protection system, there is less need for them to maintain liquidity reserve ratios at the levels normally prescribed by the central bank to cover unexpected withdrawals. Lower liquidity reserve ratios can therefore be set.

Notes

[1]The Emergency Decree on Financial Sector Restructuring created the FRA on 24 October 1997 as an independent body to oversee the rehabilitation of 58 finance companies and to safeguard the interest of bona fide depositors and investors.

[2]The FIDF was established to prevent further bank runs and systemic risk, and to quickly restore public confidence. It guarantees the deposits and liabilities of the remaining financial institutions. A self-financed and limited deposit insurance system will eventually replace this blanket guarantee.

[3]End-1998 premium rate and coverage limit figures.

[4]The discussion of this part is drawn from Kyei (1995).

[5]As of the end of 1998, the related laws were being revised to make membership obligatory.

[6]Authority to appoint a receiver for a national bank originated in the National Bank Act of 1864. Authority to appoint a conservator for a national bank originated in the Bank Conservation Act of 1933.

[7]Among the developed countries, the UK has made a move toward integrating its various deposit protection schemes. Five schemes now offer protection for depositors, insurance policyholders, and investors: a deposit protection scheme, a policyholders society protection scheme, a friendly society (a nonprofit mutual insurance association in the UK dating back to the 17th century) protection scheme, and investor compensation scheme, and a building society (a deposit-taking financial institution that makes house purchase or house improvement loans secured by mortgages) investor protection scheme. The Chancellor of the Exchequer recently announced that all five schemes would be operated by a single entity. The new “consumer compensation scheme” is part of the Financial Services and Markets Bill, which has been submitted to the House of Commons.

[8]The figures were obtained by dividing the insurance claim ceilings in Garcia (1998) by the World Bank’s per capita GDP figures.