FINANCIAL DISINTERMEDIATION AND MONETARY POLICY

by

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FOREWORD

Financial disintermediation has been occurring at a rapid pace during the last decade as a result of financial globalisation, liberalisation, securitisation and innovation. This has led to the shifting of funds from indirect financing to direct financing. Banking, at least in its traditional form, has been undergoing radical changes. In the SEACEN countries, non-bank financial intermediaries are assuming progressively significant roles in the financial markets as an outcome of financial disintermediation. This factor coupled with the brisk growth of the money and capital markets have made direct financing increasingly important. Financial disintermediation has also influenced the ways in which monetary and supervisory policies are implemented. With the introduction of new financial instruments and assets, traditional definitions of monetary agrregates no longer hold true and utilising them as intermediate targets may not be expedient. Monetary authorities may have to look for alternative targets in their implementation of monetary policy.

This paper is an attempt to investigate the extent of financial disintermediation in the SEACEN countries and also examine the policy implications of disintermediation for monetary management. In so doing, it looked into the salient features of direct financing aspects in the financial markets of the SEACEN countries and surveyed the problems and issues associated with mobilising funds for direct financing. It also examined conditions necessary for the introduction of new financial instruments and the impact of disintermediation on monetary management.

This in-house research project was undertaken by Dr. Junggun Oh, Senior Economist seconded from the Bank of Korea. He was assisted, at the final stage of project, by Ms. Seow Yun Yee, Senior Research Associate. The manuscript was reformatted by Mrs. Haslina Muda and Ms. Jayanthi Devi Appavoo, Senior Clerical Officers of the Adminstrative Unit and Training Division, respectively.

The views expressed in this volume, however, are those of the author and should not in any manner be ascribed to the institution or individuals whose assistance is duly acknowledged herein.

Ismail Abu Bakar
Officer-In-Charge

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January 1997

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EXECUTIVE SUMMARY

During the last decade, financial disintermediation has been occurring at an increasingly rapid pace along with financial globalisation, liberalisation, securitisation and innovation. This has meant a shifting of funds from indirect financing to direct financing. Moreover, this phenomenon has influenced monetary and supervisory policies in that financial disintermediation has altered the traditional definitions of monetary aggregates. This study looked into the concepts of financial disintermediation and its trends and background in the SEACEN countries. It also reviewed new financial instruments introduced in the SEACEN region. The development of the SEACEN money and capital markets and the trends of financial disintermediation were also examined. Lastly, the monetary policy implications of financial disintermediation were investigated.

There have been two significant trends in the SEACEN countries over the last decade. Firstly, non-bank intermediaries, such as pension and mutual funds, insurance companies, and finance companies, have played an increasingly important role in the financial markets. Secondly, there has been tremendous growth in the money and capital markets. Consequently, the traditional role of commercial banks has declined as both depositors and borrowers seek alternative sources for investment and financing. There has been an apparent increase in the share of direct financing (implying financial disintermediation). These developments are mainly attributed to the introduction of various new financial instruments with the advent of financial innovations and deregulation.

In addition, most SEACEN countries have undertaken measures to encourage the creation and development of money and capital markets. In general, the development of the money and capital markets was fostered by the introduction of new financial instruments such as central bank bonds, government securities, CDs (Certificates of Deposit), CPs (Commercial Papers), and RPs (Repurchase Agreements). Interest rates on these instruments were typically less restricted than those on traditional instruments. The development of money markets has not only increased competition in the financial markets but also provided flexible means for managing liquidity through open market operations. However, in most SEACEN countries, the money markets lack the depth and width for smooth open market operations.

In spite of the recent pace of development in the money markets of the SEACEN countries, most markets are still at a fairly rudimentary stage. Many reasons can be taken into account. Firstly, some interest rates in the money markets remain regulated. If the interest rates in money markets can be determined by free market forces, it would certainly increase the efficiency and flexibility of the money markets. Secondly, there are no active and viable secondary markets. In order to develop a secondary market, an efficient system of dealers or brokers should be established. Thirdly, there is still a lack of the variety of money market instruments. Therefore, it is important to introduce financial instruments and they must be diversified to provide sufficient and suitable opportunities for investors as well as borrowers. Fourthly, the maturities and denominations of money market instruments are too constrained. There need to be a wide range of maturities and appropriate denominations to meet the needs of a wide spectrum of investors. Fifth, there is a lack of suitable infrastructure for the development of money markets. The authorities should reorganise the tax system, introduce a flexible legal system, establish a credible credit rating system, and build a good telecommunications and computerized network. Adequate prudential supervision of the market as well as effective rules to protect investors should also be introduced.

Capital markets, in particular, stock markets, have expanded rapidly in a number of the SEACEN countries. It is also notable that the development trends of the stock markets in the SEACEN countries have shown synchronization as their markets have been liberalised. For example, the stock markets moved in tandem in Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand when all experienced skyrocketing bull markets in 1989 which was followed by declines and which again recovered in 1993.

Several factors have contributed to the remarkable growth of the stock markets in the SEACEN region. Firstly, the stock market in general tends to track the performance of the underlying national economy. The immense growth of the stock markets in most SEACEN countries has therefore mirrored the impressive performance of their economies in terms of the growth rate of GNP, low inflation rates and consistently high saving rates. Secondly, the growth of the stock markets was also the result of appropriate government policies which were introduced to encourage savings and offer fiscal incentives to shareholders. Thirdly, the privatization of large state corporations throughout the region during the last decade has also dramatically increased the number of shareholders. Fourthly, institutional investors have become more influential

than retail investors and tend to stabilize markets with their continuous cashflow. Fifth, as the capital markets in the region became more and more open, foreign capital started to flow into the markets in increasingly large amounts .

It was noted in the study that interest and/or exchange rates have become increasingly important as monetary transmission channels. The income velocities of money have become unstable and interest sensitivities have increased as a result of disintermediation. Consequently, the demand for money has become unstable. The inclusion of the range of financial instruments in monetary aggregates has meant that money supply is becoming increasingly endogenised. All these changes have reduced the effectiveness of monetary aggregates as intermediate targets. It was also found that many central banks in the SEACEN countries have changed the way in which monetary policy is implemented. Increasingly, they are moving away from methods such as directing credit to indirect market-oriented ones such as open market operations, rediscount and reserve requirements policies.

Lastly, the study noted that the stability of the financial markets must be one of the primary objectives of monetary policies. However, it is a widely held consensus that deliberalisation and re-regulation would be inappropriate reactions. Instead, one must reach a right combination of economic freedom and appropriate supervisory provisions.

Introduction

1. Significance of Study

During the last decade, financial disintermediation has been occurring together with financial liberalization, globalization, securitization and innovations in both the domestic and international financial markets. Financial disintermediation is defined as the withdrawal of funds from financial intermediaries by ultimate lenders (savers) and the lending of those funds directly to ultimate borrowers. In other words, disintermediation involves the shifting of funds from indirect financing to direct financing (*Rose*, 1983, p. 38).

With the help of these developments in financial markets, the share of direct financing in a corporate sector has significantly increased, which has further contributed to long-term financing for investment in long-term assets. Financial instruments have been diversified and competition in financial markets has increased, which contribute to the lowering of financing costs. Moreover, such phenomena have also substantially influenced monetary and supervisory policies.

Financial disintermediation generally occurs when surplus units withdraw their surplus funds from financial intermediaries and place them directly in financial markets due to the attractiveness of the rate of return of such transactions. These direct operations involve an offer of primary securities such as bonds, corporate securities in capital markets and commercial papers in money markets. Intermediation could be carried out using brokerage facilities and investment banking services such as underwriting and public placement. The attractiveness of financial instruments is one of the most important factors for the successful tapping of resources directly from financial markets.

Traditional banking financial institutions such as commercial banks primarily attract short-term deposits and thus are not suitable for providing long-term financing with higher risk. Therefore, they are not in a position to meet all the needs of long-term investments. Capital markets complement this problem of banking financial institutions by providing long-term direct financing. They play a role in mobilizing savings and channelling them into long-term productive investments.

In financing investments, both debt and equity financing are typically used. When a debt/equity ratio is beyond a prudent level,

enterprises may face the danger of being unable to meet their debt obligations. As a source of funds with no repayment obligations, equity capital provides enterprises with a cushion against bad times such as temporary losses or negative cashflows. Long-term debt financing through the issuing of long-term bonds also contribute to the stability of the financial structure of enterprises compared with short-term loan. Therefore, capital markets comprising bond and equity markets enhance the stability and strength of the financial structure of enterprises.

On the other hand, in money markets where short-term funds are transacted, direct financing such as issuing commercial papers provides enterprises with working capital. The government also finance short-term funds directly in the money markets through the issuing of treasury bills. In particular, during the periods of high and rapidly rising interest rates, savers are inclined to demand higher returns than the interests paid by financial intermediaries while borrowers are induced to raise short-term funds directly from savers to reduce financial costs. As a result, in the money markets, financial disintermediation (the phenomena of shifting from short-term loan to short-term direct financing) occurs.

During the last decade when interest rates have been relatively high and volatile, the weight of financial markets has moved from banking financial institutions to non-bank financial institutions and then to security markets. In line with these developments, direct financing has taken over from indirect financing as the main fund source of a corporate sector. It has resulted in the diversification of financial instruments available to savers and borrowers, which has increased competition in financial markets and thus contributed to the lowering of financial costs. These developments have been the main factors of financial deepening and stimulated economic growth.

On the other hand, these developments in the financial markets have raised a number of issues regarding monetary and supervisory policies. Important issues among them are:

(i) Demarcation disputes among banking, non-bank financial institutions and security companies have arisen.

(ii) Risks for individual financial institutions and risks for the whole financial system in a country has increased.

(iii) Effectiveness of monetary aggregates as an intermediate target of monetary policy has been changed.

(iv) Supervisory issues on how to control and regulate financial intermediaries to maintain monetary control and financial stability without being burdensome to financial disintermediation have appeared.

(v) Influence of financial globalization on domestic financial markets has increased.

However, financial instruments and intermediaries are not developed enough to meet the needs of direct financing in the SEACEN countries. This project is aimed at outlining the concept of financial disintermediation, examining financial instruments and intermediaries for direct financing in the SEACEN countries, reviewing the contribution of developments of money and capital markets to the increase in direct financing, studying the trends of financial disintermediation in the SEACEN countries, and scrutinizing monetary policy implications of financial disintermediation.

2. Study Approach

This project has been approved as an in-house research project. Its main purpose is to examine the current features of financial disintermediation in the SEACEN countries and to examine its monetary policy implications. The project comprises five parts. Part one covers the concepts of financial disintermediation, and its trends and backgrounds in developed countries. Part two reviews the introduction of new financial instruments in the SEACEN countries. In Part three, the developments of money and capital markets in the SEACEN countries are examined. In Part four, the trends of financial disintermediation in the SEACEN countries are reviewed. Finally Part five investigates monetary policy implications of financial disintermediation.

PART I

Concepts of Financial Disintermediaton

1. Types of Financial Transactions

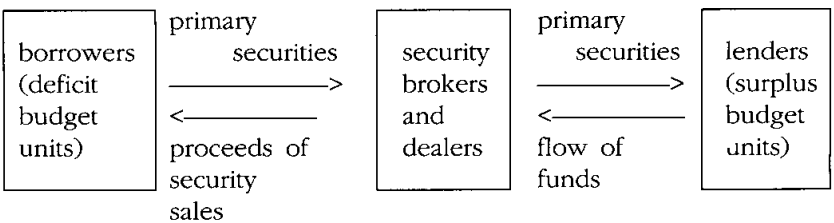
1.1 Direct Financing

Financial systems principally perform one basic function. They move funds from those who save and lend (surplus-budget unit) to those who wish to borrow and invest (deficit-budget unit). In the process, money is exchanged for financial assets. However, the transfer of funds from savers to borrowers can be accomplished in basically different ways: direct financing and indirect financing.

With the direct financing technique, borrowers and lenders may meet each other and exchange funds in return for financial assets. One may engage in direct financing when one borrows money from a friend and give him an IOU or when one purchases stocks or bonds directly from the company issuing them. In modern financial markets, financial transactions through certain financial intermediaries such as securities brokers or dealers are categorized into direct financing. In fact, direct financing through security brokers or dealers constitutes most of direct financing. The claims arising from direct finance are usually called *primary securities* since they flow directly from the borrower to the ultimate lender of funds. The essential function of securities brokers and dealers is to bring surplus and deficit budget units together, thereby reducing information costs.

Figure 1.1

DIRECT FINANCING



A broker and a dealer must be distinguished. A *broker* is merely an individual or financial institution who provides information concerning possible purchases and sales of securities. Either a buyer or a seller of securities may contact a broker, whose job is simply to bring them together. A *dealer* also serves as a middleman between buyers and sellers, but the dealer actually acquires the seller's securities in the hope of marketing them at a later time at a more favorable price. Dealers take a position of risk because, by purchasing securities outright for their own portfolios, they are subject to risk of loss if the securities decline in value. Frequently, a dealer split up a large issue of primary securities into smaller units affordable by even buyers of modest means and thereby expand the flow of savings into investment. In addition, brokers and dealers facilitate the development of *secondary markets* where securities are offered for resale.

Despite the important contribution of brokers and dealers to the functioning of the financial system, direct financing still has some limitations. The lender must be willing to accept the risk, liquidity, and maturity characteristics of the borrower's IOU. There still must be a fundamental coincidence of wants and needs between surplus and deficit budget units for direct financial transactions to take place.

1.2 Indirect Financing

The limitations of direct financing stimulated the development of indirect financing, carried out with the help of financial intermediaries. Financial intermediaries active in today's financial markets include commercial banks, insurance companies, credit unions, finance companies, savings and loan associations, mutual savings banks, pension funds, mutual funds, and similar organizations. Their fundamental role in the financial system is to serve as intermediaries between ultimate lenders and borrowers, but in a much more complete way than brokers and dealers do. Financial intermediaries issue securities of their own - secondary securities - to ultimate lenders and at the same time accept IOUs from borrowers - primary securities.

Figure 1.2

INDIRECT FINANCING

The secondary securities issued by financial intermediaries include such familiar financial instruments as checking and saving accounts and shares in a mutual fund. These securities generally carry low risk of default. For example, most deposits are insured by a deposit insurance agency. Moreover, the majority of secondary securities can be acquired in small denominations, affordable by savers of limited means. Most secondary securities are liquid and therefore can be converted quickly into cash with little risk of significant loss for the purchaser.

Financial intermediaries accept primary securities from those who need credit and in doing so, take on financial assets which many savers, especially those with limited funds and limited knowledge of the market, would find unacceptable. By pooling the resources of scores of small savings accounts, a large commercial bank or other intermediary can frequently serve the credit needs of several large firms simultaneously. In addition, many primary securities, even those issued by some of the large borrowers, are not readily marketable and carry sizable risk of default, which is not usually acceptable to the small savers. By issuing its own securities, which are attractive to ultimate lenders (savers), and accepting primary securities from borrowers, the financial intermediary act to satisfy the financial needs of both surplus and deficit units in the economy.

1.3 Financial Disintermediation

Financial disintermediation is defined as the withdrawal of funds from an intermediary by ultimate lenders (savers) and the lending of those funds directly to ultimate borrowers. In other words, disintermediation involves the shifting of funds from indirect financing to direct financing.

Financial disintermediation generally occurs when surplus units withdraw their surplus funds from financial intermediaries and place them directly in financial markets due to the attractiveness of the rate of return of such transactions. These direct operations involve an offer of primary securities such as bonds, corporate securities in capital markets and commercial papers in money markets. Intermediation could be carried out using brokerage facilities and investment banking services such as underwriting and public placement. The attractiveness of financial instruments is one of the most important factors for the successful tapping of resources directly from financial markets.

Traditional banking financial institutions such as commercial banks primarily attract short-term deposits and thus are not suitable for providing long-term financing with higher risks. Therefore, they are not in a position to meet all the needs of long-term investments. Capital markets complement this problem of banking financial institutions by providing long-term direct financing. They play a role in mobilizing savings and channelling them into long- term productive investments.

In financing investments, both debt and equity financing are typically used. When a debt/equity ratio is beyond a prudent level, enterprises may face the danger of being unable to meet their debt obligations. As a source of funds with no repayment obligations, equity capital provides enterprises with a cushion against bad times such as temporary losses or negative cashflows. Long-term debt financing through issuing of long-term bonds also contribute to the stability of the financial structure of enterprises compared with short-term loans. Therefore, capital markets comprising bond and equity markets enhance the stability and strength of the financial structure of enterprises.

On the other hand, in money markets where short-term funds are transacted, direct financing such as issuing commercial papers provides enterprises with working capital. The government also finance short-term funds directly in the money markets through the issuing of treasury bills. In particular, during the periods of high and rapidly rising interest rates, savers are inclined to demand higher returns than the interests paid by financial intermediaries while borrowers are induced to raise short-term funds directly from savers to reduce financial costs. As a result, in the money markets, financial disintermediation (the phenomena of shifting from short-term loan to short-term direct financing) occurs.

During the last decade when interest rates have been relatively high and volatile, the weight of financial markets has moved from banking financial institutions to non-bank financial institutions and to security markets. In line with these developments, direct financing has taken over from indirect financing as the main fund source of a corporate sector. It has resulted in the diversification of financial instruments available to savers and borrowers, which has increased competition in financial markets and thus contributed to the lowering of financial costs. These developments have also substantially influenced monetary and supervisory policies.

2. Financial Disintermediation and its Background in Developed Countries

During the last two decades, dramatic changes in financial markets have occurred globally: firstly, nonbank financial intermediaries such as pension and mutual funds, insurance companies, and finance companies, are playing an increasingly important role in the financial system. Secondly, there has been tremendous growth in domestic capital markets in terms of the volume and value of transactions and in the development of new types of securities. Thirdly, in response to financial market liberalization around the world, international capital mobility has risen dramatically, encouraging the development of so-called emerging capital markets of developing countries. Fourthly, associated with these changes in the financial market, there has been an apparent decline in the traditional role of commercial banks, as both depositors and borrowers have sought alternative sources for investment and financing. Bank deposits have declined as a share of household assets, and businesses have turned from banks to money and capital markets to finance their investment spending. All these have led to financial disintermediation.

Behind these developments are a variety of causes including inflation and interest rate volatility; the end of capital control and the advent of a flexible exchange rate regime; and, improvement in information and communication technologies. Firstly, the long period of price and interest rate stability that followed the Great Depression and World War II ended in the 1960s. Greater inflation brought about higher interest rates and greater interest volatility, which sensitized savers to yield differences and made it worthwhile for them to search out higher yields. As a result, financial intermediaries have had to pay

higher yields either to retain funds or attract new funds. Secondly, the growing internationalization or globalization of markets that accompanied the end of capital control and the institution of flexible exchange rates further increased competition. Internationalization also created a regulatory loophole that hampered enforcement, or undermined the effectiveness of domestic regulations. With capital free to flow to the highest yields, the imposition of deposit rate ceilings became unenforceable and counterproductive. Thirdly, the improvement in both information and communication technologies began to break down natural barriers to competition. The increased speed and lower cost of communicating and transmitting data over large geographical areas enabled financial institutions to offer new products and compete in new markets, and eliminated geographical distances as an obstacle of competition.

These changes led to deregulation and financial innovations. An increase in competition among financial intermediaries, and between financial intermediaries and primary security instruments made regulations designed to segment financial markets and institutions ineffective. As a result, there has been a steady erosion of the regulatory restrictions that historically separated financial intermediaries from one another. In the competitive struggle to capture the savings and financial assets of households, pension funds and finance and investment companies were the biggest winners during the 1980s. The introduction of new financial instruments such as money market mutual funds (MMMFs) beginning in the early 1970s, has contributed greatly to these changes. Finance companies have been able to raise funds in the commercial paper market and use these funds to make general business loans in direct competition with banks. As a result, the growth of finance companies and the commercial paper market came at the expense of bank lending to business. Furthermore, large business firms increasingly bypassed banks (as well as finance companies), borrowing more in primary markets by issuing their own commercial papers. Banks have themselves facilitated these developments by providing backup lines of credit and guarantees to commercial paper issuers, including finance companies.

The shift in household assets from depository institutions to non-depository intermediaries has also resulted in a growing institutionalization of equity markets. During the last decade, direct purchase of stocks and bonds by households have fallen sharply. In contrast, the share of

institutional investors including private and public pension funds, bank trust, mutual funds, insurance companies, in the equity markets have risen substantially. The institutional equity ownership as a percentage of total U.S. market capitalization was 38.0 per cent in 1981 but recorded 53.3 per cent in 1990. Franklin Edward (1993) pointed out that the institutionalization of the equity market has had significant consequences and has raised a number of important policy issues. Firstly, trading in security markets has increased substantially, as institutions sought to outperform one another. Secondly, the growth of institutional trading has led to the fragmentation of equity markets. Spurred by advances in automation and communication technologies, institutional traders have demanded low-cost, standardized trading services as well as specialized, tailor-made services. In response to this, new trading systems have been developed and there has been a substantial increase in off-exchange trading. Thirdly, institutional investors have been a major factor in the surge in the trading of foreign securities since 1980. Fourthly, institutional ownership of securities has fueled the growth of the derivative market - futures, options, and swaps - both on and off-exchanges. Lastly, the increasing importance of institutional investors as stock holders has raised a number of corporate governance issues. The large stock ownership by institution, especially pension funds, has raised questions regarding the appropriate role of institutions on corporate boards, and about how active institutional investors should be in monitoring managerial performance and replacing underperforming corporate managers.

Along with these developments, financial disintermediation has taken place considerably in developed countries. Banking, at least in its traditional form, is on a decline. This decline has been more severe in countries where constraining regulations have created a highly segmented financial structure and prevented banks from responding to the competitive initiatives of nonbank competitors. In all countries, however, technologically driven financial innovation, competition, and deregulation, once they have occurred, have had powerful effects. In the United States, the ratio of direct financing to total corporate financing increased from 20.8 per cent in 1980 to 27.1 per cent in 1993. In Japan, the ratio increased from 8.3 per cent to 16.7 per cent in 1994. However, the ratio in Japan is much lower than in the United States because traditionally in Japan, the reliance on banks for corporate financing is higher and the capital market is less active than in the United States.

Table 1.1

THE RATIO OF DIRECT FINANCING IN THE UNITED STATES AND JAPAN

(In Per Cent)

	1980	1985	1989	1990	1991	1992	1993	1994
U.S.A.	20.8	22.0	23.6	23.8	25.0	26.4	27.1	n.a.
Japan	8.3	11.8	17.1	17.4	17.3	17.4	16.7	16.7

In a changing financial environment where banks have come under competitive pressures, they have responded by significantly increasing their risk-taking. Banks have even increased their lending to less creditworthy borrowers possibly to maintain profit margins. They have also pursued off-balance activities. They have expanded securities, insurance, and trading activities, securitized more of their loan portfolios, provided more loan commitments and standby letters of credit, and increased derivative-market services. Banks have provided backup lines of credit for almost all of the rapidly expanding commercial paper market. In this sense, it may be argued that commercial banks remain involved in virtually all short-term working capital lending inspite of their declining roles in the traditional sense.

As a consequence of the far-reaching transformation process, the financial markets have doubtlessly become more efficient. Costs for borrowers have declined, earnings for investors have risen, and the markets have thus been given an additional growth stimuli. However, the financial markets have also become fragile. The stock market crash of 1987, the European exchange market turbulence of 1992, the European currency unrest since then, and the recent foreign exchange market crisis of Mexico have shown that enormous shifts in capital may bring about serious disadvantages for the countries as well as for the world at large. Interest volatility has become a factor in making investment environments uncertain. Accordingly, Hans Tietmeyer (1993) argued that stability of financial markets must be one of the primary

objectives of economic policies. However, it is a widely held consensus that deliberalization and re-regulation would be inappropriate reactions. Instead, one must endeavour to combine economic freedom with appropriate supervisory provisions.

PART II

Introduction of New Financial Instruments in the SEACEN Countries

Over the last decade, there have been two significant trends in the SEACEN countries as in other regions. Firstly, non-bank intermediaries such as pension and mutual funds, insurance companies, and finance companies, have played an increasingly important role in financial markets. Secondly, there has been tremendous growth in money and capital markets. Consequently, the traditional role of commercial banks has been declining as both depositors and borrowers have sought alternative sources for investment and financing. In particular there was an increase in the share of direct financing, that is, financial disintermediation has deepened. These developments are mainly attributed to the introduction of various new financial instruments as a result of financial innovations and deregulation.

In the SEACEN countries, during the 1970s, there was excessive regulation on the banking sector such as interest rates and credit controls. As such, the interest rates and inflation rates were high and volatile in the 1970s and early 1980s. The efforts of economic agents to escape such regulations as well as interest rate risks have led to the declining role of the banking sector and, by contrast, to the substantial increase in the role of non-banking financial intermediaries in the financial markets. These trends have accelerated with the introduction of new financial instruments, favorable to non-bank financial intermediaries, such as CMA (Cash Management Account), MMMF (Money Market Mutual Fund), and CP (Commercial Papers).

In addition, most SEACEN countries undertook measures to encourage the creation and development of money and capital markets. The Philippines and Singapore already had active organized money markets prior to the mid-1970s. By the beginning of the 1980s, money markets became increasingly important in Indonesia, Korea, Malaysia, Thailand and The Republic of China, Taipei. In the late 1980s, money markets began to be developed in Sri Lanka and Nepal. In general, development of money markets was fostered by the introduction of new financial instruments such as central bank bonds, government securities, CD (Certificates of Deposit), CP, and RP (Repurchase Agreements). Interest rates of these instruments were typically less restricted

than those of traditional instruments. The development of money markets have not only increased competition in financial markets but also provided flexible means for managing liquidity through open market operations. However, the depth and width of the money markets in most SEACEN countries are insufficient for smooth open market operations. On the other hand, capital markets, in particular, stock markets, have also expanded rapidly in a number of the SEACEN countries, particularly, Indonesia, Korea, Malaysia, and Thailand, with the help of various policies to encourage the growth of capital markets.

In *Indonesia*, financial reforms were carried out on June 1983 and, then as a part of the reforms, the monetary management regime was shifted from direct control to an indirect system based on reserve money management. In order for the indirect systems to work efficiently, new financial instruments for open market operations were introduced. In February 1984, *the Certificates of Bank Indonesia (SBIs)* was introduced. The certificates have been used by banks as a temporary outlet for their excess funds, and, through secondary markets, have been influencing monetary developments. In February 1985, *Money Market Securities (SBPUs)* was introduced to strengthen liquidity and to enhance the activities of money markets. The SBPUs consist of promissory notes and trade bills. Banks and non-bank financial institutions (NBFIs) can trade SBPUs among themselves or with Bank Indonesia. An NBFI (PT Ficorinvest) was appointed as a market maker (a discount house). In addition, since October 1988, banks and NBFIs were allowed to issue CDs without permission from Bank Indonesia. Before then, the issuance of CDs needed the approval of Bank Indonesia.

In 1976, for the development of capital markets, the government established the Capital Market Policy Council, the Capital Market Executive Agency (BAPEPAM), and the National Investment Trust Company (PT Danareksa). In December 1987 and in October 1988, the packages for the deregulation of capital markets were introduced, which substantially contributed to the rapid growth of capital markets.

Important measures undertaken since the mid-1980s for financial liberalization in Indonesia are as follows:

(i) June 1983 - deregulation of interest rates on bank deposits and loans.

(ii) February 1984 - introduction of SBIs.

(iii) February 1985 - introduction of SBPUs.

(iv) December 1987 - easing of listing requirements and streamlining of procedures for securities issues, creation of OTC markets, permission of foreign investors participation up to 49 per cent.

(v) October 1988 - lifting of 20-year ban on the entry of foreign banks, lifting of 30-year ban on the establishment of new banks, liberalization of the issuance of CDs.

(vi) December 1988 - allowance of the establishment of private security exchanges.

(vii) February 1991 - introduction of BIS capital adequacy ratio of 8 % of risk-weighted assets.

In *Korea,* as in other SEACEN countries, the role of NBFIs in financial markets has risen drastically with the introduction of new financial instruments. Investment and Finance Companies first established in 1972, the principal business of which consists of short-term business financing using funds raised through the issuance of their own paper, were allowed to handle factoring and CPs in 1981, and *CMAs (Cash Management Accounts),* a Korean version of the United States' MMMF, was introduced in 1984. Together with banks, they were also allowed to engage in the business of trade bills in 1989. Merchant Banking Corporations first established in 1978 were also allowed to handle factoring and CMAs in 1979 and 1984 respectively.

In the money markets, *Monetary Stabilization Bonds (MSBs)* and *Treasury Bills (TBs)* were introduced in 1961 and 1967 respectively. The CPs market were initiated in 1972 with the establishment of Investment and Finance Companies. Regarding the issuance of *Commercial Papers (CPs),* three *Credit Rating Companies,* that is, the Korea Management Consulting Corporation, the Korea Investors Service Incorporation, and the National Information & Credit Evaluation Incorporation were founded in 1983, 1985 and 1986 respectively. *Bond Repurchase Agreements (RPs)* were first introduced in 1977 when the Korea Securities Finance Corporation undertook such transactions with securities companies. Later, securities companies, banks and post offices were allowed to engage

in this business in 1980, 1982, and 1983 respectively. Meanwhile *Negotiable Certificates of Deposits (CDs)* were first introduced in 1974 but the market was not active until the mid-1980s mainly because of the lower interest rates offered as compared to those on other financial instruments. Nationwide commercial banks, local banks, and the Korea Exchange Bank resumed CDs business in 1984. In 1985, it was open to all domestic banking institutions, and in 1986 to foreign bank branches.

The security market commenced in 1956. In order to increase public participation in the stock market, *Securities Savings Deposits* and *Stock Subscription Deposits* were introduced in the late 1980s. Firms going public should make prior placement of their stocks to the holders of the deposits. As initial stages of the internationalization of the securities market, *the Korea Fund, the Korea Europe Fund,* and *the Korea Asia Fund* were set up in 1984, 1987 and 1991 respectively. In this regard, *the Convertible Bonds (CBs)* and *Bonds with Warrents (BWs)*were also introduced. As at the end of 1990, indirect investment vehicles available to foreign investors include 10 CBs, 2 BWs, 10 international investment trusts, 3 matching funds, and 2 closed-end country funds. In 1987, *the Over-the-Counter (OTC)* market was organized to provide an opportunity for unlisted small and medium-scale corporations to gain easier access to the securities market. This OTC market was newly reorganized as *the Korea Securities Dealers Automated Quotation (KOSDAQ)* in July 1996. In addition, in May 1996, *the Korea Securities Price Index Futures Market* was opened.

In the bond market, government and public bonds such as *Monetary Stabilization Bonds (MSBs), Foreign Exchange Stabilization Bonds, Treasury Bills (TBs), Industrial Finance Debentures,* and *Long Term Credit Debentures* were introduced. *Corporate Bonds* introduced in 1972 were also diversified. *Convertible Bonds (CBs)* were introduced. Interests on non-guaranteed bonds have been freely determined since November 1984, and those for mortgage and CBs since May 1985. Interest rates on guaranteed bonds were deregulated in November 1991 for those with maturities of two years or more, and in November 1993 for all maturities.

In *Malaysia, the Negotiable Certificates of Deposits (NCDs)* and *Bankers Acceptances (BAs)* were introduced in 1979 to extend the variety of papers available in the money market. In 1988, the *Floating Rate NCDs (FRNCDs)* were introduced, the interest rates of which are

refixed every three or six months based on the Kuala Lumpur interbank borrowing rates (KLIBOR). In 1979, *Repurchase Agreements* were introduced to add flexibility to the management of assets and liabilities of the financial institutions. In 1983, non-interest bearing *Government Investment Certificates (GICs)* were introduced to allow Bank Islam Malaysia, and other institutions to invest their liquid funds in an Islamic manner. The returns are declared by the government on the anniversary date of the issue of the Certificates. With the establishment of the national mortgage corporation (Cagamas Berhad), *Mortgage-backed Bonds* were first introduced in 1987. These bonds are issued on an auction basis through principal dealers.

The Central Bank Certificates were issued by the Central Bank of Malaysia to mop up excess liquidity, and also partly to rechannel funds to finance new productive investment and the scheme known as the New Investment Fund (NIF). In addition, there are government papers, private corporate bonds, swaps, unit trust, property trust, and venture capital funds. Among them, government papers comprise two instruments: *the Malaysian Government Securities (MGSs)*, and *the Malaysian Treasury Bills (MTBs)*. The MGSs are issued to tap long-term funds from the public to finance development expenditures of the government, and therefore have longer maturities ranging from 3 to 21 years. On the other hand, the MTBs are bills managed by the central bank on behalf of the government to raise short-term funds for the financing of government expenditures and have maturities of no more than one year.

In *Nepal*, the government began to issue *Treasury Bills (TBs)* in 1962. This was followed by *Government Securities* such as Land Compensation, Forest Compensation, and Development Bonds in 1964, Prize Bonds in 1967, Special Bonds in 1971, and *National Savings Certificates (NSCs)* in 1984. In addition, *Debentures* were issued by the Agricultural Development Bank in 1979, and by the Nepal Industrial Development Corporation (NIDC) in 1981. The Securities Exchange Centre (SEC) operates a limited secondary market for government securities. No corporate bonds have emerged in the capital market. Stock exchange activities are limited to a few tradable securities. Some shares of listed companies such as banks, insurance and business house, etc., are traded at a high premium price. Major companies have not listed their shares in the SEC. Consequently, the size of the security market in Nepal is extremely small.

In *the Philippines*, financial market instruments include Treasury Bills, Treasury Notes, Central Bank Bills, Commercial Papers, Promissory Notes, Repurchase Agreements, Interbank Call Loans, Certificates of Assignment, Certificates of Participation, and Development Bank of the Philippines Bonds. Among them, *Treasury Bills* are main instruments for open market operations of the central bank. *Central Bank Bills* were introduced in 1984 to mop up excess liquidity arising from the non-payment of maturing foreign loans due to the debt moratorium but were phased out beginning in 1986 to give way to the auction of Treasury Bills. *Repurchase Agreements* are undertaken only when the desired effects on the level of reserve money are temporary.

In *Singapore*, major money market instruments are Treasury Bills, Government Stock and Bonds, Bills of Exchange, S$ Negotiable Certificates of Deposits (S$ NCDs). Among them, the revamped *Singapore Government Securities (SGS)* were launched in 1987, which is characterized by scripless trading and market-determined yields. Five approved primary dealers and three approved registered dealers replaced former discount houses in the trading of the instruments. All applications in the primary auction of the government securities have to be submitted through primary dealers.

In *Sri Lanka*, money market instruments include Treasury Bills, Certificates of Deposits, Call Money, Bankers Acceptances, and Commercial Papers. A regular weekly auctioning system for the *Treasury Bills* was introduced in 1986 while interest rates on Treasury Bills were allowed to be determined by market forces with minimum intervention of the authorities. In 1989, maturities of the Treasury Bills were diversified to 6 and 12 months in addition to the continuation of 3 months. In 1981, the Secondary Market for Treasury Bills (SMTB) was established. At the same time, *CDs* were introduced by commercial banks, finance companies, and the Treasury.

Taiwan's money market instruments basically consists of five components: interbank call loans, Treasury Bills introduced in 1973, Negotiable Certificates of Deposit in 1975, Commercial Papers in 1976, and Bankers' Acceptances in 1976. Meanwhile Taiwan's capital markets are concentrated mainly on the stock market. The bond market is still at a developing stage. In order to encourage indirect investment via investment funds, *the Taiwan Fund*, a mutual fund for foreign participation in the Taiwan stock market, was founded in 1983. Subsequently,

three additional funds such as *the Formosa Fund, the Taipei Fund,* and *the Taiwan Fund Inc.* were launched in 1986. Recently, in order to facilitate the process of internationalization of the stock market, and to encourage domestic companies to raise funds abroad, *Global Depository Receipts (GDRs)* were introduced in overseas markets. Foreign issuers were also allowed to issue *Taiwan Depository Receipts (TDRs)* in 1992. In addition, domestic investors were allowed to engage in certain futures contracts transactions in foreign futures exchanges in 1993.

In *Thailand,* in the 1980s, new financial instruments bearing market rates of interest were introduced. Typical ones were the *Transferable Certificates of Deposit (TCDs)* introduced in 1984. Others included various kinds of *transferable bills of exchange* such as the Citinotes, the Chasenotes issued by the Citibank in 1986 and the Chase Manhattan Bank in 1987 respectively, and the IFCT notes issued by the Industrial Finance Corporation of Thailand in 1988. Apart from the above-mentioned instruments, the Bank of Thailand introduced *the Bank of Thailand Bond* in 1987 to mop up excess liquidity. During 1987, a number of companies initiated *the Floating Rate Notes (FRNs)* in the domestic market but had to rely on bank underwriting and private placement among institutional investors due the lack of market.

New international financial instruments were also initiated by the branches of foreign banks in mid-1980s. This was subsequently followed by a bulk of instruments from Thai commercial banks. New ones include hedging instruments such as *currency and interest swaps, options, forward rate agreements (FRAs).* In addition, new financing techniques, that is *off-balance sheet transactions,* such as note issuance facilities (NIFs), revolving underwriting facilities (RUFs) and the securitization of loans were also introduced. With regard to the stock market, the conventional types of common stocks are still dominant although trading of *Convertibles* and *Warrants* is beginning to pick up.

PART III

Development of Money and Capital Markets in the SEACEN Countries

1. Money Market

1.1 Outline of Money Market

The existence of attractive financial instruments is a necessary condition for the successful tapping of resources directly from financial markets. Broadly categorized in terms of the period of the maturity of financial assets, there are two kinds of financial instruments for direct financing: money market instruments providing short-term financing, and capital market instruments providing long-term financing.

A financial market where financial instruments with maturities up to 1 year are transacted is called a *money market.* Money markets enable market participants to borrow or lend liquid assets and thereby meet needs for cash or investment of cash. Here liquid assets may be converted into cash quickly without significant loss of value. Inflows and outflows of cash are rarely in perfect harmony with one other. For example, governments collect taxes from the public only at certain times of the year when personal and corporate income tax payments are due. Disbursements of cash must be made throughout the year. When taxes are collected, governments are usually flushed with funds which far exceed their intermediate cash needs. At these times they frequently enter money markets as lenders and purchase Treasury bills, bank deposits, and other attractive financial assets. Later on, as cash runs low relative to current expenditures, governments once again enter money markets to sell securities, and even borrow short-term money. Business firms, too, collect sales revenues from their customers at one point in time and dispense cash at other times to cover wages and salaries, purchase intermediate inputs, and meet other operating expenses. Firms with surplus cash positions frequently enter money markets as net lenders of funds, investing idle funds in the hope of earning at least a modest rate of return. On the other hand, firms with cash deficits borrow short-term funds in money markets. Therefore, money markets serve to bridge the gap between receipts and expenditures of funds, covering cash deficits with short-term borrowings when current expenses exceed receipts and providing an investment

outlet to earn some interest income for those units whose current receipts exceed their expenditures. Investing excess liquid assets, that is lending, reduces the opportunity cost of holding cash or cash equivalents. Borrowing short-term funds eliminates disruption that would be caused by temporary cash flow deficits.

Major money market participants are commercial banks, nonfinancial corporations, government securities dealers, the Treasury, the central bank, finance company and savings banks. *Commercial banks* borrow short-term funds aggressively in the money market through negotiable certificates of deposit (CDs), federal funds, and Eurodollars while simultaneously lending short-term funds to corporations which have temporary cash shortages. In the United States, commercial banks provided 79 per cent of CDs and 69 per cent of federal funds and repurchase agreements in 1991. Bank holding companies are issuers of approximately 4 per cent of commercial papers outstanding. Commercial banks extend lines of credit supporting the commercial papers of nonfinancial corporations. As a group, commercial banks hold a larger percentage, approximately 12 per cent in 1991, of U.S. government securities than any other group of financial institutions. Large *nonfinancial corporations* borrow millions of dollars on a single day only to come back into the money market later in the week as a lender of funds due to a sudden upsurge in cash receipts. *Government securities dealers* make markets in Treasury securities by buying large blocks of securities from the central bank in the primary market and distributing them to customers. The dealers hold inventories of securities that facilitate secondary trading by their customers. The dealers also buy and sell for their own accounts, further helping support an active and liquid market. *The Treasury* issues the Treasury bills and other securities that are the foundation of the money market. Short-term issues enable the government to raise money to meet necessary expenditures between receipts of tax revenues. *The central bank* is also an aggressive participant of the money market through open market operations. In the United States, the Federal Reserve System (the Fed) historically holds over 75 per cent of its financial assets in the form of U.S. government securities and its role in the operation of the money market is a crucial one. The Fed as the fiscal agent of the Treasury accepts bids for and distributes all government securities in the primary market. The Fed also sells and purchases government securities in order to adjust money supply. Its ultimate responsibility for money supply makes the central bank the single most influential participant in the money market.

In other countries, money market participants and their functions are almost the same as those of their U.S. counterparts. The United Kingdom and Japan, however, have their own specific financial institutions for the money market respectively. In the U.K., *discount houses* act as intermediaries between the government and the commercial banks (clearing banks). These private firms absorb the entire weekly U.K. Treasury bill offering. They can borrow from the Bank of England and are active dealers in the short-term government securities. They make a secondary market with merchant banks in negotiable CDs and acceptances. In the U.S., commercial banks may borrow directly from the Fed. However, British clearing banks must make their liquidity adjustments through the discount houses and they may not borrow directly from the Bank of England. The Bank of England carries out its monetary policy largely by the purchase and sale of the Treasury and commercial bills through the intermediary discount houses. Only recently, in the "big bang" of 1986, did banks gain the right to operate in the government securities market as U.S. banks do. The U.K. discount house model is also used in Singapore.

Another unique set of financial firms is the *Tanshi houses* of Japan. The Japanese government has licensed these six private companies to act as intermediaries in all money markets except the *gensaki* (repurchase agreements) market. Like discount houses, the nonbank firms may borrow from the central bank (The Bank of Japan), which frequently carries out its monetary policy through the *Tanshi.* They are the primary means through which large banks maintain reserve requirements. Due to their close relationship with the Bank of Japan, these non-governmental companies essentially supervise the bill-discount and call money markets, important components of Japan's money market.

The principal financial instruments traded in the money market in the U.S. are Treasury bills, federal funds, repurchase agreements, negotiable CDs, commercial papers, and banker's acceptances. Of these, the last three are traded in physical forms, while the remaining instruments are kept track of in book-entry form (electronic record keeping) with written confirmations. *Treasury Bills* are direct obligations of the government which must have an original maturity of one year or less. Most bills are issued in three-months, six-months, and one-year maturities and are auctioned every week in the money market. *Federal Funds* are immediately available short-term funds transferred (loaned or borrowed) between financial institutions, usually for a period of one day. Since

1980, U.S. banks and other depositary institutions which are federally insured or eligible to apply for federal insurance, are required to maintain reserves specified by the Fed in the form of vault cash or deposits at a Federal Reserve bank. This reserves deposited at a Federal Reserve bank are called Federal Funds. Since there are no interest rates on Federal Funds, excess reserves are actively transferred between financial institutions. *Repurchase Agreements* (RPs) are agreements between the buyer and seller in the sale of securities to reverse the transaction in the future at a specified date and price. *CDs* are financial instruments issued by a bank documenting a deposit, with principal and interest repayable to the bearer at a specified future date. CDs are issued by banks and thrifts to raise funds for financing their business activities. *Commercial Papers* are unsecured promissory notes, issued by corporations with the highest credit ratings, generally with maturities of nine months or less. Papers are issued, in most cases, to meet the needs of business working capital, especially to purchase inventories of goods and raw materials. *Banker's Acceptances* are a subset of bills of exchanges that are guaranteed by accepting banks. This is a vehicle created to facilitate commercial trade transactions. Of these money market instruments, *Commercial Papers* are financial instruments for direct financing of non-financial corporations.

1.2 Development of Money Markets in the SEACEN Countries

In the SEACEN countries, money markets have considerably grown considerably since the 1980s with the introduction of new money market instruments, the establishment of new financial intermediaries acting as dealers and brokers in the money market, and the liberalization of interest rates. Nevertheless, most money markets in the SEACEN region are still relatively underdeveloped except for some countries such as Korea and Malaysia where the money markets have developed relatively further compared to other member countries. Most money markets in the region have no active and viable secondary markets. In addition, some constraints imposed on the interest rates still remain.

In *Indonesia,* there are six components in the money market. CDs were first introduced in 1971, but did not become important until 1983 when interest rate liberalization was undertaken. The interbank call loan market began in 1974 and has become an important source of short-term funds for banks. The CP market, which is primarily a market for promissory notes issued by NBFIs, has been growing fairly steadily

since about 1976. RPs began around 1983 in line with financial liberalization undertaken at that time. SBIs (Central Bank Certificates) and SBPUs (Money Market Securities) were introduced in 1984 and in 1985 respectively and have been used for the implementation of open market operations. The interbank and CP markets have generally performed well in the Indonesian money market because these two instruments are free from interest rate controls. However, the interest rates of some other instruments such as SBIs and SBPUs are still controlled and thus their markets are not active.

In spite of various measures carried out in the 1980s, the Indonesian money market still remain fragmented and underdeveloped partly because no bona fide secondary markets have been developed aside from some financial institutions occasionally trading directly with each other on an ad hoc basis and partly because there are still remaining interest rate constraints. The outstanding amount of CDs decreased in the late 1980s due to the lack of a secondary market and also the high risk of keeping them. Meanwhile, in order to encourage the SBIs market, Bank Indonesia appointed seven banks and eight NBFIs as market makers in 1989. The market makers serve as the central bank's agents in the issuance of SBIs through auction. With the appointment of the market makers, the SBIs market has been a lot more active since 1990.

In order to develop the money market in Indonesia, measures to increase the role of market forces in determining interest rates would be needed, not only for SBPUs but also for SBIs. A shift to market-determined interest rates would be necessary in developing the money market. Secondly, if it is unlikely for the government to be able to issue TBs or other government securities, it would be advisable to develop SBIs into a money market instrument equivalent to TBs. This would be an important step that would allow the central bank to carry out effective open market operations. Finally, an effective system of money market brokers or dealers should be established.

In *Korea,* the money market is composed of the call market and a wide range of other short-term financial markets including those for TBs, Monetary Stabilization Bonds (MSBs), CDs, RPs, and CPs. The beginning of the organized money market in Korea dates back to the 1960s when MSBs and TBs were first issued in 1961 and 1967 respectively. However, the Korean money market remained underdeveloped

Table 3.1

COMPONENTS OF THE MONEY MARKET IN INDONESIA

	Components	Established
1.	Negotiable Certificates of Deposit	1971
2.	Interbank Call Loans	1974
3.	Commercial Papers	1976
4.	Repurchase Agreements	1983
5.	Central Bank Certificates (SBIs)	1984
6.	Money Market Securities (SBPUs)	1985

Table 3.2

MONEY MARKET TRENDS IN INDONESIA
(Rupiah Billion)

	1986	1987	1988	1989	1990	1991	1992	1993Jan
Interbank Call Loans[1/]	8022	9323	12491	22905	32054	43304	50774	-
CPs[2/]	999	986	1254	1475	-	-	-	-
SBIs[3/]	746	871	3665	3301	1529	10942	20599	21536
SBPUs[3/]	1086	0	0	0	0	4343	2820	2496
CDs[3/]	131	201	207	166	357	434[4/]	-	-

1/ Volume per year
2/ End of March outstanding
3/ End of period outstanding
4/ End of March

Source: Bank Indonesia

until the early 1970s when the government took a series of measures designed to channel curb market funds into financial institutions and to organize short-term financial market more systematically.

In 1972, the establishment of investment and finance companies (IFCs) and the sale of papers issued by non-financial business firms as well as IFCs were initiated. These were the important first steps taken toward the formation of an advanced money market. In 1974, CDs which are, large-value time deposits at banks with a fixed maturity date and a specified interest rate, were introduced. In addition, call transactions which had previously taken place between individual banks, were put on a systematic basis by the establishment of the Call Transaction Office in 1975. In 1977, the Korea Securities Finance Corporation initiated RPs with securities companies involving bonds on a short-term basis. Following the expansion in the number of financial institutions, various new instruments, including guaranteed CPs to assist small and medium-sized firms lacking easy access to short-term funds in money market, were introduced from the early 1980s. These helped broaden and activate the Korean money market.

The Korean money market has grown rapidly during the last two decades. The volume of the money market expanded from 1548 billion Won in 1980 to 44201 billion Won in 1990, and stood at 98100 billion Won as of the end of June 1995. The ratio of the volume of the money market to current GNP increased from 4.2 per cent in 1980 to 32.2 per cent as of the end of June 1995. By product, CPs make up the largest share, accounting for 38 per cent, followed by CDs (21 per cent) and MSBs (21 per cent).

In spite of the rapid growth of the money market in Korea not only in absolute size but also in relative terms compared to GNP or money supply, it is currently below its potential size. In particular, it remains underdeveloped in terms of having active secondary markets for the relevant components of the market. In order to encourage the development of the money market, it may be advisable to liberalize the maturities for certain instruments, as well as the minimum and maximum denominations. Another important measure would be to develop secondary markets, for instance, for CDs and CPs. These secondary markets should be restructured so that brokers and dealers operating in these markets find it profitable financially. Otherwise, the secondary markets are not likely to remain viable in the long-run. It

Table 3.3

MONEY MARKET TRENDS IN KOREA

(Won Billion %)

	1980		1985		1990		June 1995	
	Amount	Share	Amount	Share	Amount	Share	Amount	Share
Call 1/	178.7	11.5	432.7	5.4	3650.5	8.3	3189.6	3.3
CP 2/	1087.0	70.2	3368.1	42.1	12962.1	29.3	37520.4	38.2
RPs 2/	129.5	8.4	2562.7	32.6	3337.1	7.5	5273.2	5.4
CDs 3/		-	1080.9	13.5	6226.9	14.1	20884.7	21.3
Treasury Bills 3/	150.0	9.7	0.0	0.0	2500.0	5.7	0.0	0.0
MSBs 3/	3.2	0.2	504.1	6.3	15240.5	34.5	20815.1	21.2
Com. bills 2/		-	46.4	0.6	1.8	0.0	81.7	0.1
Trade bills 2/		-		-	5.1	0.0	783.7	0.8
Cover bills 2/		-		-	276.8	0.6	9551.1	9.7
Total (A)	1548.4	100.0	7994.9	100.0	44200.8	100.0	98099.5	100.0
A/current GDP	4.2		10.1		24.8		28.2	

1/ Daily average transactions during December.
2/ Balance of sales.
3/ Outstanding amount.

Source: Financial System in Korea, The Bank of Korea, 1995.

would be important also for the government to replace the large issues of MSBs with issues of TBs, and for the central bank to use government securities rather than the central bank's own obligations in open market operations. These measures would certainly reduce the burden of the central bank's monetary management. In addition, it would be more helpful if authorities could introduce competitive bidding for TBs, based on market-determined interest rates. Finally, the ceiling currently imposed on the amount of CDs could be liberalized and the minimum denomination could be lowered to help expand the range of choices open to potential investors with short-term funds.

In *Malaysia,* the central bank has promoted the development of the domestic money market since its establishment in 1959. It has encouraged various financial institutions to use the money market when they are in need of short-term funds rather than borrow from the central bank. Consequently in Malaysia, the money market plays an important role in the economy, not only as an important vehicle for the investment of short-term funds but also as a primary source of operating funds and liquidity for some financial institutions.

Money market instruments include TBs, CDs, BAs, Cagamas Bonds, RPs, Government Investment Certificates (GICs), and Central Bank Certificates. TBs have been issued by the government since 1955 and have been held by various financial institutions to meet part of the minimum liquidity requirements. From the mid-1960s to 1973, TBs were offered to investors on a tap basis, that is, they could be purchased at any time at the central bank. The price was predetermined by the government on the recommendation of the central bank. However since 1973 , TBs have been offered by the central bank on behalf of the Treasury on a tender basis through a sealed bid auction. Since 1989, the principal dealers can only participate in the weekly auction. The TBs market has grown over the years.

The central bank introduced in 1979, three new instruments into the market - BAs, CDs and RPs. *BAs* are issued only by commercial banks and merchant banks. However, other financial institutions are allowed to trade BAs either through rediscounting or RPs. BAs are fully negotiable and actively traded in the secondary market because of their attractive yields. The BAs market in Malaysia has developed at a relatively good pace. The *CDs* market has grown significantly since its introduction. The outstanding amount of CDs increased from RM 0.9

billion at the end of 1980 to RM 18.4 billion at end of 1992, taking the largest share in the money market. *The Floating Rate Negotiable CDs (FRNCDs)* were additionally introduced in 1988, the interest rates of which are refixed every 3 or 6 months based on the Kuala Lumpur Inter-Bank Borrowing Rates (KLIBOR). The *RPs* market has also been growing considerably over the years. BAs are used as the underlying assets for RPs because of the existence of the secondary market for BAs. In 1983, the non-interest bearing GICs were introduced to enable Bank Islam and other institutions to invest their liquid funds in an Islamic way. *Cagamas bonds (mortgage-backed bonds)* were introduced in 1987 to intermediate funds between the primary lenders of housing loans and investors of long-term funds. These bonds are issued on an auction basis through the system of principal dealers. The Central Bank Certificates, which are short-term papers similar to TBs, were issued only temporarily from time to time.

Apart from the above instruments, Malaysia has an important institution named *discount houses* first introduced in 1963. The basic function of the house is to accept short-term funds in the form of call money and deposits, and to invest the proceeds in medium-term government securities as well as certain specified money market instruments. By performing this function, the discount houses provide a convenient and reliable channel for investing very short-term funds and they act as dealers in money market papers. They could also help banks to approportion their holdings of financial assets in the desired spread of maturities.

In spite of the relatively successful development of the money market in Malaysia mainly because of market-determined interest rates on its instruments and appropriate measures of the central bank and the government, the secondary market for money market instruments remain underdeveloped. In addition the RPs market is still so thin that banks have difficulties in funding a short position. Therefore, the introduction of brokers to create an active market should be encouraged. The development of the CPs market would provide Malaysian business with a new source of funds, and potential investors with a new outlet for the investment of their short-term funds.

In *Nepal*, there are only three money market instruments: TBs, Nepal Rastra Bank (NRB) Bills, and call loans. TBs have been sold at weekly auctions conducted by the open market operations committee

Table 3.4

MONEY MARKET TRENDS IN MALAYSIA[1/]

(RM Million)

	1980	1985	1990	1992
Treasury Bills	1490	2790	4320	-
GICs	0	200	900	1000
Central Bank Certificates	0	30	0	-
Cagamas Bonds	0	0	2900	-
Bankers Acceptances	932	2760	3004	5981
Certificates of Deposit	931	5141	14653	18390
Repurchase Agreements	458	2816	10008	-
Promissory Notes	0	0	2782	-

1/ End of period outstanding.

Source: Bank Negara Malaysia

since 1988/89. Before then, although commercial banks used to purchase TBs with government-determined interest rates to maintain their reserve requirements, they seldom rediscounted them with the NRB. There used to be limited inter-bank trading of TBs and none of the other financial institutions were keen to purchase TBs because of the low yield rate and the shorter maturities. However, since the introduction of the auction-based sale system, participants in the market have increased and Nepal's money market has started to develop. However, the bank rate is fixed at 13 per cent by the NRB and thus the cut-off rate for the bills is also 13 per cent. The NRB Bills were introduced in December 1991 to mop up excess liquidity in the banking sector. The bills are issued on a weekly auction basis. The commercial banks are also buying and selling 1-day call loans with one other. The 1-day call loans were started in 1992. The interest rate of the call loans is also below 13 per cent since the bank rate is fixed at 13 per cent by the NRB.

Table 3.5

MONEY MARKET TRENDS IN NEPAL[1/]

(Rs. Million)

Fiscal Year	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
TBs	3440	4090	1171	1821	2351	3483	4103
NRB Bills	-	-	-	-	-	-	1756

1/ End of period outstanding.

Source: Nepal Rastra Bank

The development of Nepal's money market has a very short history, and accordingly, its development is hindered mainly by the underdevelopment of participating institutions and the lack of proper money market instruments and secondary markets. In order to develop the Nepal money market, a large variety of money market instruments should be introduced and appropriate financial institutions should be established. In addition, the development of a modern communication system and clearing mechanism should be encouraged.

In *the Philippines,* various money market instruments have been developed including TBs, other Government Securities (OGS), Central Bank Certificates of Indebtedness (CBCIs), Central Bank Bills, CPs, Promissory Notes, RPs, Inter-Bank Call Loans (IBCL), Certificates of Assignment, and Certificates of Participation. The market for the OGS including notes and bonds issued by government institutions other than the Department of Finance and the Central Bank, is the oldest dating from the 1950s. In 1961, the interbank call loan market was launched and in 1965, an intercompany paper market, the forerunner of the present CP market, was started. TBs were first introduced in 1966, promissory notes in 1967, and RPs in 1968. CBCIs were first issued during the 1970s to mop up excess liquidity arising from the commod-

ity boom and to reallocate credit from urban to rural areas. The Central Bank Bills were also introduced in 1984 to mop up excess liquidity arising from the non-payment of maturing foreign loans due to the debt moratorium. This was later phased out beginning in 1986 to give way to the auction of TBs. Unlike other countries, the Philippines does not have markets for CDs and BAs.

By the early 1970s, the Philippines had one of the more advanced and sophisticated money market in Asia. However, during the 1970s, several measures including the fixing of the maximum yield on short-term money market instruments at 17 per cent, the raising of the minimum value on money market placements, and the increase in the required reserve against deposit substitutes, were taken to control the explosive growth of the money market intermediaries. At that time, the authorities thought these measures were necessary because the growth of money market diverted funds from longer-term markets and the domestic banking system. This occurred mainly because interest rates on certain money markets were unregulated and hence, more attractive than the controlled interest rates on banks' deposits.

The Philippines money market showed an uptrend from 1980 to 1983 due to the deregulation of interest rates, followed by a decline from 1984 to 1987 due to the foreign exchange crisis. It, however, gained momentum in 1988 and proceeded with consistent increases up to 1992, reflecting increased issues of government securities to finance the government's large budget deficits. Most of private components of the money market, such as the markets for promissory notes, CPs, and RPs have experienced declining activity. Accordingly, in 1992, the market for the government securities including TBs and OGS showed the largest share in the money market followed by the IBCLs.

The Philippines money market is characterized by its intermediary network due to the apparent lack of true dealership with a direct transfer of funds from ultimate lenders to ultimate borrowers. While in other countries, dealers play a significant role in the mobilization of funds through outright sale or the purchase of securities, the same is clearly not manifested in the Philippines as both banks and NBFIs engage largely in quasi-banking that is funded by deposit substitutes. The inherent role of both institutions to make a market is still limited. Secondly, the Philippines money market lacks well-developed secondary markets with the exception of the TBs market. Even for the OGS

Table 3.6

MONEY MARKET TRANSACTIONS IN THE PHILIPPINES */

(Pesos Million)

Type of Instrument	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993 a/
Overall Volume	303,750	329,621	462,822	600,562	505,809	505,754	523,417	460,854	780,051	904,953	1,289,491	1,654,077	2,077,868	1,890,901
Interbank Call Loans	50,510	66,969	133,593	198,101	178,117	226,381	201,423	172,785	303,503	360,852	730,742	850,519	888,683	853,857
Promissory Notes	144,463	189,532	238,308	244,043	183,831	156,799	158,656	131,085	104,076	80,651	63,254	81,123	75,867	47,963
Private : Repurchase Agreement	60,370	20,611	13,840	7,557	3,435	14,188	46,147	2,912	817	13	803	10,476	18,878	
Private : Certificate of Assignment	1,075	230	328	259	408		8						199	
Private : Certificate of Participation	895	256	241	10	22		1,046	237						11
Government : Repurchase Agreement	35,290	27,208	33,573	111,735	70,495	13,391	7,907	853	3,526	3,074	3,572	22,508	4,467	397
Government : Certificate of Assignment														
Government : Certificate of Participation														
Commercial Papers : Non-Financial	8,576	20,467	22,762	15,049	13,086	19,913		18,442	16,835	20,933	26,340	35,829	69,258	77,171
Commercial Papers : Financial	1,890	3,459	11,894	8,949	10,306	253	15,650	95	117				19	
CBCIs	479	674	5,810	3,861	603	60	24							
Treasury Bills	147	64	1,259	4,899	21,684	38,747	55,680	96,562	295,266	361,141	425,091	544,262	851,847	756,661
DBP Bonds	39	105	381	112	352	20		263	137					
Other Government Securities	16	46	833	5,987	23,470	36,002	36,876	37,620	55,774	78,289	39,689	109,360	168,650	154,841

*/ Data reflects the volume of transactions during the period.
a/ January to August 1993.

Source: Reports of different financial institutions submitted to the Bangko Sentral ng Pilipinas (Form CBP 5-17-27).

market, most issues are placed directly with investors and there are no active dealers or brokers for secondary markets. This general lack of secondary markets has been one of the main factors constraining the growth of the money market. Thirdly, there has been a tendency to overregulate the market. For instance, yields in the OGS market are fixed by the government although yields in the TBs market reflect market demand and supply. Such regulations put in place in the mid-1970s have fostered a system of financial intermediation on the part of money market participants rather than a system of money market dealers. Measures to redirect policies towards less quasi-banking and more towards a true dealership system, to develop secondary markets, to eliminate the overregulation by the government, and to liberalize the remaining controlled interest rates should be taken in order to develop a more efficient and deep money market in the Philippines.

In *Singapore,* there are five major money market instruments: interbank call transactions, Commercial Bills, TBs, and RPs. Aside from the passive issue of TBs since the 1920s, the first component of Singapore's money market established in approximately its present-day form was the interbank market. In 1962, an interbank call market was launched in response to a request from foreign banks operating in Singapore. The interbank call market has grown considerably over the years to take the largest share in the Singapore money market. A decade later, in 1972, the commercial bills market was established together with discount houses, which stood ready to quote buying and selling prices for commercial bills. Other than the interbank market, the commercial bills market currently has the second largest share in the money market, followed by the TBs market. In 1973, MAS shifted the offering system from a tap basis to a tender bidding system. However, the size of the TBs market has not been changed greatly and has even decreased, mainly because of the unattractive yields until 1987 when the discount houses ceased operating and a system of primary government securities dealers was introduced. Since the introduction of the primary dealers system in 1987, the size of the TBs market has increased substantially. In 1975, the first CDs were issued. However, the CDs market has not been active and thus take the smallest share in the money market.

Over the years, Singapore's domestic money market has grown but it is still heavily overshadowed in size by the Singapore international money market. Nevertheless, the domestic money market has been

important, both as a source of needed short-term funds and as an investment outlet for those with surplus funds. Three components of the market have fairly active and well-developed secondary markets - TBs, commercial bills, and CDs. The secondary market for TBs is made up of both primary and secondary dealers, while that for commercial bills is made up of primary dealers and commercial banks. For CDs, currently a rather thin market, is supported by commercial and merchant banks, with domestic money brokers doing some brokering in the market.

Despite the considerable growth of the Singapore money market, it is still small and not fully developed. A major factor that has helped sustain the Singapore money market over the years has been the minimum liquid assets ratio requirement which has resulted in a sustained demand for TBs and other money market instruments. However, it is unfortunate that this demand for TBs reflects a regulatory requirement rather than a free and uninhibited market demand. It would be much better to have the demand for government securities reflecting truly free and unconstrained market conditions. Various measures could be taken to improve and expand the domestic money market. For instance, the minimum denomination of CDs could be reduced to a lower level in order to expand the range of participants in the CDs market.

In *Sri Lanka,* the money market is still very narrow with limited market instruments and institutions. The major money market instruments are TBs, interbank call loans, and CDs. Among them, the TBs are primary instruments for open market operations. The central bank issues TBs on behalf of the government to 16 dealers, that is, 12 banks and 4 money brokers on a weekly basis. The buyers are banks, institutions such as finance companies, the National Housing Development Authority, Provident Funds, Pension Funds, Trust Funds, and the general public. The TBs are traded through the primary dealers. Primary markets are conducted only by the Public Debt Department of the central bank, and secondary market is conducted by the Banking Department of the central bank and other financial institutions. Recently, several measures have been taken to encourage the TBs market. Since 1986, TBs have been issued by 3 regional offices of the central bank. Maturities have also been diversified from only 3-months to 3, 6, and 12-months. In 1987, the TBs forecasting committee was set up to decide the optimum issuing amount. In addition, TBs rates have been

allowed to vary according to market conditions. Consequently the TBs market of Sri Lanka has steadily grown over the years.

The call money market, the major outlet for short-term funds of commercial banks is operated mainly on an overnight basis. It is thin and the interest rates of the market are highly volatile. Money brokers have been permitted to operate in the market since 1982. On the other hand, CDs became very attractive money market instruments due to their special features such as free negotiability and anonymity. In addition to commercial banks, finance companies were allowed to issue CDs. The central bank encouraged the issue of the CDs as an effective method of absorbing liquidity in unorganized and black markets. The limits placed on the issue of CDs were removed in 1987.

The development of the money market in Sri Lanka was hindered, in particular, by the lack of a wide spectrum of instruments and institutions. The lack of short-term instruments creates problems for commercial banks in managing their liquidity. The large fluctuations of the interest rates in the call market are also another area of concern in the money market. The volatility in call money rates reflects the lack of arbitration between the call money market and the central bank's secondary TBs window. The reestablishment of the RPs market or the introduction of other forms of instruments such as BAs or CPs can help in overcoming these problems.

In *Taiwan,* money market instruments include TBs introduced in 1973, CDs in 1975, CPs in 1976, BAs in 1976, interbank call loans informally launched prior to the mid-1970s but officially approved in 1980, trade acceptance and government securities other than TBs. A significant breakthrough in the development of Taiwan's money market was the implementation of the Regulations Governing the Dealers of Short-term Negotiable Instruments in 1976. It facilitated the establishment of the CPs and BAs markets and permitted the establishment of bill finance companies, which have played a key role in the money market since 1976. The bill finance companies have acted as both brokers and dealers, and thus have created viable primary and secondary markets for negotiable instruments. Taiwan's securities companies have also served as brokers and dealers in the money market. Banks and private enterprises are the main participants in the money market.

Table 3.7

OUTSTANDING BALANCES OF MONEY MARKET IN SINGAPORE

(S$ Million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Commercial Bills 1/	4049.3	3979.4	4107.3	3900.4	4124.8	3528.1	4113.0	3599.6	4096.9	4533.4	4952.0	5466.0	5710.3
Negotiable Certificates of Deposit	331.9	404.5	428.0	471.7	300.7	263.6	696.4	896.8	992.7	1421.7	1457.0	1193.4	939.7
Treasury Bills	689.9	784.0	566.4	432.9	277.1	270.5	551.1	2399.4	2161.2	1773.3	1988.9	3362.0	4660.0
Deposits with discount houses 2/	884.1	1478.0	1917.9	2049.9	2387.2	2220.1	2316.0						

1/ Holdings by banks.
2/ Discount houses ceased operations in May 1987.

Source: Monetary Authority of Singapore

In 1977, the Central Bank of China, Taipei, imposed a 5 per cent minimum liquidity ratio requirement on banks, and later in 1978, raised the ratio to 7 per cent. Since banks could meet this requirement by holding CDs, BAs, and CPs, it is likely that this new requirement increased to some extent, the demand for these money market instruments and thus contributed to the growth of the money market. In 1980, the Taipei Interbank Money Market was established and interbank lending was officially approved. In 1992, banks were allowed to engage in some bills finance business, that is, banks may deal in short-term bills in the secondary market, and act as brokers or dealers.

In the TBs market, all financial institutions are authorized to participate in TBs auctions. Of these, there are 18 licensed TBs dealers that make up the secondary market. The dealers consist of bill finance companies, investment and trust companies, and certain local banks. There are two types of CPs:- CP1 created by real transactions, that is, a bill of exchange, and CP2, a promissory note usually issued by companies to raise liquidity for working capital with guarantee of banks or other financial institutions. In the case of CDs, at first, the interest rates were the same as deposit rates. However, since 1980, they were freed and are determined in accordance with market rates. Owing to the increasing use of CDs by banks to manage their liquidity, the CDs market has become the largest one in the money market.

Taiwan's money market has grown substantially since the mid-1970s with the gradual liberalization of interest rates. The rates on CPs and BAs were deregulated since the market for these instruments were first established, while the rates on CDs were liberalized in 1980. Interbank rates have been gradually liberalized since the late 1970s. On the other hand, liberalization of bank deposit and loan rates has been much slower. The restrictions on bank interest rates were abolished in 1989. Consequently, Taiwan's money market has become an important source of short-term funds for Taiwan's business community. Observing the trends of the money market development by the type of instrument, the BAs market was the largest from 1983 to 1985 with the CPs market taking over the position from 1986 to 1987. Since 1988, the CDs market has the largest share in the money market.

On the whole, Taiwan's money market has been active and useful. Interest rates are mostly free and there are active secondary markets. However, in spite of its considerable development, it has not yet

Table 3.8

MONEY MARKET OPERATIONS IN SRI LANKA

(Rs. Million)

Period	Call Money Market		Primary Treasury Bill Market						Secondary Treasury Bill Market		
	Total Lending/ Borrowings	Outstanding as at end of period (a)	Total Out Standing	Amount Issued	Amount Accepted (Purchases)				Total Sales	Total Purchases	Outstanding position as at end of period
					Central Bank	Commercial Banks	Others	Total			
1989											
1st Quarter	34,087	885	47,700.0	47,700.0	33,668.1	4,814.8	9,217.1	47,700.0	27,355	6,405	472
2nd Quarter	38,885	1,178	50,322.4	25,164.7	15,255.9	2,499.0	7,409.8	25,164.7	12,258	6,507	698
3rd Quarter	54,085	908	54,745.8	25,211.8	17,088.1	2,989.0	5,134.7	25,211.8	15,582	5,346	717
4th Quarter	37,051	790	57,245.8	19,234.5	11,490.6	3,554.2	4,189.7	19,234.5	15,960	4,991	713
1990											
1st Quarter	41,170	877	58,967.7	31,332.7	17,964.1	4,915.9	8,452.6	31,332.7	20,290	5,006	1,175
2nd Quarter	49,012	1,188	61,967.7	30,451.9	15,109.6	5,569.4	9,772.6	30,451.7	15,296	5,184	425
3rd Quarter	60,273	1,201	62,967.7	28,431.9	11,227.5	7,714.4	9,490.0	28,431.9	17,306	4,556	1,126
4th Quarter	64,856	1,988	67,967.7	29,621.4	16,686.0	7,300.6	5,634.9	29,621.4	14,817	6,351	1,964
1991											
1st Quarter	50,194	1,304	68,967.7	36,953.2	20,370.4	7,834.1	8,748.6	36,953.2	25,472	8,716	2,073
2nd Quarter	54,114	2,167	70,467.7	34,137.2	14,953.8	4,625.5	14,557.9	34,137.2	16,768	8,584	1,674
3rd Quarter	65,612	798	70,467.7	28,968.6	14,965.3	4,265.3	9,738.0	28,968.6	20,060	8,489	3,040
4th Quarter	54,940	1,592	72,967.7	31,509.1	18,150.4	5,237.5	8,121.2	31,509.1	18,078	10,898	1,453

Note:

(a) The outstanding amount as at the end of last week for each quarter.

Source: Central Bank of Sri Lanka

reached its full potential compared to developed countries. Firstly, the authorities should consider expanding the money market by the introduction of new instruments such as RPs, some of which are already used but a regular market has not been developed. In the case of CPs, the market is dominated by CP2, which relies too much on the support of financial institutions. It may be advisable to increase the share of CP1 based on real transactions. In this regard, it is necessary to establish a credit rating system. Secondly, Taiwan's money market relies too much on banks' short-term funds. In order to avoid the money market being constrained by bank funds, it is necessary to expand the participation of the money market. The setting up of the Money Market Mutual Funds (MMMFs) could be one way to encourage more participation by providing small investors with opportunities of investment in the money market. Thirdly, most money market instruments are still in physical issues. In order to enhance the efficiency of the market, a book-entry system must be introduced.

In *Thailand,* money market instruments include Interbank Loans, TBs, RPs, Commercial Bills, CPs, Transferable Bills of Exchange (TBE), and CDs (Negotiable CDs and Transferable CDs). The oldest instrument is the Interbank Loan, which began operating in the 1930s. The second oldest one are TBs, which have been traded since 1945. However, the TBs market is still a largely controlled one and remains only a primary issue market. There is no bona fide secondary market for TBs. The CPs market was introduced in 1966 but it remains relatively small and underdeveloped in spite of an early beginning. The Bank of Thailand introduced the bond RPs market in 1979. Starting in 1986, the central bank began to use the RPs market actively to adjust the amount of bank liquidity. However, the bank's RPs operations still fall somewhat short of full-fledged open market operations. In 1984, an attempt was made to introduce TCDs which are similar to NCDs since Thai law does not authorize the issuance of NCDs at that time. NCDs were introduced later in 1992. However, the attempt to issue TCDs was not successful because despite its name, they are not easily negotiable. At the time of purchase, the name of the depositor has to be registered. When transferred, the name of the new purchaser has to be registered at the original bank office where the TCDs were purchased. In addition, the last holders of the TCDs are subject to a 15 per cent withholding tax. These cumbersome registration requirements and complicated tax system have inhibited the development of the market. In 1986, the TBE was launched when Citibank began to issue its Citinotes.

Table 3.9

OUTSTANDING BALANCES OF MONEY MARKET IN TAIWAN

(NT$ Million)

INSTRUMENTS/YEAR	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Commercial Papers	59297	84655	72940	73717	92078	85325	82909	78824	85823	134747	282054	294456	340719
Negotiable Certificates of Deposits	19099	56037	42727	48545	44198	36118	18736	25814	153607	354579	296904	306022	464403
Treasury Bills	1600	1400	2000	14600	24000	78275	79800	65630	197000	34000	18000	116000	80000
Bankers' Acceptances	6617	25114	60348	85708	103830	110098	71601	59242	43485	57021	65058	50101	55412
Total	86613	167206	178015	222570	264106	309816	253046	229510	479915	580347	662016	766576	940534

Source: The Central Bank of China, Taipei

These notes were so popular that two other financial institutions also started to issue them.

The Interbank Loans market which is used not only by banks but also by finance companies, plays a useful role in helping these institutions adjust the amount of their liquidity. The bond RPs market is operated by the Bank of Thailand for open market operations. With the exception of these two markets, the Thai money market does not play a significant role in the economy. The TBs market is mainly a captive market. Banks are required to hold a certain amount of government securities. Even worse, the yields on TBs are below market levels and hence unattractive to investors. In addition, there is a government ceiling on the issue of TBs. CPs and commercial bills do not appear to be important in the money market of Thailand. On the whole, Thailand's money market, while not insignificant, has not played a vital role in the Thai economy as well as the financial market.

In order to develop the money market in Thailand, several measures could be considered. Firstly, the establishment of primary government securities dealers could assure a dependable reception for government securities offering and promote an active, bona fide secondary market. This would be helpful for open market operations of the central bank. Secondly, the complicated withholding tax system discouraging trading in money market instruments should be amended. Thirdly, the development of a secondary market, such as brokers or dealers, should be encouraged. Fourthly, the instruments of the money market should be diversified. Finally, a credit rating system is necessary to promote the development of commercial bills or a commercial papers market.

On the whole, the money markets of the SEACEN countries have grown considerably since the 1980s in spite of their currently underdeveloped states. However, the degree of development vary across the countries. Precise comparisons are not possible because of insufficient data. In some countries, data on RPs market are not available. Data availability on the Interbank call loans market is also a problem. Data on the daily transactions volume are available only in some countries while other countries have only the yearly figures. Some countries do not even have any data on a yearly basis. Accordingly, the Interbank call loans market is excluded from the comparative analyses although the market plays an important role in the money market. In addition,

Table 3.10

OUTSTANDING BALANCES OF MONEY MARKET IN THAILAND

(Baht Million)

INSTRUMENTS/YEAR	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Commercial Papers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Negotiable Certificates of Deposits (NCD) 1/	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,916.7	949.9	301.0	188.0	84.4	50.1	1,563.9
Others 2/	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,725.0	2,757.0	8,332.0	8,332.0	8,225.0	7,450.0	6,850.0
City Notes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	325.0	650.0	650.0	650.0	650.0	650.0	650.0
Chase Manhattan Notes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	200.0	200.0	200.0	600.0	-	-
IFCT Notes	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	-	-	400.0	400.0	400.0	400.0	400.0
Floating Rate Notes (FRNS)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,400.0	1,907.0	7,082.0	7,082.0	6,875.0	6,400.0	5,800.0
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

1/ The data during 1986-1991 is the Transferable Certificates of Deposits (TCD). NCD was introduced in Thailand in 1992, after the amendment of the Commercial Banking Act and Act on the Undertaking of Finance Business, Securities Business and Credit Foncier Business. The total outstanding of TCD and NCD in 1992 is B 1.3 million and B 1,562.6 million respectively.

2/ Other instruments are City Notes, Chase Manhattan Notes, IFCT Notes, Floating Rate Notes (FRNs).

Source: The Bank of Thailand

the experiences of Philippines and Thailand are excluded because of insufficient data.

Among the member countries, Korea and Malaysia have relatively well developed money markets. In Korea, the ratio of the amount of outstanding money market instruments to current GNP is 27.3 per cent and its ratio to broad money (M2) is 69.3 per cent in 1995. In Malaysia, the ratio of the amount of outstanding money market instruments to current GNP is 34.8 per cent and its ratio to broad money (M2) recorded 50.5 per cent in 1990. These ratios are higher than those of other member countries. The next group following the above-mentioned countries consist of Singapore, Sri Lanka and Taiwan. In Singapore, the ratio of the amount of outstanding money market instruments to current GNP and to M2 is 13.8 per cent and 14.9 per cent respectively in 1992. In Sri Lanka, the ratio to current GNP and to M2 is 19.8 per cent and 65.1 per cent respectively. In Taiwan, the ratio to current GNP and to M2 is 17.3 and 10.6 per cent respectively. In the case of Singapore, the ratios are lower than expected. This may be because its domestic money market is overshadowed by its international money market. Indonesia's and Nepal's money markets are the least developed among countries being compared.

Table 3.11

THE RATIO OF MONEY MARKET OUTSTANDING TO GNP AND TO M2

(In Per Cent)

	Indonesia (1991)	Korea (1995)	Malaysia (1990)	Nepal (1992/93)
The Ratio to Current GNP	7.2	27.3	34.8	3.4
The Ratio to M2	15.9	69.3	50.0	11.8

Figure 3.1
The Ratio of Money Market Outstanding to GNP

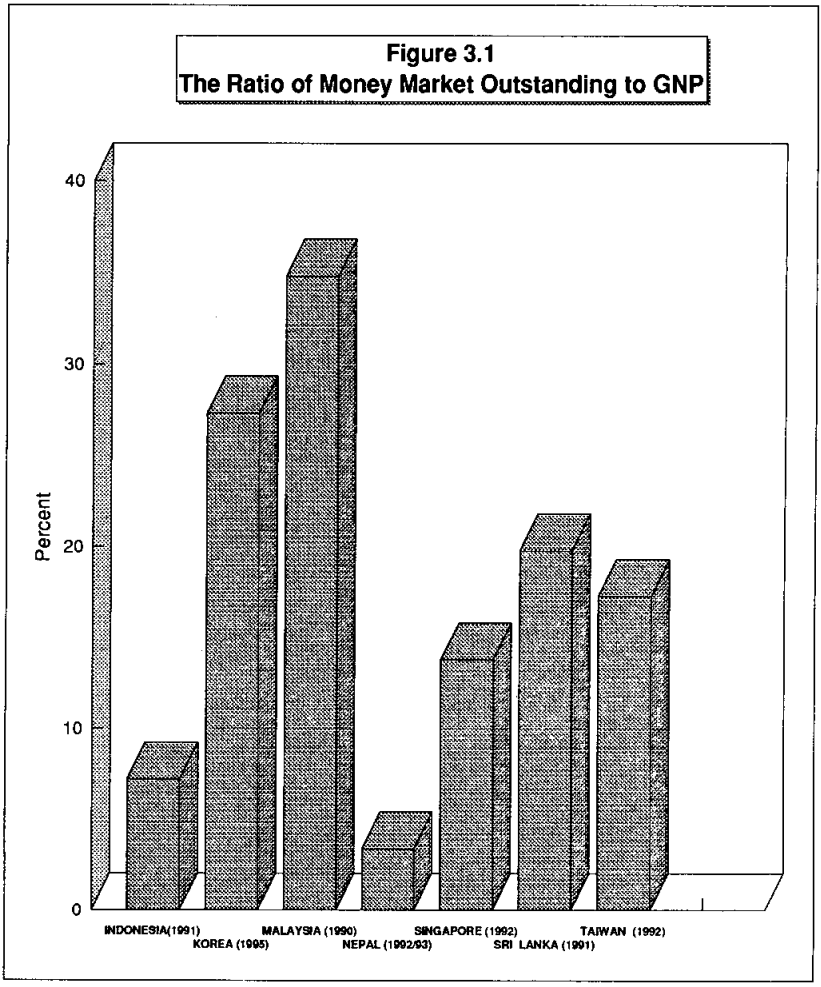


Table 3.11 (Cont'd)

Singapore (1992)	Sri Lanka (1991)	Taiwan (1992)
13.8	19.8	17.3
14.9	65.1	10.6

Source: The above respective tables on money market trends.
The SEACEN Centre, *SEACEN Financial Statistics*, 1995.
The Bank of Korea, *Monthly Bulletin*, April 1996.

TBs are mainly used in Malaysia, Nepal, the Philippines, Singapore, Sri Lanka, Taiwan,and Thailand for open market operations. Among these countries, there are no central bank certificates (or bonds) at present in Malaysia, the Philippines, Singapore, Sri Lanka, Taiwan, and Thailand. On the other hand, Central Bank Certificates in Indonesia and the Monetary Stabilization Bonds in Korea are mainly used for open market operations. Indonesia does not have a TBs market. The TBs market in Korea is almost inactive. It has been commonly pointed out that heavy dependence of open market operations on central bank certificates (or bonds) results in additional burdens for the central bank in its monetary management because of the payment of interest on the certificates (or bonds)

CPs are instruments for direct financing in money markets. Most SEACEN countries (Indonesia, Korea, the Philippines, Singapore, Taiwan and Thailand) have markets for CPs or their substitutes (commercial bills in Singapore). The share of the CPs market in the money market is substantially high in Korea, Singapore and Taiwan (in Korea, and Taiwan, its share is the largest among markets of various instruments). However, there are no CPs in Malaysia, Nepal and Sri Lanka.

In spite of the recent development of the money market in the SEACEN countries, most markets are still at an underdeveloped stage. A few reasons can be taken into account for this. Firstly, some interest rates in the money market remain regulated. If the interest rates in the money market could be determined by free market forces, it would certainly increase the efficiency and flexibility of the money market.

Secondly, there still lacks an active and viable secondary market. In order to develop a secondary market, an efficient system of dealers or brokers should be established. It is very difficult to establish the system in developing countries. The authorities should arrange to license, or select accredited dealers or brokers. The market should be restructured so that dealers or brokers find operations reasonably profitable. Creating conditions for free price competition through the free entry into the market by appropriate participants would significantly increase the efficiency of the market. Thirdly, there is of the variety of money market instruments. For instance, there are no TBs in Indonesia, almost no active TBs in Korea, no CPs in Malaysia, Nepal and Sri Lanka, no CDs in Nepal, and the Philippines, no BAs in the Philippines, and no RPs in Taiwan. The instruments should be diversified to provide sufficient and suitable opportunities for investors as well as borrowers. Fourthly, the maturities and denominations of money market instruments are too constrained. It would be viable to have a wide range of maturities and appropriate denominations to meet the needs of a wide spectrum of investors. Fifthly, there is a lack of suitable infrastructure for the development of the money market. The authorities should restructure the tax system, introduce a flexible legal system, and establish a credible credit rating system, good telecommunications and computerized network. Adequate prudential supervision of the market as well as effective rules to protect investors should also be introduced.

2. Capital Market

2.1 Outline of Capital Market

The capital market is a financial market where financial instruments with maturities longer than 1 year are bought and sold. Corporations secure financing through the capital market by selling long-term claims on their firms, whether in the form of bonds (liabilities) or stock (equity). The government goes to the capital market for operating funds, and households use them for residential mortgage financing.

Capital market instruments are basically classified into three categories: stock, bonds, and mortgages. Among them, *the corporate stock* is a financial claim on a corporation held by the owners of the firm. Holders of corporate stocks have an ownership interest in the firm. The stock is recorded in the equity section of the firm's balance sheet. Corporate stocks take two forms: preferred and common stock. The

preferred stock is a hybrid instrument that represents an equity interest but pays a fixed dividend (just as a bond pays a fixed interest payment). The *common stock* is an equity interest with dividend payments that are not fixed and which vary. In the event of liquidation, common shareholders have the lowest priority in terms of any cash distribution. Because of this, owners of common stocks have what is called a residual claim on the firm.

Bonds are contractual liabilities that obligate the issuer to pay a specified amount (the par, face, or maturity value) at a given date in the future (the maturity date), generally with periodic interest payments in the interim at a fixed rate (the coupon rate). Corporations and the government entities issue bonds to raise funds for operations or for capital projects. *Bearer bonds* are payable to whomever holds the securities and *registered bonds* are payable only to the owner specified in the issuer's records. Even though bonds have a definite term or life, investors often do not hold these instruments until they mature. Thus the valuation of bonds prior to maturity is important. The value of a bond is the present value of its future cash flows. Hence, the value or price is based on interest payments, maturity value, and the investor's minimum required rate of return.

There are two types of bonds: government bonds and corporate bonds. *Government bonds* include *Treasury Notes* and *Treasury Bonds.* In developed countries, generally the central bank auctions Treasury Notes and Treasury Bonds in the primary market. The government securities dealers which make the market for Treasury Bills also make the market for Treasury Notes and Treasury Bonds. Original maturities range from 1 to 10 years for Notes and from 10 to 30 years for Bonds. In addition, there are *Municipal Bonds* including all debt instruments issued by the local county and state governments. Issuers use proceeds from the sale of municipal bonds to finance public utilities, school construction, roads, transportation system, and industrial development.

Corporate Bonds include all bonds that are either not government bonds or municipal bonds. Non-financial corporations, commercial banks and finance companies issue corporate bonds. The money raised by selling the bonds are normally used for long-term purposes. In general, the share of corporation bonds issued by non-financial corporations is the largest in the markets for corporate bonds. Institutional investors such as insurance companies and pension companies are generally the

largest holders of corporate bonds. Foreign entities and households are also participants in the market. The wide variety of corporate bonds includes Mortgage Bonds, Equipment Trust Certificates, and Debentures. *Mortgage Bonds* are issued by firms to finance specific projects. The project becomes the collateral for the bond issue, making the issue a secured debt. Tangible property also collateralizes *Equipment Trust Certificates.* In this case, the property is a specific piece of large equipment. *Debentures* are long-term liabilities that are supported not by collateral but only by the general creditworthiness of the issuers. Corporate bonds may sometimes be exchanged for other securities. *Convertible Bonds* may be exchanged for a specific number of shares of common stock of the issuing firm. Bonds are sometimes issued with *Stock Warrants* attached. Warrants are options to purchase common stocks at a specified price up to a specified date.

Mortgages are long-term liabilities collateralized by real property. Commonly, monthly payments are made to fully repay both principal and interest over the term of the loan. Mortgages are issued to purchase real estate such as homes, multifamily dwellings, commercial property, and farms. In particular, in the United States, various Mortgage Associations issue debt securities to the public with the proceeds used for investing in *pools of mortgages.* Investors in these mortgage pool securities receive *pass-through certificates,* which entitle them to interest and principal payments according to their share of the pool.

In addition, there is *securitization* (a kind of capital market instruments) which is the pooling of a group of loans with similar characteristics and the subsequent sale of interests in the pool to investors. Securitization of mortgage loans, which are called mortgage-backed securities, is one of the best examples. Securitization has the advantage of helping make fresh infusions of funds into capital market. First of all, selling mortgage loans let financial institutions remove long-term assets from their books. As most of their deposits are short-term, sale of mortgage loans help financial institutions match the average maturity of their assets to those of their liabilities more closely. Secondly, some investors such as life insurance companies have longer-term liabilities. From their perspective, investments in longer-term residential mortgage assets would be advantageous. In this case, investments in mortgage-backed securities rather than in individual mortgage loans are far more cost-effective. Thirdly, securitization enables borrowers to have access to a source of low-cost funds. When a firm's overall credit rating is

lower than the credit rating of its receivables, securitizing the receivables can reduce the borrowers' interest rate. Fourthly, securitization also enables small and emerging companies to offer financial arrangements to their customers by packaging the receivables for resale.

The Capital Market is basically divided into the primary and secondary markets. For *equity securities*, there are *two primary markets*: *public offering* and *private placement.* In a *public offering* , new issues of corporate stock are sold indirectly to investors through investment banking institutions and dealers. Such public offerings of new issues dominate the primary market for the equity securities. Most public offerings of new equity issues are distributed to investors through investment banks (or merchant banks) via underwriting or agency selling arrangements. *Investment banks* are securities firms which are retained to advise issuing entities on stock and bond offerings and which take an active role in the distribution of the securities to ultimate investors. *Merchant banks* are banks which serve the needs of commercial enterprises by giving advice on financing alternatives and corporate mergers and by underwriting new issues, as well as accepting bills of exchange, providing foreign currency exchange facilities, and operating in money markets. *Underwriting* is the initial distributing of securities by an entity other than the issuer, with the risk of price fluctuations borne to some extent by the distributor. In the usual offering of equities, the investment banking syndicate buys the securities from the issuing firm (the underwriting function) and then sells them to investors. The other relatively minor segment of the primary equity market is *private placement.* In this case, firms sell securities to a single investor or a small group of investors (ordinarily institutional investors). Similarly, there are also *two secondary markets* for equity securities: *the organized exchanges* and *the over-the-counter market (OTC).* Generally, there is more trading in the organized exchanges than in the OTC for equity securities.

Corporate Bonds have also the two same primary markets and secondary markets as for equity securities. In primary markets, with a private placement, the seller of the issue places the entire bond offering with an institutional investor such as a life insurance company or a pension fund. Public issues of bonds are generally made through an underwriter, and the bonds are sold to a large number of investors, individuals as well as institutions. The underwriters purchase the bonds

from the corporate issuer and then resell them to investors at a higher price. In secondary markets, most trading in existing corporate bonds takes place in the OTC in contrast to equity securities, where trading on the organized exchanges is dominant.

New issues of *Government Bonds* and *Notes* are often offered to the public in exchange for existing issues that are about to mature (a refunding offer) or in exchange for issues that will mature at some future date (an advance refunding offer). Existing government bonds and notes are traded in the secondary market through *government security dealers*. Government security dealers, operating in the OTC market, play a vital role in the secondary market.

The primary market for *mortgages* has traditionally been a very local one involving local financial institutions, particularly, savings and loan associations. The initial lender is known as the originator of the mortgage. The originator may either retain the mortgage for its portfolio or dispose of the mortgage in the secondary market. The mortgage bank has traditionally served as an agent for such permanent lenders as pension funds and insurance companies. Increasingly, the primary market for mortgages has broadened with the development of mortgage-backed securities. Indeed, these mortgage-backed securities have changed the mortgage market so greatly that in many respects it is now similar to the corporate bond market. The secondary market for mortgages involves both individual mortgages and mortgage pools. In particular, in the United States, the savings and loan associations have been active in the sale of mortgage-backed bonds as a means of obtaining additional sources of funds. The secondary mortgage market has become an important link between the home buyer and a wide range of investors such as pension funds, insurance companies, investment companies and individuals who have no or little interest in the source of the primary mortgage and who traditionally seek longer-term investment. In general, the growth of the secondary market has expanded the source of mortgage credit and has more fully integrated the house financing sector with the aggregate capital market. Home loan funding through the secondary mortgage market has become a viable alternative to traditional funding by deposits in thrift institutions. In the United States, both the primary and secondary mortgage markets have grown in recent years. In particular, the secondary market has experienced tremendous expansion, particularly because of the growth in mortgage pools and mortgage-backed securities.

Apart from the above financial instruments and financial markets, there are additional financial markets and instruments called *Financial Derivatives.* Reflecting substantial volatility in interest rates and stock prices, as well as in the performance of the economy itself, the financial market place has innovated a number of new financial instruments and markets which allow portfolio managers to adjust their risk positions. Such financial derivatives include financial futures, options, and swaps. *Financial Futures Contracts* are agreements to exchange commodity or financial instruments at a specified date in the future at a predetermined price. Stock index futures based on stock indices are one of the best examples of a futures contract. *Option Contracts* are agreements that confer the right to buy or sell an asset at a set price through some future date. The right is exercisable at the discretion of the option buyer. *Swap Contracts* are agreements between two parties to exchange assets or a series of cash flows for a specified period of time at predetermined intervals. The swap contract is used to manage foreign exchange risk or interest rate risk. Thus, the commercial bank with long-term and fixed rate loans can exchange the interest income from these loans for cash flows that vary with market conditions via an interest swap contract.

2.2 Development of Capital Markets in the SEACEN Countries

Stock markets in most SEACEN countries with the exception of Singapore, Nepal and Myanmar are called emerging markets by the International Finance Corporation [IFC] (Singapore is classified as a developed market by IFC). Their performance, in particular since the mid-1980s, outstripped the performance of developed western countries. The growth rates of the Indonesian, Korean, Taiwanese and Thai stock markets have been remarkable. The amount of market capitalization at the end of 1994, compared to the end of 1982, recorded 328 times in Indonesia, 44 times in Korea, 49 times in Taiwan, and 104 times in Thailand respectively.

On the other hand, in terms of the ratio of market capitalization to current GDP, which is frequently used as an indicator showing the degree of stock market development, Malaysia records the highest ratio (275 per cent) followed by Taiwan (102 per cent) and Thailand (92 per cent). Indonesia and Sri Lanka show relatively low ratios in spite of their remarkable growth in recent years.

Several factors have contributed to the remarkable growth of the stock markets in the SEACEN region. Firstly, the stock market in general tends to track the performance of the underlying national economy. The growth in the stock markets in most SEACEN countries has therefore reflected the performance of their economies in terms of the GNP growth rate, low inflation rate, and consistently high savings rate. Secondly, appropriate government policies have been introduced to encourage savings and fiscal incentives have been offered to shareholders. Thirdly, the privatization of large state corporations throughout the region during the last decade has also dramatically increased the number of shareholders. Fourthly, institutional investors have become more influential than retail investors and tend to stabilize markets with their continuous cashflow. Fifth, as the capital markets in the region become increasingly open, more foreign capital is flowing in.

On the other hand, the bond markets in the region remain small, particularly the corporate bond market. Long-term debt outstanding is low in Taiwan and Thailand but somewhat higher in Korea, Malaysia and Singapore. The secondary markets in Korea, Malaysia and Thailand are relatively inactive whereas they are more active in Singapore and Taiwan. A number of reasons can be taken into account for this. Firstly, interest rates on many instruments are still administered or controlled in many SEACEN countries. The effective yields on government bonds are kept below free-market levels. They are sold upon issue to financial institutions, which are required to hold these bonds because of liquidity or reserve requirements, and most refrain from selling them in order to avoid capital losses. In Singapore and Taiwan, interest rates are market-determined and consequently the turnover ratio (the ratio between turnover and market capitalization) on the bond markets are comparatively higher. A second reason is the dominating position of the banking sector in the region. The volume of bank assets is generally higher than the capitalization of the equity markets. Commercial banks encourage private enterprises to borrow on short-term from the banks rather than to lose them to the securities markets. Regulations that favor banks are sustained, such as the requirement that corporate debt issues should be collateralized or guaranteed by a financial institution. Thirdly, there are some statutory limitations on the supply of bonds. An example is the Taiwanese company law stipulating that the volume of bonds issued

Table 3.12

MARKET CAPITALIZATION IN SELECTED SEACEN COUNTRIES
(US$ Million)

	1982	1994	(Growth Rate, %)
Indonesia	144	47241	(32806.3)
Korea	4408	191778	(4350.7)
Malaysia	13903	199276	(1433.3)
Philippines	1981	55519	(2802.6)
Singapore	31235	134516	(430.7)
Sri Lanka	365[1/]	2884	(790.1)
Taiwan	5086	247325	(4862.9)
Thailand	1260	131479	(10434.8)
United Kingdom	196200	1210245	(616.8)
United States	1520167	5081810	(334.3)
Japan	430817	3719914	(863.5)

1/ 1985

Source: *Emerging Stock Markets Factbook*, IFC. 1992, 1995.

Table 3.13

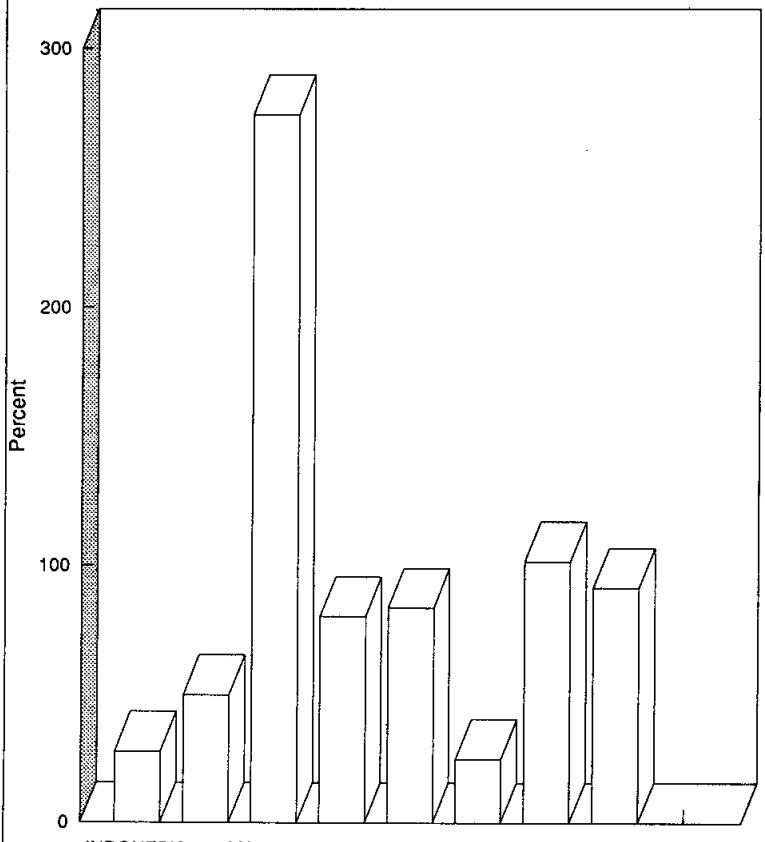
MARKET CAPITALIZATION/GDP RATIO IN THE SEACEN COUNTRIES, 1994
(In Per Cent)

Indonesia	Korea	Malaysia	Philippines
27.5	49.6	274.5	80.3

Singapore	Sri Lanka	Taiwan	Thailand
83.6	24.7	101.9	91.6

Sources: *Emerging Stock Markets Fact Book*, IFC, 1995.
SEACEN Financial Statistics, The SEACEN Centre, 1995

Figure 3.2
Market Capitalisation/GDP Ratio, 1994



must not exceed the company's net worth. Fourthly, there are prudential requirements such as the high minimum denominations, which prevent retail investment. Fifth, the development of the bond markets' infrastructure leaves much to be desired.

Table 3.14

AGGREGATE ISSUES OF DEBT SECURITIES IN SELECTED SEACEN COUNTRIES

(US $ billion)

	1987	1988	1989	1990	1991
Korea	22.04	38.85	49.69	59.52	63.97
Malaysia	3.71	3.81	2.62	3.02	2.13
Singapore	16.54	2.82	3.49	2.00	2.45
Taiwan	2.35	2.98	2.19	1.05	0.09
Thailand	1.31	1.02	0.87	0.68	n.a.

Source: Financial Market Trends, OECD, 1993.

In *Indonesia*, in the mid-1970s, the government announced reforms designed to revive the stock market in order to facilitate the mobilization of domestic equity funds. In 1976, the government established the Capital Market Executive Agency (BAPEPAM) and the National Investment Trust Company (PT Danareksa). In 1977, the first public offering of stocks on the newly revitalized exchange took place. In 1987 and 1988, the government promulgated further deregulation measures designed to enhance the capital markets. These measures included the removal of the daily price limits, the easing of listing regulations, and clarification and expansion of holding limits for foreign investors. In addition to the Jakarta Stock Exchange (JKSE), a private stock exchange, owned and operated by brokers and financial institutions, was opened in Surabaya in 1989 (The Surabaya Stock Exchange). The OTC market was legally established in 1988 in order to create an alternative source of financing for smaller companies. In 1992, JKSE

Table 3.15

STATUS OF SECONDARY SECURITIES MARKETS IN SELECTED SEACEN COUNTRIES

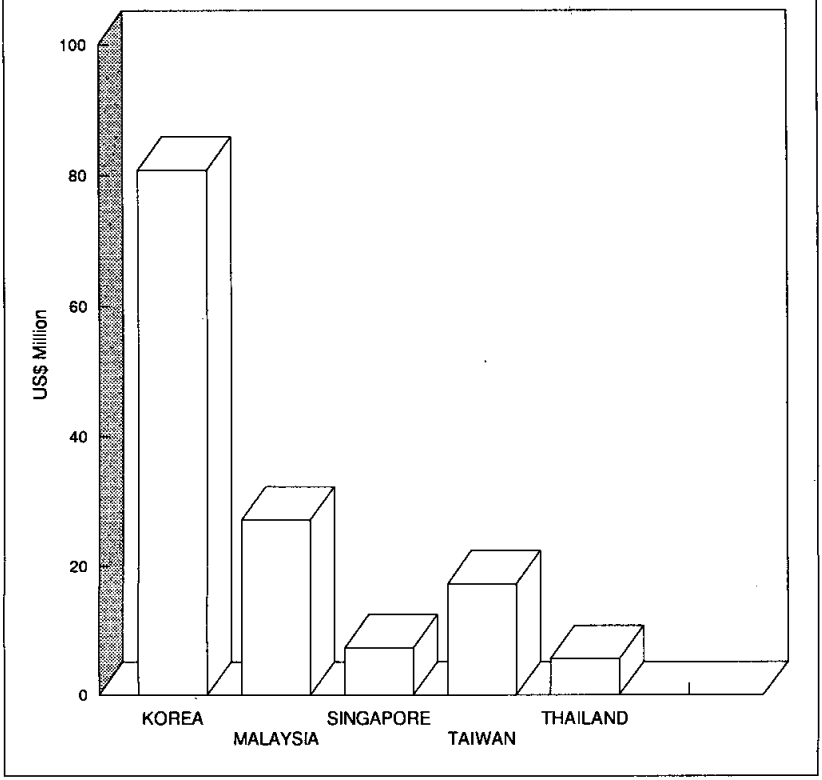
(As of December 1991)

	Korea	Malaysia	Singapore	Taiwan	Thailand
Market size ($ billion)					
Debt securities outstanding	80.82	27.16	7.40	17.29	5.71
Equity market capitalisation	96.11	59.23	58.59	123.65	35.40
Trading volume ($ billion)					
Debt securities 1/	72.40	3.21	n.a.	145.44	0.0082
Common equity	82.24	11.05	17.14	376.03	31.29
Turnover ratio					
Debt securities 1/	89.58	11.82	n.a.	841.18	0.144
Common equity 2/	85.57	18.70	29.28	304.11	91.11

1/ For Korea, including the OTC market trading volume.
2/ For Thailand, ordinary shares and preferred shares.

Source: Financial Market Trends, OECD, 1993.

Figure 3.3
Debt Securities Outstanding in Selected SEACEN Countries, 1991



was privatized. Foreign brokers have been allowed to set up joint venture brokerages with local partners since 1988. After the 1988 deregulation, the activities of the capital market have been increasing rapidly. The number of listed companies increased from 24 at the end of 1988 to 216 at the end of 1994, and the market capitalization increased from Rp. 434 billion at the end of 1988 to Rp. 103835 billion at the end of 1994. The JKSE Index jumped in 1988 due to the removal of daily price limits (from 82.58 at the end of 1987 to 305.12 at the end of 1988) and since then has maintained sustained growth with some fluctuations.

Table 3.16

STOCK MARKET TRENDS IN INDONESIA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies	24	24	24	24	57	125	141	155	174	216
Market capitalization(Rp. Bill)	131.9	132.9	112.1	434.2	4050.0	15264.6	13537.0	24839.5	69299.6	103835.2
Trading value (Rp. Bill)	3.2	1.8	5.2	6.9	957.0	7318.1	5778.3	7909.1	19088.1	25488.0
Change in index (%)	4.7	4.8	18.4	269.7	31.0	4.5	-40.8	10.9	114.6	-20.2
Market Capitalization/GDP (%)	0.1	0.1	0.1	0.3	2.4	7.6	6.0	9.4	22.7	27.5

Source: *Emerging Stock Markets Fact Book*, IFC, 1995.

In the Indonesian bond market, the number of companies issuing bonds and the value of bonds increased substantially in 1989 due to the deregulation policies introduced in 1988 and since then has been recording sustained growth. Nevertheless, the Indonesian bond market is still small compared to other member countries. In Indonesia, most of bonds have been issued by Indonesia's development banks, the toll road authority, or by middle-income housing finance institutions (government agency). On the other side, banks have become major purchasers due to their excess liquidity and the favorable regulatory cli-

mate. It is estimated that 50 per cent of current investors are banks, 30 per cent pension funds, and 20 per cent, other institutional investors. As banks are not buy-and-hold investors, this has led to the development of the OTC secondary market. The RPs market is quite small and currently exists between dealers and banks only. RPs are mostly used to fund secondary market activities.

In *Korea,* the operations of the modern Korean securities market commenced in 1956 with the establishment of the Korea Stock Exchange (KSE). However, for more than a decade afterwards, the market was of only minor significance in the mobilization of private savings for corporate financing. During the late 1970s and early 1980s, the securities market showed steady growth thanks to the improved environment for securities investment resulting from government policies to promote the capital market. The market was extremely brisk during the period from 1986 to 1989, reflecting a swelling trade surplus. However, since around mid-1989, the market has become inactive and bearish owing to the slowdown in economic growth and an oversupply of stocks but from 1993, the market began to revive. Internationalization of the Korean stock market had its beginning in the 1981 government announcement of a long-term blue print for capital market opening. After the issuance of the overseas Convertible Bonds (CBs) in 1985; CBs, Bonds with Warrant (BWs) and Deposit Receipts(DR) have been subsequently issued. In addition, the OTC market was officially organized in 1987.

In Korea, there are three types of bonds: government bonds, public bonds, and corporate bonds. Public bonds include local government bonds, government enterprise bonds, and Monetary Stabilization Bonds. The bond issue market enjoyed steady growth until the mid-1980s mainly due to the rapid growth of the market for corporate bonds. However, since the latter half of the 1980s, the issue of corporate bonds was somewhat crowded out by that of government and public bonds, reflecting the marked expansion in the issuance of MSBs. The issue rates of most government and public bonds have been determined to reflect prevailing market interest rates since 1993 when the second stage of the interest rate deregulation plan was implemented. The majority of corporate bonds are issued in the form of fixed rate coupon bonds, guaranteed by financial institutions such as commercial banks, the Credit Guarantee Fund, investment and finance companies, and securities companies. Interest rates on non-guaranteed bonds have

Table 3.17

BOND MARKET TRENDS IN INDONESIA

(Rp. Billion)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Value of Issued Bonds (million Rp.)	94.7	154.7	254.7	404.7	535.7	855.7	1495.2	1890.2	2215.2	3022.9
Number of Companies	3	3	3	3	3	7	21	23	24	25

Source: Bank Indonesia

Table 3.18

STOCK MARKET TRENDS IN KOREA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies	342	355	389	502	626	669	686	688	693	699
Market Capitalisation (won million)	6,570,403	11,994,200	26,163,050	64,543,684	95,476,773	79,019,675	73,117,833	84,711,982	112,665,260	151,217,230
Trading Value (won million)	3,620,600	9,597,965	20,497,444	58,081,409	81,199,753	53,454,058	62,564,888	90,624,380	169,919,588	229,771,896
Change in index (%)	14.7	66.9	92.6	72.8	0.3	-23.5	-12.2	11.0	27.7	18.6
Market capitalisation/GDP (%)	7.9	13.1	25.0	54.0	66.0	45.1	32.7	34.9	42.1	49.6

Note: End of period

Source: Emerging Stock Markets Fact Book, IFC, 1995.

Table 3.19

OTC STOCK MARKET TRENDS IN KOREA

(As of the end of period)

(number/won billion)

	Number of registered companies	Capital stock of registered companies	Value of traded stocks 1/
1988	27	32.4	4.3
1989	47	105.6	13.5
1990	66	203.4	11.7
1991	77	857.7	8.8
1992	126	1470.1	101.5
1993	209	2711.1	140.6
1994	310	3308.1	332.0
1995	321	3732.8	137.1

1/ During the period.

Source: Financial System in Korea, The Bank of Korea, 1995.

been freely determined since 1984. Those on guaranteed bonds were deregulated in 1991 for bonds with maturities of two years or more, and in 1993 for all maturities. In the secondary market, above 90 per cent of the total trading takes place in the OTC market. Recently the trading of bonds has shown remarkable expansion, mainly due to the comparatively high retursn on bonds and the rapid expansion of institutional investors such as securities investment trust companies and life insurance companies.

One of salient features in the Korean capital market is the substantial increase in the investment of institutional investors such as life insurance companies, securities investment trust companies, pension fund and other financial institutions. The share of institutional investors' investment in total investment on corporate bonds and stocks increased from 9.5 per cent in end of the third quarter of 1995. The share of institutional investors' investment in total investment on stocks was of third quarter of 1995. In the case of the corporate bond market, the share recorded 92.2 per cent at the end of third quarter of 1995. These trends indicate that inviduals prefer holding indirect securities issued by institutional investors to investing directly on stocks or bonds and that a large share of funds raised in the capital markets is channelled through institutional investors.

Table 3.20

THE SHARE OF INSTITUTIONAL INVESTORS' INVESTMENT IN KOREA

	1970	1980	1990	3rd Qtr. 1995
Corporate bonds	83.3	76.4	89.9	92.2
Stocks	6.5	15.4	37.6	45.0
Total	9.5	30.7	50.3	54.3

Note: The end of period outstanding.

Source: The Bank of Korea

Table 3.21

TRENDS OF CORPORATE BOND ISSUANCE IN KOREA

(During the period)

(won billion %)

	Guaranteed Bonds	Non-Guaranteed Bonds	Mortgage Bonds	Total	Outstanding Balance 1/
1980	963.7 (100.0)	-	-	963.7 (100.0)	1839.2
1985	2905.7 (91.5)	224.6 (7.1)	46.4 (1.5)	3176.7 (100.0)	7395.6
1986	2411.9 (88.4)	297.8 (10.9)	19.2 (0.7)	2728.9 (100.0)	8747.0
1987	2779.1 (87.1)	390.0 (12.2)	20.5 (0.7)	3189.6 (100.0)	10116.1
1988	4191.0 (98.7)	30.3 (0.7)	23.0 (0.6)	4244.3 (100.0)	11885.5
1989	6157.5 (88.5)	791.0 (11.4)	10.5 (0.1)	6959.0 (100.0)	16320.6
1990	9197.7 (83.0)	1870.4 (16.9)	15.5 (0.1)	11083.6 (100.0)	24067.8
1991	10978.3 (86.2)	1762.4 (13.8)	-	12740.7 (100.0)	31382.3
1992	8332.9 (74.7)	2822.4 (25.3)	-	11155.3 (100.0)	35384.0
1993	11193.1 (71.8)	4405.2 (28.2)	-	15598.9 (100.0)	39890.0
1994	11455.3 (57.2)	8578.0 (42.8)	-	20033.2 (100.0)	47928.7
1995	5777.1 (62.5)	3464.6 (37.5)	-	9241.7 (100.0)	53070.1

1/ As of the end of period.
2/ Figures in parentheses indicate percentages of the total.

Source: Financial System in Korea, The Bank of Korea, 1995.

Table 3.22

TRENDS OF GOVERNMENT AND PUBLIC BOND ISSUANCE IN KOREA

(During the period)

(Won Billion %)

	Government Bonds	Municipal Bonds	Special Bonds	Total
1980	1054.2 (68.0)	24.3 (1.6)	471.6 (30.4)	1550.1 (100.0)
1985	1369.0 (25.7)	63.6 (1.2)	3896.7 (73.1)	5329.3 (100.0)
1986	1519.6 (19.3)	66.1 (0.8)	6307.0 (79.9)	7892.7 (100.0)
1987	4474.8 (28.9)	90.0 (0.6)	10928.1 (70.5)	15493.0 (100.0)
1988	4999.6 (20.9)	116.5 (0.5)	18777.7 (78.6)	23893.8 (100.0)
1989	7045.2 (22.8)	172.8 (0.6)	23635.8 (76.6)	30853.8 (100.0)
1990	9657.3 (26.8)	260.0 (0.7)	26101.8 (72.5)	36019.1 (100.0)
1991	8613.1 (22.5)	334.2 (0.9)	29355.8 (76.6)	38303.1 (100.0)
1992	8548.0 (18.4)	348.5 (0.8)	37436.6 (80.8)	46333.1 (100.0)
1993	10350.6 (25.0)	426.2 (1.0)	30682.1 (74.0)	41458.9 (100.0)
1994	9346.6 (20.5)	41.0 (0.1)	36194.3 (79.4)	45581.9 (100.0)
1995 1~6	4401.7 (12	223.7 (0.6)	30840.7 (87.0)	35466.1 (100.0)
Outstanding balances (1995.6)	23526.8 (29.0)	2291.0 (2.8)	55281.4 (68.2)	81089.2 (100.0)

1/ Figures in parentheses indicate percentages of the total.

Source : Financial System in Korea, The Bank of Korea, 1995.

In *Malaysia*, the Kuala Lumpur Stock Exchange (KLSE) was established in 1973. Until the end of 1989, the KLSE and the Stock Exchange of Singapore (SES) had enjoyed dual listing of companies. On January 1990, the KLSE and the SES were separated. After the separation, 133 Malaysian companies could still be traded in the OTC market in Singapore known as CLOB International. The development of the stock market in Malaysia has been a steady evolution process during the last two decades. The market has been allowed to function freely in a market-oriented environment. Market capitalization of the KLSE has ballooned 64 times from RM8 billion in 1974 to RM509 billion in 1994, while the annual turnover has skyrocketed. Rising income levels, the growing interest of the public in the stock market, the privatization of government projects, and the relative attractiveness of raising equity capital have contibuted to the significant growth of the market. Indeed, privatization and the listing of large privatized enterprises such as EON, Telekom, HICOM, and Tenaga Nasional Berhad have stimulated a lot of public interests in the stock market. The ability of the economy to absorb the increase in new issues was largely due to the high savings rate in Malaysia. A second board was formed in November 1988 to enable fast-growing expansion. Besides equities, loan stock and Transferable Subscription Rights (TSR) are also traded on the KLSE.

Since the 1980s, a number of measures has been introduced to promote the stock market. The major ones include the SCANS (Securities Clearing Automated Network Services) which was introduced to provide instantaneous real time price information to brokers and investors, SCORE (System of Computerized Order Rerouting and Execution) which was implemented in 1989 to improve and to replace the old cry system of placing and matching sell and buy orders. FDSS (the Fixed Delivery and Settlement Sustem) which was introduced in 1990 to bring about a more efficient clearing system, the Rating Agency Malaysia (RAM) which was set up in 1992, the CDS (Central Depository System) which was introduced in 1992 to further upgrade its services by resolving the problems of physical deliveries of scrips and finally the Securities Commission which was established in 1993.

One institutional investor, the Employees Provident Fund (EPF), plays an important role in the stocks and corporate bonds market. Before June 1991, the EPF had to invest 70 per cent of its net increase in investible funds in Malaysian Government Securities (MGS). However, according to the new Act which came into force on June 1991,

the EPF has to invest only 50 per cent in MGS, which increased the amount of EPF funds available for investment in the equities and corporate bonds markets.

The Malaysian bond market is dominated by Malaysian Government Securities (MGS) and shorter-dated TBs. Bank Negara Malaysia, the central bank, has recently issued a short-term paper known as Negarabills to control the excess liquidity in the money market. Between 50 and 60 per cent of total outstanding Malaysian government bonds are held by the Employees Provident Fund. Insurance companies hold approximately 20 per cent, while banks and others hold the balance. In the 1980s, the government of Malaysia implemented a number of financial reforms to liberalize the MGS market. In 1989, the financial reforms were put in place to achieve market-related pricing in primary issues and at the same time, facilitate secondary market trading. A system of principal dealers for government securities was introduced. Only the principal dealers may have access to the central bank's rediscount window, while the central bank's open market operations are conducted though these dealers only. Individual financial institutions with excess liquidity or which are short of funds have to square their positions in the market, and not with the central bank. Securities with maturity period of up to 10 years are issued by way of auction through the principal dealers. A Scripless Securities Trading System (SSTS) was introduced in 1990.

The Malaysian private debt securities market came into existence only in the second half of the 1980s and it is still in the early stages of development. The first major measure to promote the private debt securities market is the setting of Cagamas Berhad, the national mortgage corporation in 1986. Its role is to purchase housing loans from loan originators and repackage them into bearer fixed rate bonds. The success of Cagamas bonds has encouraged several large corporations to raise funds by issuing term notes on a floating or fixed rate basis. The emergence of the private debt securities market was assisted by favorable domestic monetary conditions, ample liquidity and a low and stable interest rate during the period from 1987 to mid-1980. In order to make the market viable, a credit rating agency called the Rating Agency Malaysia Berhad (RAM) was incorporated in 1990 and the Securities Commission was established in 1993. Additionally, the Kuala Lumpur Options and Financial Futures Exchange (KLOFFE) was incorporated in 1992 to undertake activities in the options and financial

Table 3.23

STOCK MARKET TRENDS IN MALAYSIA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies	222	223	232	238	251	282	321	369	410	478
Market Capitalisation (ringgit million)	39,380	39,214	46,106	63,193	107,513	131,166	159,495	245,820	593,343	508,850
Trading Value (ringgit million)	5,799	3,046	9,647	6,858	18,638	29,391	29,294	55,347	395,554	331,384
Change in index (%)	-23.1	8.1	3.5	36.8	58.2	-10.0	9.9	15.8	98.0	-23.8
Market capitalisation (GDP %)	52.0	54.3	58.6	67.1	106.3	113.7	124.4	162.0	342.0	274.5

Note: End of period

Source: Emerging Stock Markets Fact Book, IFC, 1995.

futures market. In 1993, Bank Negara Malaysia liberalized bond issues, allowing companies to issue private debt securities with maturities of as long as 12 years. Increasingly, Malaysian companies are relying more on the capital market rather than bank borrowings to finance their business operations and expansions.

The Stock Exchange of Nepal (SEN) started operating in 1976 but equity shares were traded only in 1984 when the government attempted to raise capital for manufacturing- based industries. The SEN is still in the early stage of development. The dominance of the government on non-agricultural economic activities has limited private companies from issuing their own financial instruments. Consequently, the narrow capital market is heavily dominated by government securities which accounts for 96 per cent of the total. Corporate stocks account for 4 per cent only. The number of listed companies stood at only 62 in 1993 and they offer about 15 to 50 per cent of their issued capital in the open market. The limited number of listed companies and the small portion of their equity allotted to the general public have further thwarted the development of the Nepalese capital market.

The Nepalese bond market is dominated by government securities. The Nepal Rastra Bank (NRB) is authorized to conduct the trading of government securities. It conducts its open market operations with government securities. The NRB has issued various government securities such as Development Bonds (DBs), National Savings Certificates (NSCs) and Special Bonds, in addition to TBs. Since there is no dealer, the Securities Exchange Centre, commercial banks, and the NRB sell the government securities. Only NSCs and TBs are marketable. Before 1984, there were only two commercial banks so that only these banks were the main participants in the government securities market. Since 1984, the number of banking institutions and NBFIs have increased, and interest rates on NSCs as well as TBs have risen. With the introduction of NSCs in 1984, participants in the government securities market and the volume of the securities have increased. Furthermore in 1992, in order to mop up excess liquidity in the economy, the authorities made it mandatory for commercial banks to maintain 24 per cent of their total deposit liabilities in the form of government bonds and NRB bonds in addition to the 12 per cent statutory reserve requirements, which contributed the growth of the market. However, the Nepalese bond market is to still in the early stages of development. The main obstacles are the lack of marketable securities, the limited

Table 3.24

BOND MARKET TRENDS IN MALAYSIA

(Million RM)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Value of Issued Bonds 1/	3320.0	4200.0	6450.0	4266.9	5292.1	4900.0	5200.0	9245.0	9845.3	7137.9	8043.4	5766.3	8411.5
Corporate Bonds (Gross)	20.0	0.0	50.0	136.9	392.1	0.0	0.0	395.0	1795.3	1952.7	2602.8	1966.3	4111.5
Government and Public Bonds (Gross)	3300.0	4200.0	6400.0	4130.0	4900.0	4900.0	5200.0	8850.0	8050.0	5185.2	5440.6	3800.0	4300.0
Value of Traded Bonds 2/	-	-	-	-	-	-	-	-	-	19080.0	22297.0	7764.0	7183.0

1/ Book value
2/ Data before 1989 is not available. Refers to Cagamas bonds and MGS only.

Source: Bank Negara Malaysia

Table 3.25

STOCK MARKET TRENDS IN NEPAL

Particulars	1986	1987	1988	1989	1990	1991	1992	1993
Number of Listed Companies	16	23	27	36	41	46	55	62
Paid-up value of listed shares (Rs. in million)	341	419	524	684	789	-	-	-
Market Capitalisation (Rs. million)	548	988	1089	1509	1775	-	-	-
Total Annual Turnover (Rs. million)	10.1	8.1	7.7	30.0	25.3	-	-	-

Source: Nepal Rastra Bank

number of participants in the market and the underdevelopment of the secondary market.

Table 3.26

BONDS MARKET TRENDS IN NEPAL

(Rupees Million)

	1980	1984	1989	1992	Mar. 1993
DBs	650.0	1810.0	5086.6	5132.2	3322.9
NSCs	-	500.0	2196.5	4546.3	4821.5
Special Bonds	177.3	197.1	4431.8	10073.2	8144.7
Others					1946.9
Total	827.3	2507.1	11714.9	19751.7	18236.0

Note: End of period outstanding.

Source: The Nepal Rastra Bank.

In *the Philippines*, the Manila Stock Exchange (MSE) was incorporated in 1927 as a voluntary and non-profit making organization patterned after the New York Stock Exchange. It is one of the oldest stock markets in Asia. In 1936, the Securities and Exchange Commission was set up. The few market booms which occurred during the last two decades were associated with the rise in oil prices in the 1970s, the people's revolution in 1986, and copper price increases in 1989. Generally, however, the market is rather inactive. The number of listed companies actually deceased from 194 in 1980 to 189 in 1994. The Makati Stock Exchange was established in 1964. It is, however, practically unified with the Manila Stock Exchange. For example, listing in one exchange automatically guarantee listing on the other.

The Philippines domestic bond market is not significant in size and corporations are not active issuers. Since the Philippines capital market is underdeveloped, the tax structure irrational, and the interest rates unstable, investors prefer short-term government debt instruments. Accordingly, the growth of the secondary market for medium- and long-term government securities lags behind, while the market for short-term debt instruments is relatively well developed. Two basic instruments are often used to conduct open market operations - Repurchase Agreements and Outright Contracts. For short-term effects, the central bank utilizes Rps, while for a long-term objective on reserve base change, the central bank undertakes outright sales or the purchases of securities.

The Singapore Stock Exchange (SSE) was incorporated in 1973 when Singapore was separated from Malaysia with the termination of currency interchangeability between the two countries. Since 1975, listed companies have been assigned to either the first trading section or second trading section. With the delisting of Malaysian counters from the main board at the beginning of 1990, international and regional securities are traded on the Clob International, the OTC market. The Singapore Exchange suffered a setback in 1985 but has since made steady progress. The tight regulations have, however, implied that the number of listings has grown rather more slowly than elsewhere. In Singapore, there are no foreign exchange controls on the trading of securities and also no restrictions on the acquisition of securities by foreign investors. Foreign ownership is restricted only in certain companies. No restrictions exist on the acquisition of foreign securities by residents.

The Singapore government created a task force in 1985 to study the possibility of a fixed income security market. Until then, there has been no pressing need for such a market as development financing was provided for in a large part by the Post Office Savings Fund and the Central Provident Fund. Moreover, monetary policy was based on foreign exchange swaps, complemented by direct lending and borrowing in the market. However, it was decided that a government bond market would provide another source of investment without default risk. The Singapore government securities market was restructured in 1987. Since its revamp, taxable book-entry (scripless) government securities with maturities ranging from 3 months to 7 years have been issued regularly by auction at market-determined interest rates. The government bond

Table 3.27

STOCK MARKET TRENDS IN THE PHILIPPINES

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies	138	130	138	141	144	153	161	170	180	189
Market Capitalisation (pesos million)	12,741	41,214	61,108	88,592	260,470	161,219	266,648	353,139	1,088,819	1,354,660
Trading Value (pesos million)	2,067	11,471	31,352	18,251	50,730	28,569	40,330	77,002	180,741	364,226
Change in index (%)	32.1	223.8	91.4	3.5	31.2	-41.0	76.7	9.1	154.4	-12.8
Market capitalisation (GDP %)	2.2	6.7	8.8	11.1	27.3	13.0	21.9	25.3	72.8	80.3

Note: End of period

Source: Emerging Stock Markets Fact Book, IFC, 1995.

Table 3.28

BOND MARKET TRENDS IN PHILIPPINES

(Pesos million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Value of Issued Government and Public Bonds 1/	34,000	38,200	46,714	48,599	69,590	94,890	123,711	150,300	197,296	227,200	245,040	333,461	508,278

1/ Government and public bonds consist of issues of the National Government, selected government corporations, and the Central Bank.

Source: Bangko Sentral ng Pilipinas

Table 3.29

OUTSTANDING GOVERNMENT SECURITIES IN THE PHILIPPINES (Exclusive of Foreign-Denominated)

(Million Pesos)

Year End	Total	National Government	Government Corporate	Central Bank
1980	31,020.0	18,402.5	1,178.4	11,439.1
1981	35,527.8	14,431.8	1,278.4	10,061.4
1982	41,840.2	31,014.1	2,671.3	8,154.8
1983	42,860.9	33,989.9	3,841.3	5,029.7
1984	63,522.6	47,564.5	4,305.6	11,652.5
1985	89,164.7	59,399.3	4,412.0	25,353.4
1986	118,819.5	88,878.2	6,279.9	23,662.0
1987	146,586.1	141,567.2	4,352.3	666.6
1988	195,111.3	187,290.7	3,854.9	3,965.7
1989	225,264.0	217,600.4	1,620.8	6,042.8
1990	243,377.9	237,450.1	1,899.6	4,028.2
1991	331,953.3	282,257.3	2,186.6	46,509.4
1992	514,557.2	435,539.9	2,350.4	76,666.9

Source: Bangko Sentral ng Pilipinas

Table 3.30

STOCK MARKET TRENDS IN SINGAPORE
(US$ Billion)

	1985	1986	1987	1988
Number of Listed Comp.	122	122	127	132
Market Capitalization	11.1	16.6	17.9	24.0
Value Traded	1.4	2.7	6.9	4.5
Market Cap./GDP (%)	13.0	19.5	19.7	23.4

1989	1990	1991	1992	1993	1994
136	150	166	163	178	240
35.9	34.3	47.6	48.8	132.7	134.5
13.7	20.3	18.1	14.1	81.6	81.1
31.3	28.1	36.5	37.1	88.7	83.6

Source: Emerging Stock Markets Fact Book, IFC, 1995.

market in Singapore is comparable to the United States Treasury System, the only major difference being that the primary dealers are banks, not large security houses as in the US. This is also the main reason for its slow development as banks are reluctant to promote an instrument competing with bank deposits. At present, all applications for new government bonds offered on auction must be placed through 7 primary dealers. There are 37 secondary dealers among banks, merchant banks, and stockbrokering firms which deal with customers. In addition, another 63 banks have bookentry SGS accounts with the MAS for their own trading. Bonds are traded on the OTC. Activities in the secondary market has increased markedly since the revamp of the market. In 1987, the daily average turnover recorded S$ 474 million, a sharp increase from only S$8 million in 1986. The domestic bond market consists of both government and corporate issues of various maturities. However, the issues of corporate bonds have not increased

very much and most of the activities are in the form of equity-linked debt.

Apart from Japan, Singapore has the most successful futures market in Asia. The Singapore International Money Exchange (SIMEX) was established in 1984 by the Monetary Authority of Singapore (MAS). Futures trading in Singapore was brought into legal force in 1986. Most of contracts are made in non-domestic and non-fixed income underlying including the Eurodollar, Euroyen, Nikkei stock average, and gas/oil futures. SIMEX has also successfully launched a contract on the MSCI Hong Kong Index Futures which is the second stock index futures after the highly popular Nikkei futures contract.

Table 3.31

BOND MARKET TRENDS IN SINGAPORE
(S$ Million)

	Government Securities Outstanding	Government Securities Daily Average Turnover
1980	2612	9
1981	2376	11
1982	2750	13
1983	3576	8
1984	3696	7
1985	4462	12
1986	4152	8
1987	8181	474
1988	9213	445
1989	10279	254
1990	11100	225
1991	13160	208
1992	15700	280

Source: Monetary Authority of Singapore

In *Sri Lanka*, capital market development has been slow although its origins can be traced back to the beginning of the plantation economy in the early 19th century. The market became weak with the introduction of policies towards nationalization and government controls in the 1960s and early 1970s. However, since 1977, considerable attention has been given to promoting capital market activities. The Colombo Stock Exchange was set up in 1982 and the Capital Development and Investment Company was established in 1983 to provide equity financing. In 1987, the Security Council was established. Since 1990, the stock market has become more active in terms of both market capitalization and turnover. Nevertheless, the stock market of Sri Lanka is still small in terms of both market capitalization and turnover.

The Taiwan Stock Exchange (TSE) came into being in 1961 and the Securities and Exchange Law was passed to regulate the market in 1968. The first Taiwan Stock Exchange Weighted Index was complied in 1967 but it remained below 1000 for 19 years before bursting through to 1039 in 1986. In 1983, foreign investment was officially channeled into the market for the first time by the establishment of the first investment trust fund. A computer-aided trading system (CATS) was initiated by the SEC in the early 1980s to improve the speed of trading. The first computer-aided trading was done in August 1985. Since 1987, the Taiwanese stock market has become tremendously buoyant due to the world economic recovery and abundant liquidity resulting from the balance of payments surplus. Market capitalization reached a peak of NT$ 6174 billion in 1989 but has since experienced a set back. It, however, began to recover again from 1993 onwards. The Taiwan stock market has historically been a market of high turnover. With the local excessive liquidity rushing into the stock market, shares changed hands at such a frantic pace that the Taiwan stock market consistenly ranked among the top three markets in the world in terms of turnover. In 1989, the turnover ratio reached 531.7 and remained high at 323.1 in 1994.

Low inflation and the abolition of all interest rate controls have made Taiwan ripe and ready for the development of a bond market. The Taiwan bond market has been dominated by government bonds as the government has frequently resorted to bond sales for policies ranging from land reform and infrastructure development to monetary sterilization and inflation control. In particular, since 1991, the issue of the government bond, related to major infrastructural works incor-

Table 3.32

STOCK MARKET TRENDS IN SRI LANKA

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies Colombo Stock Exchange	171	171	168	176	176	175	178	190	200	215
Market Capitalisation (Rupees Million)	10,000	12,000	18,700	15,500	17,087	36,880	82,700	66,200	123,790	143,213
Trading Value (Rupees Million)	72	144	335	380	256	1,563	4,302	4,969	18,579	34,522
Change in index (%)	-	7.5	65.9	-20.9	98.2	99.1	76.2	-31.0	74.5	-0.2
Market capitalisation (GDP %)	6.1	6.6	9.1	6.7	6.1	11.4	21.6	14.9	23.4	24.7

Note: End of period

Source: Emerging Stock Markets Fact Book, IFC, 1995.

porated in the National Six-Year Economic Development Plan beginning in 1991, has increased substantially. With the substantial increase in the issue of the government bonds, the government and the central bank implemented a number of reforms on the bond market. These included changing the issuance procedure from a fixed-price allocation system among banks to an auction system among newly-licensed primary dealers, which include qualified securities companies and banks. In addition, the Taiwan Stock Exchange has had a computerized bond trading system since 1991. Bond market reforms have been successful as evidenced by the ease with which the substantial increase in bond issuance has been absorbed in the newly set-up primary market. Total outstanding central government bonds rose from NT$ 127 billion at the end of 1990 to over NT$ 550.5 billion at the end of June 1993. New offerings were well received by the investors. However, in the secondary market, the overwhelming part of bond trading still occurs on the OTC in the form of repurchase agreements. The Taiwan Stock Exchange also provides centralized bond brokering for retail accounts and has recently developed a large-lot trading system for brokers, dealers and large institutional players. Since reforms were implemented, the secondary market has grown signicantly with the emergence of new dealers and market-makers, leading to a marked improvement in bond availability and a narrowing of bid-ask price spreads. However, the market at times still suffers from bouts of illiquidity and one-sided order flow. Secondary market liquidity is expected to improve further with the introduction of interest rate derivative products on the stock exchange and with the gradual entrance of more large banks as bond dealers. Increasing competition in the recently deregulated banking and securities sectors has made their traditional business activities much more challenging, leading these firms to devote more resources to bond dealing, trading, and corporate bond underwriting, with positive consequences for the market.

So far, trading in corporate bonds has been inactive, due to the low coupon rates, the high conversion prices and long conversion periods although the growth of the government bond market gives a boost to the corporate debt market. The corporate market is dominated by state-owned corporations (e.g., Taiwan Power), with state-owned banks being also active issuers of bank debentures. Most private corporate bonds have been convertible bonds, with the exception of one or two large industrial groups with a long history of strait bond issuance. The corporate bond market has been an insignificant

Table 3.33

STOCK MARKET TRENDS IN TAIWAN

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies Taiwan Stock Exchange	127	130	141	163	181	199	221	256	285	313
Market capitalization (New Taiwan dollars Million)	415,700	548,436	1,386,065	3,383,280	6,174,164	2,681,911	3,184,028	2,545,302	5,145,410	6,501,682
Trading value (New Taiwan dollars Million)	195,200	675,655	2,668,603	7,872,393	25,407,964	19,031,282	9,682,738	5,995,748	9,056,716	18,812,112
Change in index (%)	-0.4	24.4	125.2	118.8	88.0	-52.9	1.6	-26.6	79.8	17.4
Market Capitalization/GDP (%)	16.8	19.2	47.9	98.0	160.5	63.2	70.2	48.4	89.2	101.9

Note: End of period

Source: Emerging Stock Markets Fact Book, IFC, 1995.

Table 3.34

BOND MARKET TRENDS IN TAIWAN

(NT$ million)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Value of Issued Bonds	32079	19848	24151	39671	51834	67092	85690	69773	30043	232681	265719
Corporate Bonds	2200	4100	7095	2630	3500	2300	3500	1300	3250	8800	4340
Government and Public Bonds	29879	15748	17056	37041	48334	64792	82190	68473	26793	223881	261379
Value of Traded Bonds	706	3303	21250	49057	86647	164435	352528	870792	1593053	3744964	NA
Outstanding Government Bond (NT$ Billion)	43.4	48.3	43.1	66.4	92.1	131	186	223	189	348	551

Source: The Central Bank of China, Taipei

source of funding for Taiwan's private sector. The main reason for this has been the historical ease with which a credit-worthy company could obtain bank credit on favorable terms, due to excess funds in the banking sector. It is expected that this will change in the near future, with more corporations resorting to bond issuance. In this regard, the recent successful strait bond issuance has been hailed as a turning point in the developing corporate bond market. All government bonds are automatically listed on the stock exchange and corporate bonds may also be listed. However, most trading is handled by market makers on the OTC negotiated market. It is estimated that between 90 to 95 per cent of all secondary market trading is done on an RP basis. Foreign investors have limited access to Taiwan's domestic bond market through the special programme for qualified foreign institutional investors promulgated in 1991 by the Securities and Exchange Commission (SEC).

Table 3.35

OTC MARKET BOND TRADING VOLUME IN TAIWAN

(NT $ Billion)

1988	1989	1990	1991	1992	June 1993
414	906	1593	3743	10736	6218

Source: *World Domestic Bond Markets*, Euromoney, September 1993.

The Securities Exchange of Thailand (SET) was created in 1974 and started its operation in 1975. The SET introduced the computerized trading system and automated matching process called the Automated System for the Stock Exchange of Thailand (ASSET) in 1991. In 1992, the Securities and Exchange Commission (SEC) was established. The SEC is responsible for regulating and supervising the primary market while the secondary market is left to the SET. The SEC Act sets the

procedure for the operation of the OTC market to facilitate the trading of unlisted securities. In Thailand, there was only one authorized fund management company, the Mutual Fund Company established in 1975 as an affiliate to the International Finance Corporation of Thailand. It is estimated that the Mutual Fund Company's 10 country funds for foreign investors, 7 domestic mutual funds, and 77 provident funds account for 8 per cent of the Thai stock market. Recently in 1992, the government approved another 7 mutual fund management companies to promote local institutional investors. Insurance companies were also allowed to invest more widely in the securities listed in the SET. In order to encourage the variety of securities for investors, new instruments such as the American Depository Receipts (ADRs) and the International Depository Receipts (IDRs) were recently introduced.

The stock market in Thailand has been showing steady growth since the late 1980s. In particular, a second consecutive year of double-digit economic growth from 1988 to 1989 fueled the growth of the stock market resulting in the sharp increase in the SET index from 386.7 at the end of 1988 to 879.2 at the end of 1989. The rise of the SET index since 1986 has been accompanied by an equally impressive expansion of the market itself. At the end of 1986, there were 98 listed companies and the market capitalization of US$2.9 billion was equivalent to approximately 7 per cent of GDP. When the index peaked in July 1990 at 1143.78, the market boasted almost 200 listed companies with a combined capitalization of almost US$40 billion, equivalent to 47 per cent of GDP. However, the Thailand stock market has shown a decline since the peak in July 1990 due to the Gulf crisis, coupled with rapidly rising interest rates and mounting domestic political concerns. Ironically, the decline in the share prices was exacerbated by Thailand's more liberal foreign exchange environment, which enables foreign institutional investors to repatriate funds rapidly enough to cover unit trust redemptions. The net inflow from foreign investors for stock investment in 1990 was only US$ 463 million, compared with a net inflow of US$ 1425 million in 1989. Nevertheless, Thailand's stock market regained momentum in 1993. The SET index recorded 1682.9 at the end of 1993, a sharp increase from 893.4 at the end of 1992. At the end of 1994 the number of listed companies increased to 389 and market capitalization recorded US$ 80 billion, 91.6 per cent of GDP. In addition, foreign investments in Thailand's stock market recently increased considerably in response to the provision of incentives and the favorable outlook for the market in Thailand. In particular, foreign investment volume almost doubled in 1992.

In Thailand, most bonds are issued by the government or state enterprises. Debentures can be issued by public companies and companies quoted at the SET. Since 1992, the corporate sector has also been allowed to issue bonds. Floating rate notes are issued by private enterprises, but have little appeal among investors. Secondary market trading of bonds and notes are low. Most bonds are held until maturity by banks in order to fulfill their reserve requirements. As far as trading is concerned, it is mostly done in the OTC market. The alternatives are transactions through the market. There is no central clearing system. The decentralization of the bond market is a result of the lack of up-to-date price dissemination information and adequate trading infrastructure. The fragmentation of the bond market into a large number of small series is another problem in the Thailand. Effort is being made to encourage the development of a traded market for fixed income securities. The new Securities and Exchange Act was introduced in 1992 to enforce the regulation of the OTC market, which has been in fact unregulated, and to provide for the setting up of new institutions such as a share depository and a private clearing institution. A small number of warrants and convertibles have been issued. Finally, one of the most important developments was the establishment of Thailand's first credit rating agency, Thai Rating and Information Service Co. (Tris) in 1993.

Table 3.36

FOREIGN INVESTMENT TRENDS IN THE THAILAND STOCK MARKET

(Baht Billion)

1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
238	339	1185	1596	4617	25501	40276	97285	180674	130163	267987

As a whole, the stock markets in the SEACEN countries have recorded remarkable growth since mid-1980s aided by the tremendous growth in their economies, the deregulation of financial markets, ap-

propriate government policies to encourage the development of capital markets, the privatization of state-owned enterprises and the opening of capital markets. It is also notable that the development trends of capital markets in the SEACEN countries have shown synchronization as their markets have opened. For example, the capital markets in Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand experienced simultaneously, the skyrocketing bull markets in 1989 followed by declines and recovery in 1993. On the other hand, the bond markets in the region have remained small, particularly the corporate bond markets. Long-term debt outstanding is low in Taiwan and Thailand, but somewhat higher in Korea, Malaysia and Singapore. The secondary markets in Korea, Malaysia and Thailand are relatively inactive whereas they are more active in Singapore and Taiwan. Factors responsible include the administered interest rates, regulations in favor of banks, statutory limitations on the supply of bonds, the high minimum denominations, and underdeveloped infrastructure for bond markets.

Table 3.37

STOCK MARKET TRENDS IN THAILAND

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Number of listed companies	100	98	125	141	175	214	276	305	347	389
Market Capitalisation (baht million)	49,457	75,200	138,170	221,958	656,842	604,566	897,159	1,485,019	3,325,393	3,300,769
Trading Value (baht million)	15,438	29,807	119,179	141,473	344,778	584,154	767,056	1,830,026	2,201,148	2,018,955
Change in index (%)	-5.1	53.5	37.5	35.7	127.3	-30.3	16.1	25.6	88.4	-19.2
Market capitalisation (GDP %)	5.0	6.9	11.3	14.8	37.0	29.7	39.0	56.4	108.5	91.6

Note: End of period

Source: Emerging Stock Markets Fact Book, IFC, 1995.

Table 3.38

BOND MARKET TRENDS IN THAILAND

(Baht Million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Value of Issued Bonds	15450.4	19274.7	27167.7	19435.0	30868.8	33130.5	43541.5	33325.2	24078.4	24010.5	19099.3	39883.8	37995.9
Corporate Bonds	-	-	100.0	-	100.0	280.0	200.0	2250.0	3401.0	4292.4	3906.0	6510.0	5950.3
Government and Public Bonds 1/	15450.4	19274.7	27067.7	19435.0	30768.4	32840.5	43341.5	31075.2	20677.4	19719.1	15193.8	33273.8	32045.6
Value of Traded Bonds 2/	10.0	376.5	87.8	300.4	273.0	1149.8	4854.8	1282.4	192.1	30.9	70.5	76.5	0.3

1/ Government and Public Bonds also include the state enterprise bonds issued in each year.
2/ Valued of Traded Bonds data is collected from transactions in the Stock Exchange of Thailand (SET), excluding the transactions in over-the-counter (OTC) market.

Source: The Bank of Thailand

Table 3.39

GOVERNMENT BONDS OUTSTANDING IN THAILAND

(As of the end of year)

(Baht billion)

Holders	1980 (%)		1981 (%)		1982 (%)		1983 (%)		1984 (%)		1985 (%)		1986 (%)		1987 (%)		1988 (%)		1989 (%)		1990 (%)		1991 (%)		1992 (%)	
Commercial banks and financial institutions	35.6	41.4	39.0	38.5	55.8	43.7	62.3	42.8	85.2	50.5	95.1	50.1	123.7	55.7	139.9	59.7	147.0	69.1	152.0	75.6	149.6	76.8	107.8	71.63	94.5	70.73
BOT	35.7	41.6	47.8	47.2	51.1	40.0	58.6	40.2	56.5	33.5	60.8	32.0	61.7	27.8	58.6	25.0	31.8	15.0	23.4	11.6	29.7	15.2	33.5	22.26	32.9	24.63
GSB	9.8	11.4	9.2	9.1	9.2	7.2	9.1	6.2	8.3	4.9	7.9	4.2	8.2	3.7	6.5	2.8	2.8	1.3	1.0	0.5	-	-	-	-	-	-
Others	4.8	5.6	5.2	5.1	11.6	9.1	15.7	10.8	18.8	11.1	26.1	13.7	28.4	12.8	29.5	12.6	31.5	14.6	24.7	12.3	15.6	8.0	9.2	6.11	6.2	4.65
	85.9	100.0	85.9	100.0	127.7	100.0	145.7	100.0	168.8	100.0	189.9	100.0	222.0	100.0	234.5	100.0	212.7	100.0	201.1	100.0	194.9	100.0	150.5	100	133.6	100

Source: The Bank of Thailand

PART IV

Financial Disintermediation in the SEACEN Countries

During the last decade, financial disintermediation has been occuring in the SEACEN countries, as in most developed countries. This is with the exception of Taiwan where direct financing as a share of total financing of the corporate sector has been more or less stable due mainly to abundant liquidity in the banking sector. In the SEACEN countries, financial disintermediation has been fueled mainly by the considerable growth of the capital markets during the period. In particular, the growth of the stock markets have contributed substantially to the deepening of financial disintermediation in most SEACEN countries. The bond and commercial papers markets have yet to contribute very much to direct financing in most SEACEN countries since both markets are still small and narrow.

In *Korea*, financial disintermediation has been deepening consistently at a considerably high rate since the 1980s. The share of direct financing to total financing of the corporate sector increased from 22.0 per cent in 1980 to 51.0 per cent in 1995. The share of financing from the stock market increased from 7.3 per cent to 14.4 per cent and that from the bond market increased from 8.9 per cent to 14.9 per cent over the same period. The substantial growth of the capital market over the period has greatly contributed to financial disintermediation. The share of the commercial papers market has remained at a stable level for long time. However, in 1993 it jumped to 13.9 per cent from 7.9 per cent in 1993 and recorded a high of 16.1 per cent in 1995. This was a result from an increase in the issuance of commercial papers of the corporate sector to make up for unsatisfactory borrowings from financial institutions. On the other hand, the share of bank loans to total financing of the corporate sector decreased from 21.3 per cent to 15.0 per cent while that of non-bank loans increased from 13.5 per cent to 16.9 per cent over the same period. In particular, the share of non-bank loans has been higher than that of bank loans since 1990 reflecting the vigorous business activities of the non-bank sector. As a whole, the role of the banking sector in the Korean financial market has declined markedly over the years. (see Table 4.1 and Figure 4.2).

In *Malaysia*, financial disintermediation has been in evidence since the later part of the 1980s. The direct financing ratio of the corporate

Figure 4.1
Direct Financing/Total Financing Ratio in Selected SEACEN Countries

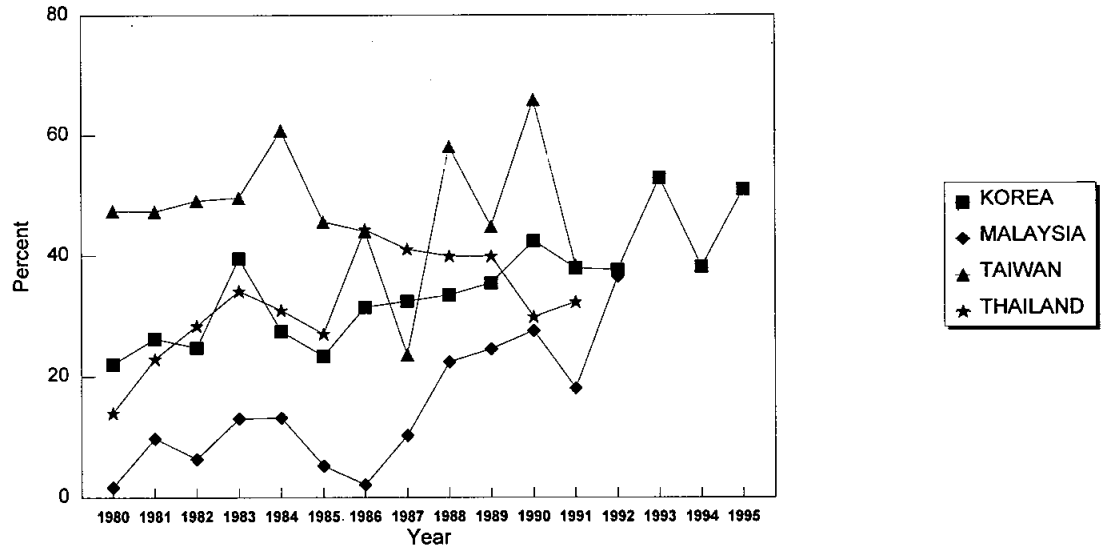


Table 4.1

KOREA

EXTERNAL FUNDS RAISED BY THE CORPORATE SECTOR

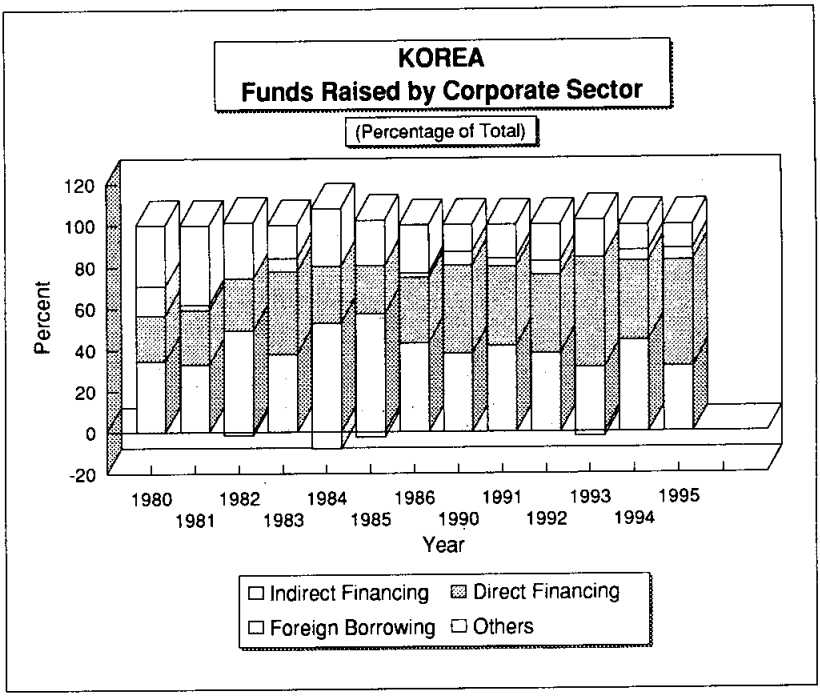
(Billion Won)

	1980	1981	1982	1983	1984	1985	1986	1990	1991	1992	1993	1994	1995
Indirect financing	3471.5	3350.1	5038.3	3857.3	6014.8	7569.9	5891.4	19472.1	24343.1	20179.8	20373.2	39649.6	31874.4
Per cent of total	34.8	33.1	49.6	38.1	52.9	57.4	43.3	38.4	41.8	38.2	31.4	44.5	31.8
Banks	2126.5	1704.5	2745.4	2000.7	2350.2	4612.2	4637.2	7994.8	11540.5	8477.4	8486.5	18441.9	14990.6
Per cent of total	21.3	16.8	27.0	19.7	20.7	35.0	34.1	15.8	19.8	16.0	13.1	20.7	15.0
Non-banks	1345.0	1645.6	2292.9	1856.6	3664.5	2957.7	1254.2	11477.3	12802.6	11702.4	11886.6	21207.7	16883.8
Per cent of total	13.5	16.3	22.6	18.3	32.2	22.4	9.2	22.6	22.0	22.2	18.3	23.8	16.9
Direct Financing	2197.7	2647.4	2512.7	4001.2	3120.7	3077.6	4275.4	21512.1	22079.1	19866.1	34377.0	33939.9	51070.7
Per cent of total	22.0	26.2	24.7	39.5	27.4	23.3	31.4	42.4	37.9	37.6	52.9	38.1	51.0
Stocks	729.3	737.1	835.5	1106.8	949.2	1897.3	1403.0	5986.7	6664.9	6451.6	9541.6	13198.2	14444.5
Per cent of total	7.3	7.3	8.2	10.9	8.3	14.4	10.3	11.8	11.5	12.2	14.7	14.8	14.4
Bonds	892.3	961.6	1068.0	2026.3	2261.1	1127.0	1460.8	10931.2	14065.0	6616.3	12679.7	12956.2	14958.2
Per cent of total	8.9	9.5	10.5	20.0	19.9	8.5	10.7	21.5	24.2	12.5	17.9	14.6	14.9
Commercial Paper 1/	576.2	948.7	609.1	868.0	-89.6	53.3	1411.6	1901.8	-2210.6	4182.5	9016.7	4405.0	16096.2
Per cent of total	5.8	9.4	6.0	8.6	-0.8	0.4	10.4	3.7	-3.8	7.9	13.9	4.9	16.1
Foreign Borrowing	1381.5	256.2	-143.2	680.2	-909.7	-314.4	304.3	3247.0	2402.4	3583.0	-1453.0	4407.3	5567.6
Per cent of total	13.8	2.5	-1.4	6.7	-8.0	-2.4	2.2	6.4	4.1	6.8	-2.2	4.9	5.6
Others	2935.0	3867.7	2746.5	1593.6	3143.2	2858.4	3134.8	6517.2	9355.4	9200.0	11685.0	11043.6	11656.2
Per cent of total	29.4	38.2	27.0	15.7	27.6	21.7	23.0	12.8	16.1	17.4	18.0	12.4	11.6
TOTAL	9985.7	10121.4	10154.3	10132.3	11369.0	13191.5	13605.9	50748.4	58180.0	52828.9	64981.6	89040.5	100168.9
Per cent of total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Refers to the net increase in outstanding commercial papers.

Source: Bank of Korea

Figure 4.2


KOREA
Funds Raised by Corporate Sector
(Percentage of Total)
Percent
120
100
80
60
40
20
0
-20
1980
1981
1982
1983
1984
1985
1986
1990
1991
1992
1993
1994
1995
Year
Indirect Financing
Direct Financing
Foreign Borrowing
Others

sector increased from 22.3 per cent in 1988 to 36.5 per cent in 1992, propelled by the growth of the stock market. The share of financing from stock market increased from 7.4 per cent to 25.8 per cent over the same period. The share of financing from commercial papers also increased from 0.8 per cent to 1.9 per cent over the same period. However, that from bond market decreased from 14.2 per cent to 8.8 per cent. On the other hand, the indirect financing ratio decreased substantially from 84.3 per cent in 1989 to 51.4 per cent in 1992. In the case of indirect financing, the share of bank loans dropped rapidly, while the share of non-bank loans increased. In short, the importance of the stock market and non-bank loans is becoming greater, while that of conventional bank loans is shrinking in the financing of the corporate sector in Malaysia (see Table 4.3 and Figure 4.3).

In *Singapore*, detailed data on financial disintermediation are not for available this study. However, net capital raised in the stock market by the private sector has shown an increasing pace in recent years.

Table 4.2

NET CAPITAL RAISED IN STOCK MARKET IN SINGAPORE

S$ Million

1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
863.5	1131.5	830.4	1068.1	743.2	495.4	84.0	1353.9	944.0	1077.8	3036.6	1057.7	2434.2

Source: Monetary Authority of Singapore

Taiwan is a unique country, among the SEACEN countries surveyed, as financial disintermediation has not deepened during the last decade. The share of direct financing has remained more or less stable with some fluctuations. The ratio was 47.4 per cent in 1980, 44.8 per cent in 1989, 65.9 per cent in 1990 and 38.3 per cent in 1991 reflecting mostly the development of the stock market. It is however interesting

to note, that the share of corporate financing from the stock market is already at high levels compared to other SEACEN countries. The share of corporate financing from commercial papers has remained low and that from the bond market is still at negligible levels since liquidity in the banking sector is abundant. As a result, the bond market has not been well developed. On the other hand, in the case of indirect financing, the share of borrowings from financial institutions has remained somewhat stable recording 36.6 per cent in 1980 and 39.4 per cent in 1991. On the whole, liquidity has been abundant due mainly to the continuous surplus in the balance of payments, which has helped the corporate sector to have easy access to borrowings from financial institutions. It has also resulted in a buoyant stock market. (Table 4.4 and Figure 4.4).

In *Thailand*, financial disintermediation has also been occuring substantially during the last decade. The share of direct financing increased from 13.9 per cent in 1980 to 31.8 per cent in 1990. In the case of direct financing, the share of financing from share capital increased from 7.4 per cent to 16.2 per cent and that from commercial bills rose from 5.5 per cent to 15.1 per cent. In contrast, financing that from debentures has remained at a low levels over the same period. It is distinctive that the contribution of commercial bills to direct financing has risen considerably in Thailand. Another point worth noting is that an increase in domestic direct financing, in particular, has contributed not only to the lowering of borrowings from domestic financial institutions but also to the lowering of foreign borrowings. The share of foreign borrowings to total corporate financing decreased from 59.2 per cent in 1980 to 38.8 per cent in 1990. This implies that the development of the capital market and, as a result, an increase in direct financing has resulted in successful domestic resource mobilization in Thailand. As for the share of indirect financing, it has remained more or less stable at 26.1 per cent in 1980 and 27.6 per cent in 1990. It is noteworthy that the share of short-term loans decreased from 15.0 per cent in 1980 to 6.7 per cent in 1990, while that of long-term loans increased from 7.3 per cent to 20.0 per cent in 1990 (see Table 4.5 and Figure 4.5).

Table 4.3

MALAYSIA

EXTERNAL FUNDS RAISED BY THE CORPORATE SECTOR

(RM Million)

	1980	1981	1982	1983	1984	1985	1986	1988	1989	1990	1991	1992
Indirect financing	7824.0	6816.0	5431.0	5265.0	10518.0	10574.0	9312.0	12772.0	16060.0	31283.0	30150.0	18276.0
Per cent of total	98.3	73.0	54.8	54.0	69.9	85.1	103.0	100.9	84.3	77.1	79.6	51.4
Borrowing from financial insts. 1/	7824.0	6816.0	5431.0	5265.0	10518.0	10574.0	9312.0	12772.0	16060.0	31283.0	30150.0	18276.0
Per cent of total	98.3	73.0	54.8	54.0	69.9	85.1	103.0	100.9	84.3	77.1	79.6	51.4
Banks	-	-	-	-	-	-	-	-	15782.0	23395.0	25915.0	12590.0
Per cent of total	-	-	-	-	-	-	-	-	82.9	57.7	68.4	35.4
Non-banks	-	-	-	-	-	-	-	-	278.0	7888.0	4235.0	5686.0
Per cent of total	-	-	-	-	-	-	-	-	1.5	1934.0	11.2	16.0
Direct Financing	137.0	902.0	629.0	1262.0	1972.0	644.0	189.0	2826.0	4656.0	11143.0	6834.0	12986.0
Per cent of total	1.7	9.7	6.3	13.0	13.1	5.2	2.1	22.3	24.5	27.5	18.0	36.5
Stocks	137.0	902.0	629.0	1262.0	1972.0	644.0	189.0	931.0	2508.0	8650.0	4391.0	9181.0
Per cent of total	1.7	9.7	6.3	13.0	13.1	5.2	2.1	7.4	13.2	21.3	11.6	25.8
Bonds	-	-	-	-	-	-	-	1795.0	1908.0	2278.0	1841.0	3121.0
Per cent of total	-	-	-	-	-	-	-	14.2	10.0	5.6	4.9	8.8
Commercial Paper	-	-	-	-	-	-	-	100.0	240.0	215.0	602.0	684.0
Per cent of total	-	-	-	-	-	-	-	0.8	1.3	0.5	1.6	1.9
Foreign borrowing 2/	-	1616.0	3855.0	3214.0	2559.0	1204.0	-458.0	-2939.0	-1675.0	-1865.0	899.0	4278.0
Per cent of total	-	17.3	38.9	33.0	17.0	9.7	-5.1	-23.2	-8.8	-4.6	2.4	12.0
TOTAL	7961.0	9334.0	9915.0	9741.0	15049.0	12422.0	9043.0	12659.0	19041.0	40561.0	37883.0	35540.0
Per cent of total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Lending to private sector include NPFEs.
2/ Include NFPEs.

Source: Bank Negara Malaysia

Figure 4.3

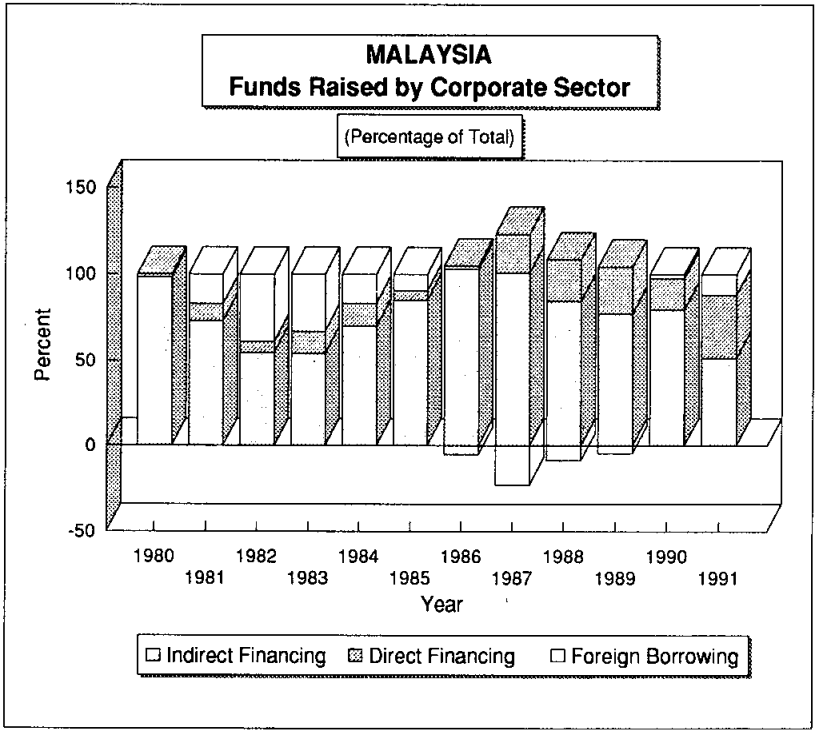

MALAYSIA
Funds Raised by Corporate Sector
(Percentage of Total)
150
100
50
0
-50
Percent
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
Year
Indirect Financing
Direct Financing
Foreign Borrowing

Table 4.4

TAIPEI, CHINA

EXTERNAL FUNDS RAISED BY THE NON- FINANCIAL PRIVATE CORPORATE SECTOR

(Million NT $)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Indirect financing	89337.7	71544.6	68702.7	82173.2	80281.8	78322.0	264088.7	278180.6	274866.1	363834.4	250042.8	425311.1
Per cent of total	49.4	45.6	48.1	47.0	35.6	38.9	49.4	54.1	38.1	49.4	29.8	53.0
Borrowing from financial insts. 1/	66181.0	51119.0	40985.0	61043.0	71692.0	50264.0	126328.0	241679.0	263652.0	335627.0	250013.0	316543.0
Per cent of total	36.6	32.6	28.7	34.9	31.8	25.0	23.7	47.0	36.5	45.6	29.8	39.4
Trade Credit	307.0	-	-	2301.0	-	-	-	13522.0	11176.0	13009.0	-	13100.0
Per cent of total	0.2	0.0	0.0	1.3	0.0	0.0	0.0	2.6	1.5	1.8	0.0	1.6
Borrowing from Government	22813.0	20393.0	27689.0	18793.0	8558.0	28033.0	137737.0	22930.0	-	15151.0	-	95627.0
Per cent of total	12.6	13.0	19.4	10.8	3.8	13.9	25.8	4.5	0.0	2.1	0.0	11.9
Direct Financing	85722.3	74244.5	70159.0	86633.8	137089.4	91794.6	234970.0	120874.5	419238.8	329941.2	552747.7	307447.7
Per cent of total	47.4	47.3	49.1	49.6	60.8	45.6	44.0	23.5	58.1	44.8	65.9	38.3
Stocks	69931.0	55249.0	70110.0	80666.0	115509.0	91138.0	234926.0	120851.0	408558.0	280906.0	442320.0	279829.0
Per cent of total	38.6	35.2	49.0	46.2	51.3	45.3	44.0	23.5	56.6	38.2	52.7	34.8
Bonds	1150.0	455.0	-	2935.0	4792.0	611.0	-	-	1276.0	-	-	6935.0
Per cent of total	0.6	0.3	0.0	1.7	2.1	0.3	0.0	0.0	0.2	0.0	0.0	0.9
Commercial Paper 1/	14602.0	18505.0	-	2985.0	16735.0	-	-	-	9348.0	48997.0	110375.0	20648.0
Per cent of total	8.1	11.8	0.0	1.7	7.4	0.0	0.0	0.0	1.3	6.7	13.2	2.6
Foreign borrowing	5966.0	11171.0	4084.0	5972.0	7942.0	31132.0	34997.0	115548.0	27449.0	42362.0	35928.0	70257.0
Per cent of total	3.3	7.1	2.9	3.4	3.5	15.5	6.6	22.5	3.8	5.8	4.3	8.7
Foreign trade credit	-	5641.0	-	-	-	17574.0	22632.0	92774.0	-	-	-	36169.0
Per cent of total	0.0	3.6	0.0	0.0	0.0	8.7	4.2	18.0	0.0	0.0	0.0	4.5
Foreign capital	5966.0	5530.0	4084.0	5972.0	7942.0	13558.0	12365.0	22774.0	27449.0	42362.0	35928.0	34088.0
Per cent of total	3.3	3.5	2.9	3.4	3.5	6.7	2.3	4.4	3.8	5.8	4.3	4.2
TOTAL	181026.0	156960.1	142945.7	174779.1	225313.2	201248.6	534055.6	514603.1	721553.9	736137.5	838718.5	803015.8
Per cent of total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Refers to net increase in outstanding commercial bills.

Source: Flow of Funds Tables, Central Bank of China, Taipei.

Figure 4.4

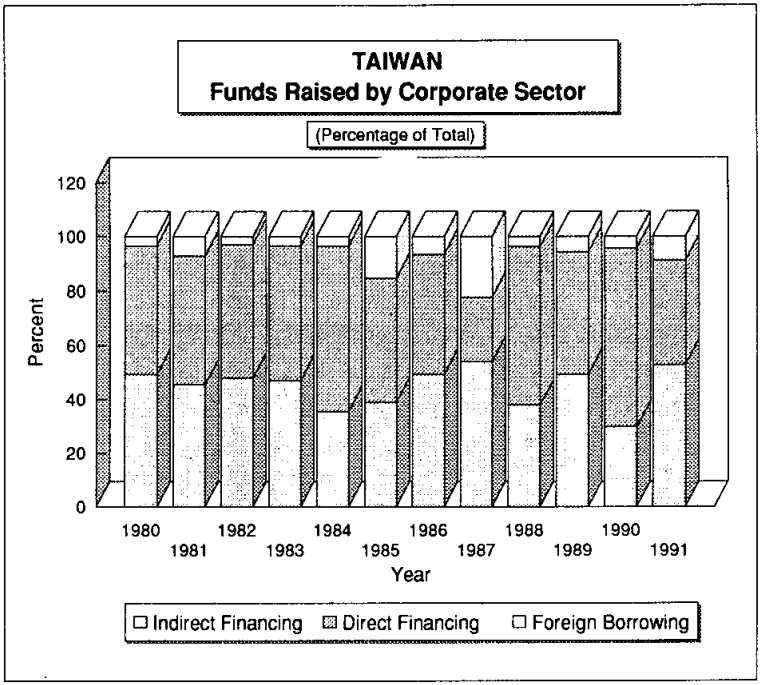

TAIWAN
Funds Raised by Corporate Sector
(Percentage of Total)
Percent
120
100
80
60
40
20
0
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
Year
Indirect Financing
Direct Financing
Foreign Borrowing

Table 4.5

THAILAND

EXTERNAL FUNDS RAISED BY CORPORATE SECTOR

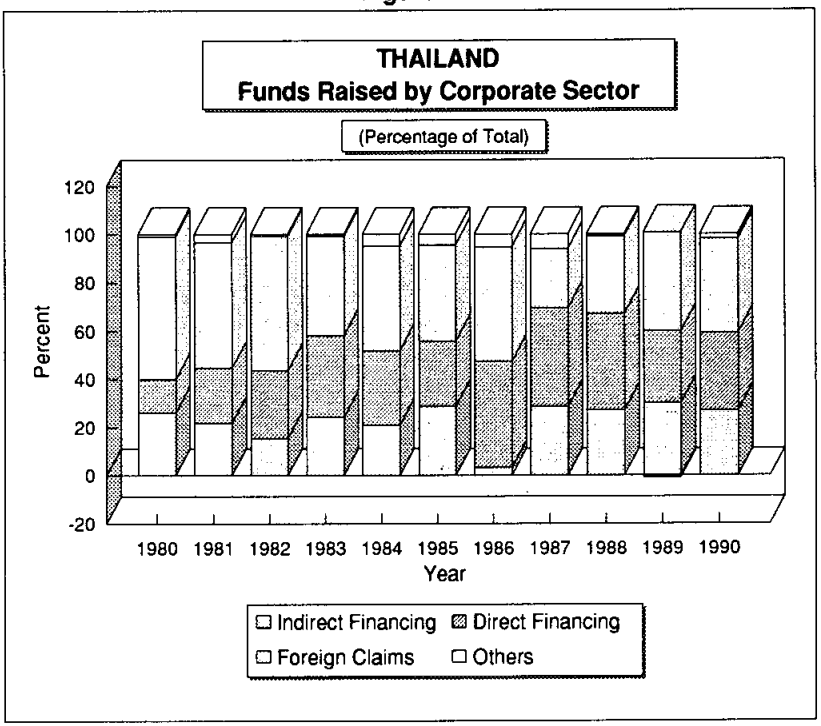
(Baht Million)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Indirect financing	21170.9	17332.6	16744.0	37430.6	27285.0	31267.7	2611.3	57453.6	79049.2	131463.1	172861.0
Per cent of total	26.1	21.9	15.5	24.1	21.0	28.8	3.3	28.6	27.2	30.1	27.1
Trade Credit	3098.1	1968.1	884.5	3816.4	-1726.0	3131.0	-5506.0	12686.0	-178.0	738.0	2200.0
Per cent of total	3.8	2.5	0.8	2.5	-1.3	2.9	-6.9	6.3	-0.1	0.2	0.3
Short-term loans	12156.1	13817.7	14835.2	32961.1	9561.0	8229.0	-7819.0	3110.0	24456.0	30091.0	42509.0
Per cent of total	15.0	17.5	13.8	21.3	7.4	7.6	-9.8	1.5	8.4	6.9	6.7
Long-term loans	5890.7	1523.2	1008.2	550.8	19431.0	19877.0	15944.0	41639.0	54682.0	100535.0	127763.0
Per cent of total	7.3	1.9	0.9	0.4	15.0	18.3	20.0	20.7	18.8	23.0	20.0
Hire-purchase debts	-0.1	1.7	0.5	78.2	-2.0	2.0	-11.0	-10.0	62.0	69.0	362.0
Per cent of total	-0.0	0.0	0.0	0.1	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.1
Direct financing	11262.8	18027.1	30465.0	52864.0	40127.7	29373.1	35324.4	82356.0	116020.5	130050.3	206211.7
Per cent of total	13.9	22.8	28.3	34.1	30.9	27.0	44.3	41.0	39.9	29.8	32.3
Commercial bills 1/	4468.9	13201.3	19061.0	33264.0	18811.0	4802.0	13428.0	43717.0	66183.0	61777.0	96316.0
Per cent of total	5.5	16.7	17.7	21.5	14.5	4.4	16.8	21.8	22.8	14.2	15.1
Share capital	6019.3	3820.2	10695.0	18861.2	20597.0	23558.0	19484.0	36793.0	44471.0	62333.0	103804.0
Per cent of total	7.4	4.8	9.9	12.2	15.8	21.7	24.4	18.3	15.3	14.3	16.2
Debentures	760.7	982.8	680.8	704.7	499.0	1132.0	2481.0	1929.0	4121.0	3860.0	2714.0
Per cent of total	0.9	1.2	0.6	0.5	0.4	1.0	3.1	1.0	1.4	0.9	0.4
Mortgages	-	-	-	-	190.0	-146.0	-113.0	-124.0	1206.0	2051.0	3346.0
Per cent of total	0.0	0.0	0.0	0.0	0.1	-0.1	-0.1	-1.0	0.4	0.5	0.5
Foreign debt and claims	48034.8	41171.2	59957.9	63712.1	56296.0	43344.0	37718.0	49344.0	93269.0	178180.0	247991.0
Per cent of total	59.2	52.0	55.6	41.1	43.3	39.9	47.3	24.6	32.1	40.8	38.8
Others	691.8	2580.0	633.8	1001.5	6254.0	4683.0	4142.0	11755.0	2304.0	-3202.0	11847.0
Per cent of total	0.9	3.3	0.6	0.6	4.8	4.3	5.2	5.9	0.8	-0.7	1.9
TOTAL	81160.2	79110.8	107800.8	155008.2	129962.7	108667.9	79795.6	200908.6	290642.7	436491.4	638910.7
Per cent of total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Figures in parenthesis are percentages and the total.

Source: Flow of Funds Accounts of Thailand, Office of the National Economics Social Development Board.

Figure 4.5


THAILAND
Funds Raised by Corporate Sector
(Percentage of Total)
Percent
120
100
80
60
40
20
0
-20
1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990
Year
Indirect Financing
Direct Financing
Foreign Claims
Others

PART V

Monetary Policy Implications of Financial Disintermediation

Monetary policy is basically implemented through financial markets. Therefore, financial disintermediation which implies a great structural change in financial markets, has considerably affected monetary policy in several aspects. Among them, the following five points may be considered:

(i) Monetary policy transmission mechanism may be altered.
(ii) Money demand may become unstable.
(iii) The channel of money supply may be affected.
(iv) The information provided by traditional policy intermediate targets such as monetary aggregates may be distorted.
(v) Different monetary policy instruments may be necessary.

1. Monetary Policy Transmission Mechanism

The channels through which monetary policy operates depend on the structure of the financial markets, the degree of flexibility of interest and exchange rates, and the degree of external capital mobility. Considering these points, the channels may be divided into three ways:

(i) credit channel,
(ii) interest rate channel, and;
(iii) exchange rate channel.

Firstly, monetary policy actions may directly affect the ability of certain types of lenders to obtain funds. In underdeveloped financial markets, characterized typically by interest rate regulations, domestic credit controls, the segmentation of financial markets, underdeveloped money and capital markets, and restrictions on international capital movement, monetary policy works mainly by directly affecting the availability of credit. This is the credit channel of the monetary policy transmission mechanism. Through this mechanism, monetary policy may affect particularly firms and households which depend on banks for loans.

In this environment, bank credit is the major source of finance. Bank credit is mainly controlled by credit rationings such as credit

ceilings, selective credit controls, and direct credit controls. These credit rationings are introduced to channel limited credit into certain strategic parts of the economy such as export, or small- and medium-scale industries. Expansionary monetary policy by easing credit rationings encourages the growth of certain sections of the economy and this increases aggregate demand. Contractionary monetary policy by reducing credit ceilings works conversely. Through such channels, monetary policy affects the real economy.

Before financial reforms such as deregulation, the introduction of new financial instruments and the liberalization of interest rates in the 1980s, monetary policies of most SEACEN countries have depended on credit rationings. The main purpose of monetary policy has been to target the growth of certain strategic sections of the economy such as export, or small- and medium-scale industries. The credit channel of the monetary policy transmission mechanism had worked fairly well for this purpose. Ever since various financial reforms were introduced in the 1980s, the credit channel has still been effective in some SEACEN countries, partly because the window guidance of the central bank has not been totally eliminated and partly because financial markets has not been fully developed to fulfill the financing demands of economic agents. Moreover, credit availability still played an important role in financing.

Secondly, the structural changes of the financial markets and the liberalization of interest rates in the 1980s created a greater role for interest rates to transmit the effects of monetary policy. Tightening of monetary policy leads to an increase in the overall level of interest rates. When prevailing interest rates rise, borrowers may choose to borrow less, and lenders may choose to ration funds to certain types of borrowers. This is the interest channel of the monetary policy transmission mechanism.

According to Romer and Romer (1993), the credit side of the transmission mechanism is less important today than the interest rate side of the transmission mechanism in the United States. They suggested that direct credit actions have played a very important role in the transmission mechanism. However, the Fed has become less willing to directly control bank lending in recent years. They feel that monetary policy could work exclusively through the interest rate channel in the future. They argued that the continued existence of the

interest rate channel did not depend on the existence of reserve requirements. Even in the absence of reserve requirements, as long as payment settlement occurs on the books of the central bank, monetary policy will have leverage over interest rates. They are also of the view that the credit actions of the central bank would create inefficiency in the provision of credit. In contrast, a reliance on interest rates assures that loans go to the borrowers who provide the highest anticipated returns. Therefore, they regard the recent move away from Federal Reserve credit actions and the consequent changes in the transmission mechanism as highly desirable.

In Korea, before the late 1980s, the credit channel depending mainly on credit rationing had worked fairly well. Since the late 1980s, as financial markets became deeper and wider and more liberalized, the sensitivity of economic agents to interest rates has risen, and thus the role of the interest rate channel has become more important. According to Kang and Shin (1994), and C. Kim (1995), as shown in (Table 5.1), before the late 1980s, the effect of credit availability on the real economy was significant. Since the 1980s the effect of interest rates on the real economy has become more significant than credit availability. This is mainly because sources of corporate financing has become diversified from bank loans to corporate bonds, commercial papers and so on, and the regulation on various interest rates such as corporate bond yield, call rate, and CD (Certificates of Deposit) rate has been lifted since the late 1980s. Naturally, the money and capital markets have grown rapidly. In such an environment, banks' reliance on non-deposit sources of funds has also been increased. As a result, the effect from credit rationing of the central bank has been reduced. Thus, the role of interest rates as the opportunity cost of corporate financing has become more important.

The degree to how much the interest rate channel works depends on the depth and width of financial markets. In some SEACEN countries, where financial markets has not been developed sufficiently in spite of the recent changes, the interest rate channel has not worked very well. In order to make the interest rate channel work, various financial instruments must be introduced. Financial institutions where such financial instruments may be intermediated must also be established, and the liberalization of the interest rates must also be continuously carried out.

Table 5.1

VARIANCE DECOMPOSITION OF VAR*/

(In Per Cent)

	Own lags	M2	Corporate Bond Yield
GNP			
1983 -1988	67.1	17.8	15.2
1989 -1994	63.7	16.0	20.3

*/ The degree of contribution of changes in M2 and Corporate Bond Yield to a change in GNP 4 quarters later (%)

Source: C. Kim (1995)

Thirdly, in an open economy, the exchange rate and international capital flows provide additional transmission channels. In an open economy with a fixed exchange rate regime, the monetary authorities are not in full control of the money supply because changes in the money supply can occur through monetary movements brought about by changes in international reserves. Control over the money supply in these circumstances would require the monetary authorities to sterilize the imbalances in the balance of payments.

Under a more flexible exchange rate regime, there is a greater degree of control of the money supply, in particular when capital is mobile. In these circumstances, the exchange rate becomes an important channel for the transmission of monetary policy. A change in the money supply would lead to a change in the exchange rate through capital flows. For example, a decrease in the money supply would lead to an increase in interest rates and thus encouraging capital inflow, which results in the appreciation of the domestic currency. The appreciation of the domestic currency would then lead to the curbing of the demand for domestically produced tradable goods, which reinforces the effects of monetary contraction. Feldstein (1993) argued that the effectiveness of monetary policy has been strengthened with the addi-

tion of the exchange rate channel to supplement the traditional interest rate channel.

Therefore, monetary conditions abroad have become an important concern for domestic monetary authorities, in particular when the economy is small. The interest rate and exchange rate effects of domestic monetary policies need to be taken more into account together. Coordination between monetary and exchange rate policies is essential. These trends are likely to increase in the future in view of the accelerating integration of world capital markets due to the liberalization of capital controls, technological change, and financial innovation.

In the SEACEN countries, as capital mobility increases and exchange rate regimes become more flexible, the exchange rate channel of the monetary policy transmission mechanism is becoming more important. By the early 1980s, restrictions on capital flows were virtually eliminated in Indonesia and Singapore. In Singapore, in particular, its small open economy has a high degree of capital mobility, where the exchange rate channel plays a very important role in the transmission mechanism. Malaysia also imposes almost no restrictions on international capital flows and Korea recently lifted restrictions on international capital flows. Thailand retains controls on outward capital movements but inward movements have been largely unregulated.

There have been movements toward more flexible exchange rate regimes in the SEACEN countries during the 1980s. This is in contrast to the late 1970s when a number of these countries maintained fixed exchange regimes, usually pegged to the U. S. dollar (Indonesia, Korea, Nepal, Singapore and Thailand). By 1989, the exchange rate regimes were more flexible and included pegs to composite baskets (Malaysia, Myanmar, Nepal, and Thailand) or managed floating regimes (Indonesia, Korea, the Philippines, Singapore, and Sri Lanka). Consequently, the need to take into account interest and exchange rates together is rapidly increasing in the SEACEN region.

2. Money Demand

Keynes argued in his *General Theory* (1936) that the demand for money is composed of three motives such as transaction, precautionary, and speculative motives. The transaction motive is the need for cash for current transactions for personal and business exchanges, and

the precautionary motive is the desire for security as to future cash needs. Both depend on income. The speculative motive is the object of securing profit from the best available sources in the market. This depends on the rate of interest. Therefore, a change in the interest rates would also affect the transaction and precautionary demands through a change in income. Therefore, the transaction and precautionary demands may be defined as a function of the level of income and the rate of interest, not only of the level of income. Consequently, the money demand function is traditionally specified with independent variables of income and the rate of interest. Accordingly, in the money demand function, the income elasticity and interest elasticity are estimated.

Changes in the financial markets such as the introduction of new financial instruments, liberalization of interest rates, and the improvement in the efficiency of the markets, may create instability in money demand. This instability may arise from two factors - changes in the sensitivity of money demand to changes in income and interest rates. A change in the sensitivity of money demand to changes in income means a change in the income velocity of money. The income velocity of money defined as the ratio of income to money (more correctly defined, the ratio of income to money from transaction and precautionary demand) depends "on the character of banking and industrial organizations, on social habits, on the distribution of income between different classes, and on the effective cost of holding idle cash" (*Keynes*, 1936, p. 201). Therefore, financial changes naturally affect the income velocity. However, it is hard to distinguish between a change in the income velocity due to financial changes and a change in the income velocity due to other reasons.

At the early stage of economic development when financial markets are relatively immature, the income velocity of money is typically found to trend downwards as the growth of money exceeds the growth of income due to the monetization of the economy. Monetization is a phenomenon usually associated with narrow monetary aggregates. In these circumstances, the estimated income elasticity shows more than unity. As the degree of sophistication of the economy increases, the trend of the income velocity of money is typically reversed because financial market innovations permit agents to economize on the holdings of money. In these cases, the income elasticity is less than unity. Unless the income velocity of money is unity, changes in the growth

rate of income will systematically affect the velocity even with no shifts in the money demand function. If the velocity is volatile, monetary policy depending on a fixed target for monetary growth would be inappropriate.

The instability of money demand arising from changes in the sensitivity of money demand to changes in interest rates is a very important aspect of financial innovation. In this aspect, there may be two important factors making money demand unstable - the introduction of new financial instruments and the liberalization of interest rates. Recent financial innovations have widened the array of financial instruments available to both savers and borrowers, and reduced transaction costs of shifting among financial instruments. These developments could result in portfolio shifts away from monetary assets. In addition, the liberalization of interest rates could increase the interest elasticity of money. Such changes in the interest elasticity may have more impact on broad money (M2), which contains interest-bearing time deposit, than narrow money (M1) which is composed of non-interest bearing currency and demand deposit.

The income velocities of money (in terms of M2) in most SEACEN countries show declining trends as shown in (Figure 5.1) reflecting the monetization of the economies except for Korea, Myanmar and Sri Lanka. Korea and Sri Lanka show almost constant trends while in Myanmar there is an increasing trend. In spite of the different sample periods, the trend in Korea is consistent with the results of the income elasticity estimation. However, the trends of Myanmar and Sri Lanka are inconsistent with the results of the income elasticity estimation.

Tseng and Corker (1993) tested the long-run income elasticity of money in Indonesia, Korea, Malaysia, Myanmar, Nepal, the Philippines, Singapore, Sri Lanka and Thailand. They showed that the long-run estimated income elasticity of broad money demand exceeds unity in all but only one exception, mirroring the declining trends of the income velocities of broad money in the SEACEN countries. The one exception is Korea for which the income elasticity is unity. Tseng and Corker viewed the large elasticities as reflecting the high saving rates in the countries, where savings in the form of time deposits have grown rapidly.

On the other hand, the estimated long-run elasticity of narrow money demand vary substantially across the SEACEN countries. In

Table 5.2

INCOME VELOCITIES OF BROAD MONEY IN THE SEACEN COUNTRIES

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Indonesia	5.07	4.77	4.02	3.56	3.50	3.22	2.71	2.19	2.18	2.07	2.15	2.27
Korea	2.07	2.06	2.33	2.14	2.26	2.35	2.16	2.06	2.02	2.00	2.07	1.97
Malaysia	1.60	1.62	1.43	1.19	1.33	1.34	1.30	1.32	1.28	1.22	1.22	1.13
Myanmar	2.96	2.87	3.05	3.22	3.76	3.23	4.02	3.41	3.25	3.20	3.74	3.14
Nepal	4.17	3.69	3.63	3.63	3.42	3.38	3.23	3.16	3.01	3.06	3.00	
The Philippines	3.74	4.57	4.43	4.28	4.24	4.04	3.67	3.64	3.68	3.63	3.74	3.43
Singapore	1.43	1.50	1.43	1.29	1.15	1.21	1.15	1.10	1.08	1.08	1.18	1.19
Sri Lanka	3.25	3.34	3.34	3.51	3.36	3.25	3.27	3.51	3.29	3.25	3.40	3.23
Taiwan	1.18	1.11	0.96	0.89	0.80	0.73	0.71	0.70	0.66	0.61	0.62	0.58
Thailand	2.19	1.81	1.75	1.65	1.58	1.60	1.51	1.41	1.36	1.31	1.35	1.36

Figure 5.1

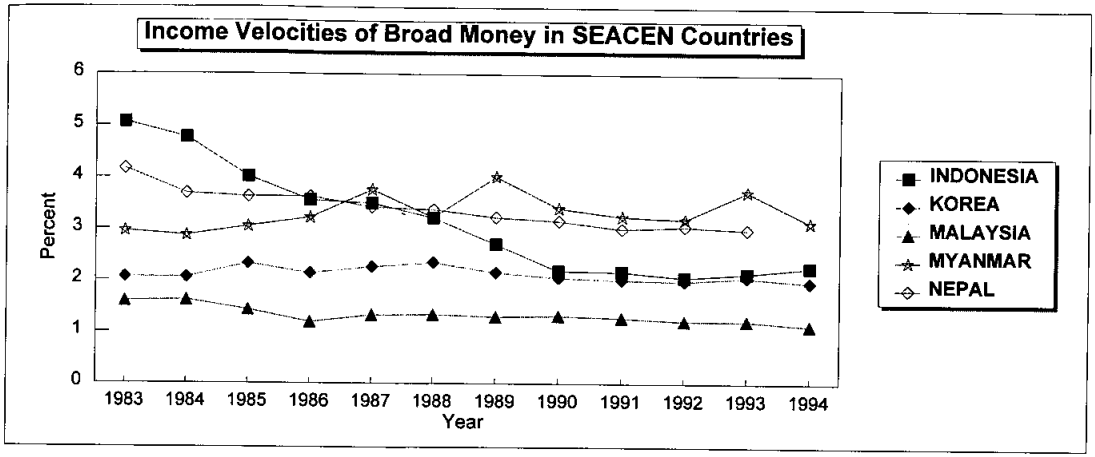
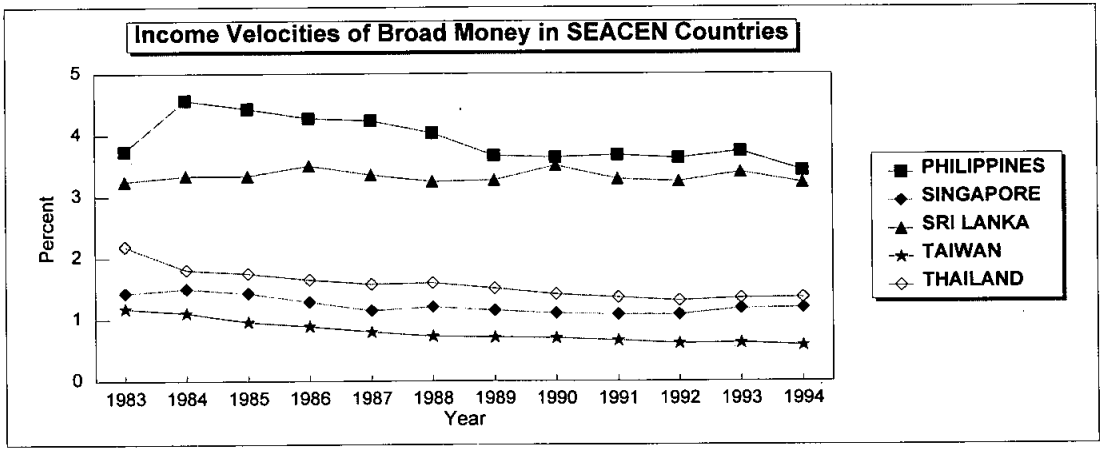

Income Velocities of Broad Money in SEACEN Countries
Percent
6
5
4
3
2
1
0
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
Year
INDONESIA
KOREA
MALAYSIA
MYANMAR
NEPAL

Figure 5.1 (Cont'd)



Indonesia, Malaysia, Myanmar and Nepal, the elasticities exceed unity mirroring the monetization of the economy while in Korea, the Philippines, Singapore, Sri Lanka, and Thailand, the elasticities are less than unity reflecting agents' economizing on holding cash balances.

Table 5.3

ESTIMATED LONG-RUN INCOME ELASTICITY OF MONEY

Country	Narrow Money	Broad Money
Indonesia (1974:2 - 1989:4)	1.16	1.58
Korea (1970:1 - 1989:4)	0.79	1.00
Malaysia (1970:1 - 1989:4)	1.11	1.63
Myanmar (1970:1 - 1989:3)	1.27	1.43
Nepal (1970:1 - 1989:4)	1.79	2.60
Philippines (1973:1 - 1989:4)	0.67	1.47
Singapore (1975:1 - 1989:4)	0.86	1.37
Sri Lanka (1978:1 - 1989:4)	0.92	1.22
Thailand (1977:1 - 1989:4)	0.85	1.72

Source: Tseng and Corker (1993)

It is not easy to capture separately changes in the interest elasticity of money over time. One may use cointegration between money, income and interest rates as a test for the stability in long-run money demand relationships. Again according to the results of the test carried

out by Tseng and Corker (1993), in the case of the narrow money demand function, a long-run cointegration relationship exist in Indonesia, Malaysia, Myanmar, and Singapore. There is a weak long-run cointegration relationship in Nepal and the Philippines. On the other hand, there is no cointegration relationship in Korea, Sri Lanka and Thailand. The reasons for the long-run unstable relationships in those countries include the sharp rise in the velocity of narrow money due to the availability of new, alternative financial assets and the high rate of inflation in the early 1980s for Korea, uncertainty due to political turmoil in Sri Lanka, and gradual interest rate liberalization during the 1980s in Thailand.

On the other hand, in the broad money demand function, it is noteworthy that significant long-run cointegration relationships exist only in Indonesia and the Philippines. In Korea, Malaysia and Sri Lanka, there are only weak cointegration relationships. In Myanmar, Nepal, Singapore and Thailand, there is no cointegration relationship. These results imply that the broad money demand function is more unstable than the narrow money demand function. This is because broad money includes interest-bearing time deposits and thus there may have been portfolio shifts between time deposits and alternative new financial assets in the changing financial environment where new financial instruments are introduced and interest rates are liberalized. On the contrary, narrow money is composed of non-interest bearing cash and demand deposits, and the influences by financial changes would be relatively weak in spite of some economization on holding cash balances.

In addition, Tseng and Corker showed that there is no satisfactory error-correction model for many of the SEACEN countries, which imply the poor short-run predictability of monetary developments. Exceptions are Indonesia and Malaysia (narrow and broad money), and Korea and Sri Lanka (broad money only).

In conclusion, from examining the trends of the income velocity of money, and reviewing the results of the estimation of income elasticity, long-run cointegration and short-run dynamic error-correction model, one may observe that financial changes such as the introduction of new financial instruments and the liberalization of interest rates increase the instability of the demand for money in terms of conventional monetary aggregates. Consequently, the significance of the con-

Table 5.4

COINTEGRATION RELATIONSHIP BETWEEN MONEY, INCOME AND INTEREST RATES

Country	Narrow Money	Broad Money
Indonesia (1974:2 - 1989:4)	yes	yes
Korea (1970:1 - 1989:4)	no	weak
Malaysia (1970:1 - 1989:4)	yes	weak
Myanmar (1970:1 - 1989:3)	yes	no
Nepal (1970:1 - 1989:4)	weak	no
Philippines (1973:1 - 1989:4)	weak	yes
Singapore (1975:1 - 1989:4)	yes	no
Sri Lanka (1978:1 - 1989:4)	no	weak
Thailand (1977:1 - 1989:4)	no	no

Source: Tseng and Corker (1993)

ventional monetary aggregates as intermediate targets decreases with respect to their controllability and relationship to ultimate policy targets. On the contrary, interest rates are becoming increasingly important determinants of money demand in the SEACEN countries.

3. Money Supply

It has conventionally been accepted that the supply of money is determined exogeneously by the monetary authorities. However as financial markets become more sophisticated, in particular as new financial instruments are introduced and commercial banks' activities

become more diversified, the channels of money supply have started to change. As banks' reliance on non-deposit sources of funds such as certificates of deposit increases, banks' off-balance sheet activities such as securitization of their loans increases. As banks' technologies of asset-liability management improves, their ability to go around the restraint on credit supply enforced by the central bank, and thus to meet their needs to lend, increases. Reflecting these trends, fee income in the United States nowadays accounts for a third of total bank income, up from about a fifth in the late 1970s (*Romer and Romer*, 1993, p. 106).

In such an environment, the power of the central bank to influence the supply of money cannot but be reduced. This is in spite of the remaining ability of the central bank to influence the supply of credit, for example, through the discount window and reserve requirements. The supply of money varies partly in response to changes in the public demand to hold cash and bank deposits. In this sense, money supply is endogenous, not exogenous.

Kaldor (1985, p. 47) argued that money is credit-driven and thus not exogenous but endogenous in a credit money economy. Arestis (1988, 1992), Moore (1988), Wray (1990), Dow (1993) developed the concept of money-endogneity. They argue that credit rather than money enables spending units to bridge any gap between their desired level of discretionary spending and the current rate of cash flow. Money is viewed as essentially endogenous in a credit money economy responding to changes in the behavior of private units rather than, to the behavior of the monetary authorities. Money is viewed as the outcome of credit creation. Consequently, according to Moore (*op. cit.*), the money supply function becomes horizontal in interest-money space, and money supply is demand-determined when the central bank choose to peg the level of interest rate at some predetermined level.

Reflecting these developments, Bernanke and Blinder (1988) introduced the concept of credit (bank lending) rather than money being controllable by the monetary authorities in the analysis of the transmission mechanism. In the conventional IS-LM analysis, money and bonds are included as monetary assets. They also included bank lending i.e., credit as a third monetary asset. They found that credit plays an important role in the transmission mechanism. Their empirical studies show that in the United States, the correlation between money and

income is larger than the correlation between credit and income during the period having stable money demand function (1953 - 1973). On the other hand, the latter is larger than the former during the period having unstable money demand function (1979 - 1985). In Korea also, it is argued that monetary policies transmit their effects, in part, through the bank lending channel (*H. Kim,* 1995).

Money-endogeneity has very important implications in monetary policy. If money supply is endogenous, the central bank will find it hard to control the supply of money and thus monetary policy depending on monetary aggregates targeting will not work. In such circumstances, the central bank cannot but choose interest rates as an intermediate target.

The degree of money endogeneity depends mainly on the degree of financial market development. The more financial markets develop, the more money supply is endogenously driven. In some SEACEN countries where financial markets are developed and where many new financial instruments are introduced and commercial banks' activities are diversified, a large share of money is certainly endogenously supplied while in some SEACEN countries where financial market development is slow, the share of money endogenously supplied is low.

4. Intermediate Targets

There are various intermediate targets: price targets such as interest rates or exchange rates, and quantity targets such as credit aggregates or monetary aggregates. At least two primary conditions must be fulfilled for any variables to be intermediate targets. Firstly, strong relationships must exist between financial indicators to be used as intermediate targets and final objectives such as income and price, and secondly, controllability by the monetary authorities. In addition, in the case of quantity targets, the demand for them should be stable.

Traditionally, monetary aggregates such as narrow money (M1) or broad money (M2) have been often used as intermediate targets. However, financial innovations including the introduction of new financial instruments and the liberalization of interest rates have reduced the efficacy of monetary aggregates as intermediate targets. Firstly, as reviewed above, the transmission mechanism has changed and consequently, the relationships between the monetary aggregates and final

objectives such as income and price have been weakened. Indications about movements in income or price by monetary aggregates have changed. Secondly, the income velocity of money has become unstable and interest elasticity has also been changed. As a result, the demand for money has become unstable. In this regard, the introduction of new financial instruments have changed the characteristics of financial assets included in the definition of monetary aggregates. Many new financial instruments almost perfectly substitutable with time deposits have appeared. The issue of which financial assets should be included in the definition of monetary aggregates to be used as intermediate targets has arisen. Thirdly, a substantial part of money supply has become endogenous and thus uncontrollable by the central bank. If money supply is uncontrollable by the central bank, monetary aggregates cannot used to be intermediate targets.

In the United States, causality tests with independent variables of money and interest rates, show that none of the monetary aggregates regardless whether it is M1, M2, or M3, convey statistically significant information about the movements of real income over the period from 1960:2 - 1979:3 and 1979:4 - 1992:4. For price movements over the same period, for the former sample period, M1 and M3 were significant. However, for the latter period, none of the monetary aggregates was significant (note that new operating procedures for monetary policy was introduced in 1979) (*B. M. Friedman*, 1993). B. Friedman argued that these changes are likely the result of the changing financial market structure and practices, and in the response to those changes, of the changing behaviors of households and businesses.

Considering the results of the test, B. Friedman suggested the use of *information variables* such as the yield curve or the commercial paper-Treasury bill spread, rather than an intermediate target as the central bank need information about the economy's current state, its future direction, and the effects of the central bank' own actions. Monetary policy-making processes need to incorporate information inclusively, rather than focusing narrowly on any one variable. Also, policy-making processes need to exploit information intensively through frequent reexamination rather than just what the information provided by any one source is saying. Therefore, according to him, case-by-case judgments, or case-by-case discretion in responding to pertinent information, rather than a simple rule based on a particular monetary aggregate, is important.

Monetary targeting needs a simple rule because simplicity make it easy to monitor the authorities' success in maintaining their commitment, which is essential for effective monetary policy. However, Lewis (1994) warned about the possibility of the danger that authorities would be led to take a ride on a tiger's back - defending the simple rule, for the sake of their reputation, even in the circumstances when the rule is inappropriate. In changing financial circumstances, it would hardly be possible, nor sensible, for the authorities to commit themselves rigidly to achieving a specified numerical growth rate for any particular definition of money over long periods. In such circumstances, it is hard to select an optimal form of monetary target, one that could retain underlying principle, while at the same time allowing a sensible and flexible response to the rapidly changing financial system.

In this regard, Allan Meltzer (1993) argued that change and uncertainty do not make the case for discretionary monetary policy. According to him, errors in the use of information variables or in economic forecasts could lead to costly, destabilizing policy actions. Therefore, he suggested the use of *an adaptive policy rule,* instead of discretion or fixed policy rule. He is of the view that an adaptive policy rule, unlike a discretionary approach, reacts to new information, but does not base policy actions on forecasts. It also differs from a fixed rule that it ignores new information. However, in this instance also, case-by-case judgments seem necessary in order to react efficiently to new information.

Considering the changing financial environment, the importance of price variables, in particular, interest rates, have been recently suggested as alternatives to money and credit as intermediate indicators *(Kohn, 1993).* The degree to which the effects of monetary policy are transmitted to the real sector through interest rates has been increased, and the importance of interest rates for the stability of financial markets has also increased since the liberalization of interest rates.

However, Kohn pointed out that there are some pitfalls involved in very heavy reliance on interest rate indicators. One is that innovations in capital markets would likely to have affected the relationship of these indicators, as well as money and credit, to spending. For example, changes involving new markets and instruments, and freer international capital flows may also be affecting interest rate-spending relationships. The other is that interest rates or spreads do not, by

themselves, have unambiguous implications for spending or inflation. A particular short-term nominal interest rate can be consistent with ever increasing or ever decreasing output gaps, and accelerating or decelerating inflation.

Accordingly, Kohn argued that interest rate targets and indicators need to be accompanied by attention to variables that anchor the system in nominal terms, perhaps even the price level, or inflation rates themselves. The central bank should pay attention to interest rates, but monetary growth rates have to be taken into account as long-term indicators. It may be advisable to use interest rates as intermediate targets, with monetary aggregates as long-term supplementary indicators.

In developing countries where money and capital markets have not been sufficiently developed, additional problems may exist: first, there may not be short-term interest rates which reflect the conditions of money markets and are controllable by the central bank. Second, there may not be close relationships between the short-term money market interest rates and the medium- or long-term interest rates. In fact, the central bank usually can control the short-term interest rates, but the real economy is likely to be influenced mainly by the medium- or long-term rates. Therefore, there must be close relationships between the short-term and the medium or long-term rates.

Real interest rates are also problematic. Unless set equal to its equilibrium or natural levels, a given set of real rates will be influenced by increasing or decreasing inflation rates, and there is no unique inflation rate associated with real rates at their natural level. Equilibrium real rates themselves, so crucial for the evaluation of the implications of actual real rates, may vary quite a bit over relevant policy horizons. The central bank needs to take into account several factors affecting equilibrium or actual real interest rates such as tastes, technology, supply and demand for goods and services, fiscal policy, financial frictions, or even information on inflation expectations, in order to avoid exacerbating swings in output and prices.

It is an important issue for central bankers to be able cope flexibly with changes in financial markets without damaging the credibility of the central bank. As is well known, a decrease in the credibility of the central bank can cost the economy. Nowadays, some central banks

have been directly adopting explicit inflation or price stability objectives.

In the SEACEN countries, financial innovation, along with the relaxation of capital controls and the shift from fixed to more flexible exchange rate regimes, have affected their choice of monetary policy targets. While some countries continue to focus on credit aggregates (Myanmar and Nepal), there has been a shift to monetary or interest rate targets in the others.

Several countries have adopted monetary targeting. In Korea, M2 has been used as the intermediate target since 1979. However, recent doubt about the suitability of M2 as an intermediate target has arisen bcause the share of M2 to total liquidity (M3) has dropped to 26 per cent in 1995 from 77 per cent in 1978 and thus the ability of the central bank to control liquidity is very limited. In addition, as interest rates are liberalized and capital markets open, monetary policy relying on the targeting of M2, increases the instability of interest rates and exchange rates. As a result, alternative monetary targets such as M2 plus CD (Certificates of Deposits) or MCT (M2 + CD + Trust), or interest rates targets have been suggested recently.

Table 5.5

TRENDS OF M3 AND M2 IN KOREA
Won Billion

	1992	1993	1994	1995
M3	267597	325428	397148	520139
M2	86492 (32.3)	102579 (31.5)	118603 (29.9)	136951 (26.3)

The numbers in parentheses refer to the share of M2 in M3 (%)

Source: The Bank of Korea

In Malaysia, prior to 1984, M1 had been used as an intermediate target. However, from 1983 to 1984, there was a substantial shift from non-interest bearing deposits to interest-senstive deposits due to persistently high interest rates during the early 1980s. As a result, M3 has been used as an intermediate target since 1984. In Thailand, the growth of M1, M2 and domestic credits are used together as intermediate targets.

On the other hand, the Philippines have used base money as an intermediate target since 1984 when a floating exchange rate system was introduced. Before 1984, the intermediate target was the net domestic assets of the monetary authorities or the domestic portion of base money. In Sri Lanka, the monetary base, especially central bank credit to the Government has become the primary target since 1986 when open market operations began to be used as the main monetary policy instrument.

In Indonesia, before the financial reform in 1983, domestic credits with credit ceiling had been used as a direct monetary policy instrument. Since 1983, reserve money as an intermediate target and interest rate as a short-term target have been used together.

In contrast, Singapore does not rely on credit or monetary aggregates. Due to the high degree of capital mobility, monetary aggregates are essentially demand-determined, and domestic and foreign interest rates tend to move in line. Accordingly, Singapore relies on the exchange rate to influence domestic prices through its effects on prices of tradable goods.

As examined above, financial innovations, such as the introduction of new financial instruments and the liberalization of interest rates, were followed by a change in the transmission mechanism, an increase in the instability of money demand, and an increase in the endogeneity of money supply in the SEACEN countries. All these changes are factors weakening the efficacy of monetary aggregates as intermediate targets. Nevertheless, most SEACEN countries, except for Indonesia and Singapore, are still using the aggregate variables as intermediate targets.

In order to use interest rates as intermediate targets, at least the following conditions must be fulfilled: first, short-term money market interest rates must sufficiently reflect the conditions of the money market.

Second, there must be close relatonships between short-term and medium- or long-term interest rates affecting the real economy. Third, there must be also strong relationships between interest rates, in particular, medium- or long-term rates and income and prices, and finally short-term money market rates must be controllable by the central bank.

Regarding the controllability by the central bank, Kohn argued that it is important for the central bank to be at the centre of the payment system. The central bank can set the overnight rate by controlling the supply of a unique instrument, one with no effective substitute, that is, deposits on its balances. Clearing balances at the central bank may be required, as in Canada. However, even without that requirement, there would normally be predictable demand for the central bank balances by banks and their customers due to the riskless clearing through an institution that can create liquidity in a pinch. Countries without reserve requirements seem to be able to achieve short-term interest rate objectives, even with low average clearing balances. So long as commercial banks clear through the central bank, that institution, by manipulating its balance sheet, can force banks to obtain central bank deposits through discount or open market repurchase facilities at predetermined rates that form a basis for other interest rates (*Kohn, 1993, P. 202*).

Nevertheless, the financial markets in most SEACEN countries are still, in spite of recent changes, not able to fulfill the above necessary conditions. First, money markets are not sufficiently developed, in particular the transactions of the money markets instruments are not activated. In some countries, money markets are even segmented, and thus the interest rates do not provide reliable information on the money markets. Second, capital markets are also not fully developed and thus capital market instruments are not diversified. Therefore, there is no close relationship between money market and capital market interest rates. Third, in some SEACEN countries, there is no explicit channel through which the central bank can effectively control money market interest rates such as the Federal Fund rates in the United States.

Consequently, in the circumstances where the ability of monetary aggregates as intermediate targets is decreasing, the central banks of the SEACEN countries face great challenges in their sourcing of appro-

priate intermediate targets. In these circumstances, enhancing the infrastructure for effective monetary policies, that is, the development of money and capital markets and the diversification of financial instruments are urgently needed.

5. Monetary Policy Instruments

Along with financial reforms in the SEACEN countries, the central banks of the region have changed the way in which monetary policies are implemented - from the method of directing credit to indirect market-oriented methods. Indirect market-oriented monetary policy instruments are traditionally of three kinds: open market operations, rediscount policy and reserve requirement policy. In the SEACEN countries, indirect market-oriented monetary policies have been implemented with a greater reliance on open market operations and less dependence on rediscount windows and reserve requirements.

In most SEACEN countries, rediscount policies have often been used to provide low-cost credit to priority sectors such as small- and medium- scale industries. Consequently, the central banks found it difficult to reduce the rediscount facilities because their reduction would result in disruptive effects on the priority sectors. Therefore, the rediscount windows make the shift towards indirect monetary policy implementation difficult. However, countries like Korea are trying to reduce its special rediscount facilities in favor of restoring the original function of rediscount windows for adjusting liquidities. In the United States, rediscount windows have often been used as windows of last-resort lending by the central bank.

The use of reserve requirements have diminished recently in the SEACEN countries even though they were utilised frequently in the past. This trend is due to the concern that changes in reserve requirements may be too disruptive and that high reserve requirements may adversely affect the development of the financial system. There have also been concerns that non-interest bearing reserve requirements, which are effectively a kind of tax on the banking system, may encourage disintermediation. Indonesia, Korea and Malaysia have substantially lowered their reserve requirements. Recently, their reserve requirements ratios were lowered to encourage a decrease in market interest rates. In developed countries, low reserve requirements ratios are currently maintained.

Consequently, open market operations have increasingly become the main instrument for monetary policies in almost all the SEACEN countries. However, the use of open market operations has also been limited by the shallow domestic money and capital markets, both in terms of instruments and participants. In particular, the lack of government debt instruments have forced the central banks to issue their own debt instruments. Examples are, the Bank Indonesia Short-Term Securities (SBIs) in Indonesia and the Monetary Stabilization Bonds (MSBs) in Korea. However, open market operations depending on the central banks' own debt instruments have their own limitations as increasing interest payments on the debt instruments themselves serve to increase the supply of money. On the other hand, the Philippines modified its open markets operations with the phasing out of Central Bank bills to give way to auctioned Treasury bills as the primary instrument of its open market operations.

Most SEACEN countries are at the initial phase of indirect market-oriented monetary policy implementation. In order to implement open market operations more efficiently, the money and capital markets, the markets for short-term government debt instruments such as Treasury bills, should be developed. In addition, principal dealers must be introduced and secondary markets for active trading of the instruments should be developed. Maturities of the instruments must be diversified too. It is also advisable that the interest rates of the instruments be freely determined depending on market conditions, thus making the market environment more favorable for the issue of instruments by auction.

6. Concluding Remarks

Financial reforms including the introduction of new financial instruments, the liberalization of interest rates and the relaxation of capital controls in the 1980s have resulted in the decline of the traditional role of commercial banks and, by contrast, an increase in the roles of non-bank financial intermediaries and money and capital markets. In other words, financial disintermediation has ocurred. Such financial disintermediation has resulted in an increase in the difficulty of the central bank to implement monetary policies even though financial innovations have increased the efficiency of financial markets.

The importance of interest rates as transmission mechanisms and/or exchange rate channels have increased. Income velocities of money

have become unstable and interest sensitivities have also increased. Consequently, the demand for money has also become unstable. Also, the issue of the range of financial instruments to be included into monetary aggregates has become highlighted. Money supply has also become increasingly endogenised. All these changes have reduced the effectiveness of monetary aggregates as intermediate targets.

It is a difficult task for the central banks in the SEACEN countries to find alternative intermediate targets because their money and capital markets have not been sufficiently developed. In underdeveloped money and capital markets, it is not easy to identify interest rates fulfilling the necessary conditions as intermediate targets. Even if such interest rates exist, it may be risky to rely solely on only one intermediate target in a rapidly changing financial environment. Interest rate targets need to be accompanied by attention to various information variables, perhaps even the price level or inflation rates themselves.

Furthermore, central banks in the SEACEN countries have changed the way in which monetary policy is implemented - from the method of directing credit to indirect market-oriented ones such as open market operations, rediscount and reserve requirements policy. Among these, open market operations have become the dominant instrument of monetary policy implementation. However, such indirect market-oriented monetary policy implementation is also limited mainly because of the underdeveloped money and capital markets.

Therefore, the development of financial infrastructure such as money and capital markets are urgent issues to be taken up in order to increase the efficiency of monetary policies. Monetary policies in the SEACEN countries are now at a transitional stage.

Summary and Conclusion

During the last two decades, dramatic changes in the financial markets have occurred worldwide. Firstly, nonbank financial intermediaries such as pension and mutual funds, insurance companies, and finance companies, have played an increasingly important role in the financial system. Secondly, there has been tremendous growth in the domestic capital markets in terms of the volume and value of transactions and in the development of new types of securities. Thirdly, in response to financial market liberalization around the world, international capital mobility has risen dramatically, encouraging the development of so-called emerging capital markets of developing countries. Fourthly, associated with these changes in the financial markets, there has been an apparent decline in the traditional role of commercial banks, as both depositors and borrowers seek alternative sources for investment and financing. Bank deposits have declined as a share of household assets, and businesses have turned from banks to money and capital markets to finance their investment spending. All these have led to financial disintermediation. Financial disintermediation means the withdrawal of funds from financial intermediaries by ultimate lenders (savers) and the lending of those funds directly to ultimate borrowers. In other words, disintermediation involves the shifting of funds from indirect financing to direct financing. Behind these developments are a variety of causes including inflation and interest rate volatility, the deregulation of capital controls and the introduction of a flexible exchange rate regime, and the improvement in information and communication technologies.

As a result of the abovementioned developments, financial disintermediation has taken place considerably in developed countries. Banking, at least in its traditional form, is in decline. This decline has been more severe in countries where constraining regulations have created a highly segmented financial structure and prevented banks from responding to the competitive initiatives of nonbank competitors. In all countries, however, technologically driven financial innovation, competition, and deregulation, once they have occurred, have had powerful effects. In the United States, the ratio of direct financing to total corporate financing increased from 20.8 percent in 1980 to 27.1 percent in 1993. In Japan, the ratio increased from 8.3 percent to 16.7 percent in 1994. However, the ratio in Japan is still much lower than in the United States because traditionally in Japan, the reliance on banks for corporate financing is higher and also the capital market is less active than that of the United States.

There have been two significant trends in the SEACEN countries over the last decade. Firstly, non-bank intermediaries, such as pension and mutual funds, insurance companies, and finance companies, have played an increasingly important role in the financial markets. Secondly, there has been tremendous growth in the money and capital markets. Consequently, the traditional role of commercial banks has declined as both depositors and borrowers have sought alternative sources for investment and financing. There has been an apparent increase in the share of direct financing (implying financial disintermediation). These developments are mainly attributed to the introduction of various new financial instruments with the advent of financial innovations and deregulation.

In the SEACEN countries during the 1970s, there were excessive regulations on the banking sector such as interest rate and credit controls. As a result of high and volatile interest and inflation rates during the 1970s and early 1980s, the efforts of economic agents to circumvent regulations as well as interest rate risks have led to the decrease in the role of the banking sector and, by contrast, to a substantial increase in the role of non-banking financial intermediaries. These trends have accelerated with the introduction of new financial instruments, favorable to non-bank financial intermediaries, such as CMA (Cash Management Account), MMMF (Money Market Mutual Fund), and CP (Commercial Papers).

In addition, most SEACEN countries have undertaken measures to encourage the creation and development of money and capital markets. The Philippines and Singapore already have active organized money markets prior to the mid-1970s. By the beginning of the 1980s, money markets became increasingly important in Indonesia, Korea, Malaysia, Thailand and Taiwan. In the late 1980s, money markets began to be developed in Sri Lanka and Nepal. In general, such development of money markets was fostered by the introduction of new financial instruments such as central bank bonds, government securities, CD (Certificates of Deposit), CP (Commercial Papers), and RP (Repurchase Agreements). Interest rates on these instruments were typically less restricted than those on traditional instruments. The development of money markets have not only increased competition in financial markets but also provided flexible means of managing liquidity through open market operations. However, in most SEACEN countries, the money markets still lack the depth and width for smooth open market operations. In particular, most money markets in the region lack active

and viable secondary markets. In addition, some constraints imposed on the interest rates still remain.

Treasury bills (TBs) are the main instruments used for open market operations in Malaysia, Nepal, the Philippines, Singapore, Sri Lanka, Taiwan, and Thailand. There are, however, no central bank certificates (or bonds) at present in Malaysia, the Philippines, Singapore, Sri Lanka, Taiwan, and Thailand. On the other hand, Central Bank Certificates (SBIs) in Indonesia, and Monetary Stabilization Bonds (MSBs) in Korea are used for open market operations. Indonesia has no TBs market, and the TBs market in Korea is not active. It has been pointed out that heavy dependence of open market operations on central bank certificates (or bonds) poses a burden to the central bank in its monetary management because of the interest payments on the certificates (or bonds). On the other hand, CPs are instruments for direct financing in the money market. Most SEACEN countries (Indonesia, Korea, the Philippines, Singapore, Taiwan and Thailand) have the markets for CPs or their substitutes (commercial bills in Singapore). The share of the CPs market in the money market is substantially high in Korea, Singapore and Taiwan (in Korea, and Taiwan, its share is largest among markets of various instruments). Conversely, there is no CPs in Malaysia, Nepal and Sri Lanka.

In spite of the recent pace of development in the money markets of the SEACEN countries, most markets are still at a fairly rudimentary stage. Many reasons can be taken into account for this. Firstly, some interest rates in the money markets remain regulated. If the interest rates in money markets can be determined by free market forces, it would certainly increase the efficiency and flexibility of the money markets. Secondly, there are no active and viable secondary markets. In order to develop a secondary market, an efficient system of dealers or brokers should be established. It has been found that it is very difficult to establish this system in developing countries. As a start , the authorities should license, or select accredited dealers or brokers. The market should be restructured so that dealers or brokers find operations reasonably profitable. Creating conditions for free price competition through the allowance of free entry into the market by appropriate participants would significantly increase the efficiency of the market. Thirdly, there is still a lack in the variety of money market instruments. For instance, TBs are not traded in Indonesia and in Korea, the market for them is not active. There are no markets for CPs in Malaysia, Nepal and Sri Lanka and no market for CDs in Nepal and the Philippines. The

Philippines also do not have BAs and RPs do not exist in Taiwan. Therefore, it is imperative that the financial instruments be diversified to provide sufficient and suitable opportunities for investors as well as borrowers. Fourthly, the maturities and denominations of money market instruments are too constrained. There need to be a wide range of maturities and appropriate denominations to meet the needs of a wide spectrum of investors. Fifth, there is a lack of suitable infrastructure for the development of money markets. The authorities should reorganise the tax system, introduce a flexible legal system, establish a credible credit rating system, and build a good telecommunications and computerized network. Adequate prudential supervision of the market as well as effective rules to protect investors should be also introduced.

Capital markets, in particular, stock markets, have expanded rapidly in a number of the SEACEN countries. In particular, the growth of stock markets in Indonesia, Korea, Taiwan and Thailand has been remarkable. The amount of market capitalization at the end of 1994 as compared to the end of 1982 stood at 328 times for Indonesia, 44 times for Korea, 49 times for Taiwan, and 104 times for Thailand respectively. In terms of the ratio of market capitalization to current GDP, which is frequently used as an indicator to show the degree of stock market development, Malaysia posted the highest ratio (275 percent) followed by Taiwan (102 percent) and Thailand (92 percent). The stock markets in Indonesia and Sri Lanka show relatively low ratios in spite of their remarkable growth in recent years. It is also notable that the development trends of the stock markets in the SEACEN countries have shown synchronization as their markets have been liberalised. For example, the stock markets moved in tandem in Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand when all experienced skyrocketing bull markets in 1989 which was followed by declines and which again recovered in 1993.

Several factors have contributed to the remarkable growth of the stock markets in the SEACEN region. Firstly, the stock market in general tends to track the performance of the underlying national economy. The immense growth of the stock markets in most SEACEN countries has therefore mirrored the impressive performance of their economies in terms of the growth rate of GNP, low inflation rates and consistently high saving rates. Secondly, the growth of the stock markets was also the result of appropriate government policies which were introduced to encourage savings and offer fiscal incentives to shareholders. Thirdly,

the privatization of large state corporations throughout the region during the last decade has also dramatically increased the number of shareholders. Fourthly, institutional investors have become more influential than retail investors and tend to stabilize markets with their continuous cashflow. Fifth, as the capital markets in the region became more and more open, foreign capital started to flow into the markets in increasingly large amounts .

On the other hand, the bond market in the region is still small, particularly the corporate bond market. Long-term outstanding debt is low in Taiwan and Thailand but somewhat higher in Korea, Malaysia and Singapore. The secondary markets in Korea, Malaysia and Thailand are relatively inactive while they are more active in Singapore and Taiwan. This is due to a few factors. First of all, interest rates are still largely administered or controlled in many SEACEN countries. The effective yields on government bonds are kept below free-market levels. They are sold upon issue to financial institutions which are required to hold these bonds for liquidity or reserve requirements purposes. Most refrain from selling them to avoid capital losses. In Singapore and Taiwan, interest rates are market-determined and consequently the turnover ratio (the ratio between turnover and market capitalization) of the bond market is comparatively higher. The second factor is the dominating position of the banking sector in the region. The volume of bank assets is generally higher than the capitalization of the equity markets. Commercial banks encourage private enterprises to borrow at short-term from the banks rather than to lose them to the securities markets. Moreover, regulations that favor banks are imposed, such as the requirement that corporate debt issues be collateralized or guaranteed by a financial institution. Thirdly, there are some statutory limitations on the supply of bonds. An example is the Taiwanese company law stipulating that the volume of bonds issued must not exceed the company's net worth. Fourthly, there are prudential requirements such as the high minimum denominations, which prevent retail investment. Fifth, the development of infrastructure for the bond market leaves much to be desired.

During the last decade, financial disintermediation has been occurring in the SEACEN countries as in most developed countries. This is with the exception of Taiwan where the share of direct financing to total financing of the corporate sector has been more or less stable due mainly to abundant liquidity in the banking sector. Financial disintermediation in the SEACEN countries has been fueled largely by

the considerable growth of the capital market during the period. The growth of the stock market in particular has contributed substantially to the deepening of financial disintermediation in most SEACEN countries. However, the bond and commercial papers markets have not contributed very much to direct financing in most SEACEN countries since both markets are still small and narrow. Financial reforms including the introduction of new financial instruments, the liberalization of interest rates and the relaxation of capital control in the 1980s have resulted in a decline in the traditional role of commercial banks and by contrast, an increase in the role of non-bank financial intermediaries, money and capital markets. Such financial disintermediation has resulted in the increasingly difficult task of the central bank to implement monetary policies even as financial innovations have increased the efficiency of financial markets.

As a result of disintermediation, interest and/or exchange rates have become increasingly important as monetary transmission channels. The income velocities of money have also become unstable and interest sensitivities have increased. Consequently, the demand for money has become unstable. The inclusion of the range of financial instruments in monetary aggregates has meant that money supply is becoming increasingly endogenised. All these changes have reduced the effectiveness of monetary aggregates as intermediate targets. However, it is difficult for central banks in the SEACEN countries to look for alternative intermediate targets because the money and capital markets have not been sufficiently developed. In underdeveloped money and capital markets, it is not easy to identify interest rates fulfilling the necessary conditions for targetting them as intermediate targets. Even though if such an interest rate can be identified, it may be risky to rely solely on only one intermediate target in a financial environment which is rapidly changing. Interest rate targets, therefore, need to be accompanied by attention to various other information variables, for example, perhaps even the price level or inflation rates.

Many central banks in the SEACEN countries have changed the way in which monetary policy is implemented. Increasingly , they are moving away from methods such as directing credit to indirect market-oriented ones such as open market operations, rediscount and reserve requirements policies. Open market operation, especially, is gradually becoming the dominant instrument for monetary policy implementation. However, the use of such indirect market-oriented monetary policy implementations has also been limited due mainly to the immature

money and capital markets. It is imperative, therefore, that the development of financial infrastructure such as money and capital markets be emphasised so as to increase the efficiency of monetary policies.

As a consequence of the far-reaching transformation process, financial markets have doubtlessly become more efficient. Costs for borrowers have declined, earnings for investors have risen, and the markets have thus been given additional growth stimuli. However, the financial markets have also become fragile. The stock market crash of 1987, the European exchange market turbulence of 1992, the European currency unrest since then, and the recent foreign exchange market crisis of Mexico have shown that enormous shifts in capital may bring about serious consequences to a country as well as for the world at large. Interest volatility has also become another factor making the investment environment uncertain. Accordingly, Hans Tietmeyer (1993) argued that the stability of the financial markets must be one of the primary objectives of economic policies. However, it is a widely held consensus that deliberalization and re-regulation would be inappropriate reactions. Instead, one must come up with a right combination of economic freedom and appropriate supervisory provisions.

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