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**PRIVATE POWER PROJECTS
AND
CAPITAL MARKET DEVELOPMENT**

**Final Report
December 1990**

Final Report

"Private Power Projects & Capital Market Development"

**To The United States Agency for
International Development**

BY

Financial Markets International Research Institute

And

Price Waterhouse: Financial Sector Development Project

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Table of Contents

- Section I. Summary and Introduction
- Section II. Historical Role of Utilities In Economic and Financial Market Development: The Experience of the U.S. and Canada
- Section III. Prototype Private Power Project
- Section IV. Overview of the Financial Systems In Six Asian Countries: Indonesia, Malaysia, Pakistan, Philippines, Thailand and Turkey
- Section V. Potential Role of Export Import Banks and MIGA
- Section VI. Views of Power Sector and Financial Market Experts
- Section VII. Philippines Case Study
- Section VIII. Thailand Case Study
- Section IX. List of Public and Private Sector Financial Experts Interviewed

SECTION I -- SUMMARY AND INTRODUCTION

Background

LDC power sector investment needs may total as much as \$1 trillion dollars during the 1990-2000 period. Due to concerns over operational efficiency as well as financing constraints many governments are considering private sector involvement in these and other major infrastructure projects. International aid organizations and Ex-Im banks have important and evolving roles to play in assisting such projects. In addition, as occurred in developed countries during earlier periods, the financing of these major projects offer a potentially large supply of lower risk securities which could stimulate the development of investment banking organizations, new issue markets, private placement markets, and secondary trading markets, in LDC's.

Scope of This Report

USAID/ANE contracted FMIRI, Inc. through a subcontract with Price Waterhouse under the auspices of the AID/PRE Financial Sector Development Project to undertake research on private power projects and capital market development. This project has several research objectives. First is to assess the likely availability of private financing for LDC private power projects under current conditions. Second is to identify the factors currently inhibiting private financing for such LDC projects. Third is to identify project modifications, regulatory changes, and capital market innovations which could expand the flow of private financing to private power projects. Fourth is to understand the historical roles of private and public power projects in LDC's. Fifth is to identify the historical connection between private utility financing and capital market development in developed countries and to ascertain how the financing of private power projects in LDC's can be utilized to assist in developing their capital markets.

Research Methodology

The adopted research methodology begins with a review of the literature on utility financing in developed and developing countries. In addition, a capital market analysis framework was developed and applied to publicly available information on the financial market structure and conditions in six Asian countries. A prototype private power project was also developed and then refined through interviews with project financing and financial market experts. Finally field studies in the Philippines and Thailand were undertaken to assess the feasibility of private power projects and identify needed project modifications, regulatory changes and local capital market innovations.

Project Team

The principal authors of this research study are Professors Theodore Barnhill and Yoon Park of The George Washington University, School of Business and Public Management. Graduate students Wing Wu and Polly Tan provided important assistance. The authors wish to express their thanks to Robert Archer of USAID, Dick Breen of Price Waterhouse and Hugh Wynne of Lehman Brothers who reviewed the manuscript as well as the numerous professionals who agreed to be interviewed and who provided valuable information and insights.

Project Financing Structures

Two concepts under active consideration are the Build Own and Operate (BOO) and Build Own and Transfer (BOT) project structures with non-recourse financing. While there are several variations in the basic model, all involve the establishment of a private sector company as a vehicle for ownership, financing, construction and operation of the project for a certain period. Thereafter, ownership may be transferred to the public sector (BOT) or still retained by the project entity (BOO) at its own discretion. These new schemes involve limited privatization of the public utility to the extent that the power project is privately owned and operated, with the project completion and operational risk shifted to the private sponsors of the project.

A number of experts favor the BOO approach since it implies a long-term private sector role. This approach leaves the exit decision on when the sponsors might sell all, or part, of their equity in the project to be made on the business merits rather than being preordained as in BOT.

Role of Multilateral and Bilateral Aid Organizations

A number of multilateral and bilateral international aid organizations as well as certain Ex-Im Banks are involved in supporting this effort to foster private participation in LDC electric power generation including the World Bank, U.S.A.I.D., the Asian Development Bank (ADB), IFC, Japanese Ex-Im Bank and others. Five principal functions can be identified for these organizations. First is the promotion of a suitable economic environment in LDCs, for private sector development, and assisting LDC governments to pursue the right mix of market liberalization and regulatory reforms. Licensing, property rights and similar issues are critical. Second is to work with LDC's and project sponsors to develop project structures and procedures which minimizes potential conflicts and if necessary assist in resolving conflicts which may develop. Third is to provide loans to an LDC government which can be used to fund the project's long-term debt financing needs. Alternatively the ADB and IFC can invest directly in the project's debt and equity securities. Fourth is the provision of foreign exchange convertibility guarantees possibly through MIGA and OPIC. Lastly, would be to assist in financing certain ancillary projects such as power transmission and port facilities.

Private Power Projects History and Risks

In many cases private companies built, owned and operated the first large scale electric generating plants in LDC's 35 to 50 years ago or longer. However, over time an inability to enforce franchise concession agreements weakened these projects financially and many were merged into public sector entities.

Current BOT/BOO power project proposals are viewed as having significant potential risks due to:

- A difficult history of risk transference as shown in the Cogasco Pipeline which went bankrupt in spite of having a take or pay contract with the Argentinean government.
- Government controls on both the input and output prices.
- The history of government actions to hold down rates to achieve political objectives.
- The history of government actions to maintain employment even if workers are not really needed.
- Inflation risks.
- Political stability risks.
- Questions regarding the ability of certain governments to live up to the power purchase agreement.
- Questions regarding the host country central bank's ability to live up to commitments to provide foreign exchange.
- Potential labor strikes.
- Potential fuel supply disruptions, and
- Potential inflationary problems and currency collapses.

The U.S., Canada and certain European countries have in place regulatory systems which act as a referee between private power companies and consumers. This type system does not exist in LDC's and some reliable mechanism needs to be created to resolve disputes, establish bidding guidelines, etc.

Private Power Financing Issues

The financial structure for BOO/BOT projects is typically on the order of 20% to 40% equity financing. Local currency financing is typically 30% to 40% of total project cost.

Indications are that the way to motivate potential private power sponsors is to offer them a return commensurate with risk. It would appear that such sponsors can be found and might include:

- Construction Firms
- Unregulated affiliates of domestic power companies,
- Fuel suppliers,
- Equipment suppliers,
- International Trading companies, and
- Local entities with a good understanding of the local political and economic environment.

Further use of a "team approach" drawing together various interested parties seems to be preferred.

The most difficult financing problem involves arranging debt financing. Given the various risks identified above for BOO private power projects both private lenders and potential guarantor agencies including various Ex-Im banks seem to be of the mind that a sovereign debt guarantee, or its equivalent through various other arrangements, would often be required. Under such conditions some people argue that BOO projects are really just "off balance sheet" financing by LDC governments. Since such projects typically generate no foreign exchange earnings, investors, lenders and guarantor agencies will be equally concerned about the credit-worthiness of the project and the country.

It is conceivable however that a BOO/BOT project could be financed without a sovereign guarantee if:

- The tariff and power purchase agreement are clearly adequate to cover debt service.
- A substantial portion of financing is equity.
- Sponsors are experienced and reputable.
- The builder is a world class contractor.
- Someone, for example the builder, provides completion guarantee.
- The LDC government gives adequate assurances against political risks including expropriation, currency convertibility restrictions, civil unrest, etc.

Further financing is already available to certain private power companies without a sovereign guarantee when they are clearly credit-worthy (for example Hong Kong Electric).

Various innovative financing techniques have been mentioned which could expand the amount of financing available for private power projects, including:

- Spinning off existing power plants so as to create a credit-worthy entity with a capacity to help finance incremental investments.
- Using take-or-pay contracts with credit-worthy export oriented power customers as a secure source of foreign exchange.
- Using LDC commercial banks as agents to sell equity securities in projects.
- Offering the opportunity or even requiring, electric power customers in LDC's to buy equity securities as they pay their power bills.
- Issuance of local currency bonds payable on an index based on the U.S. dollar exchange rate.
- Use of subordinated debt convertible into equity.

Perhaps the financing of such projects will get easier over time. A few successful projects demonstrating how they can be structured and how the various risks can be managed could encourage private sponsors and lenders to step forward with large amounts of financing.

Current LDC Financial Market Conditions

LDC financial markets are currently dominated by the banking sectors which concentrate on short-term lending for working capital and trade. Security markets and non-bank financial institutions exist but are relatively underdeveloped and presently provide only limited long-term financing for private projects. Various studies by U.S.A.I.D., the World Bank, IFC, ADB and others have identified needed financial market reforms, and some countries are moving forward on recommended programs to strengthen local capital markets.

Problems limiting the amount of long-term financing which can be raised in LDC financial markets fundamentally revolve around:

- Inflation risks,
- Political risks,
- Investor desires for confidentiality,
- Investor desires for geographic diversification of investments.

Synopsis of Thailand Case Study

In recent years Thailand has achieved economic growth rates over 10%, in the context of moderate inflation rates, stable exchange rates, and a recently balanced federal budget. This exceptional economic performance has created a pressing need for tens of billions of dollars of infrastructure investments in a number of areas including electric generating facilities, transportation, telecommunications and water works.

A significant concern is whether due to financing constraints The Electricity Generating Authority of Thailand (EGAT) will be able to accomplish the expansion in electricity generating capacity. Recognizing this financing problem the National Energy Policy Committee has recommended that the private sector should be invited to participate in the production of electricity. In the near term it appears likely that smaller scale private co-generation projects will be possible.

The principal obstacle to large-scale private electric generating plants in Thailand is the opposition of the politically powerful EGAT and its unions. Should this issue be resolved, and appropriate take or pay power purchase contracts negotiated, it would appear that such projects costing up to several hundred million dollars could be financed privately without Government of Thailand sovereign guarantees or foreign exchange risk bearing. This comes about due to the very favorable financial market attitudes toward Thailand at the present.

While local financial markets are of significant size and have the capacity to finance individual large projects they do not currently have the capacity to finance all needed investments through out the economy and thus financial market development remains an important objective. In particular, debt market development could help achieve a number of important monetary management and capital mobilization objectives. Such efforts would ideally involve a number of coordinated activities in the areas of increasing investor confidence, investor education, corporate education, regulatory and tax review, security underwriting, and secondary markets.

An extremely important issue is identifying the context in which a critical mass of such activities can be accomplished to achieve the overall objective. It is suggested that the financing of the above major infrastructure projects could provide such an opportunity where a large number of people would have a profit motive to undertake needed efforts. In particular, debt market development could be advanced significantly if the Government of Thailand would encourage, or require, project sponsors and financiers to make a good faith effort at selling medium and long-term debt in Thailand and internationally.

Synopsis of Philippines Case Study

A second case study for this project was on the Philippines. With energy demand expected to grow at the rate of 4.5 percent per year for the next five years, it is recommended that the Philippine government take the initiative to draw up a phased program to improve energy sector operations.

In view of the financial constraints faced by both NPC and the government, the private sector can play an important role in Philippines power production, given the proper financial incentives. The BOT/BOO approach can supplement the nation's power supply relatively quickly without the expenditure of large up-front capital costs by the public sector.

Even though the Philippine financial institutions and financial markets are limited in their capacity compared to other more developed financial markets, there appears to be the potential for raising the 25 to 30 percent of local currency funds needed for a private power project costing \$170 to 200 million.

The Philippines, through its Hopewell project, has already demonstrated that it can successfully attract foreign private investors who are able and willing to develop power plants on a BOT/BOO basis. The Hopewell project has acted as the trail blazer for similar ventures in the country, as both the government and the private sector in the Philippines have become familiarized with the BOT/BOO concept. In this sense, the Philippines can be said to be one of those developing countries that are well prepared to encourage further private power plant projects on the BOT/BOO basis.

Conclusions

The principal conclusions of this study are:

- The BOO/BOT project financing framework offers a badly needed additional financing channel which may be used to relieve financing constraints faced by many LDC governments.
- Such private sector involvement may also increase operational efficiency for electricity generation and other major infrastructure projects.
- Multilateral and bilateral international aid organizations have important roles to play in terms of helping create an appropriate environment in which such private sector initiatives can succeed, as well as in some cases providing necessary financial assistance where risks are perceived to be particularly high.
- However in some countries with more stable economic conditions and more developed financial markets it would likely be possible to finance such projects without sovereign guarantees provided that appropriate take or pay contracts can be negotiated.
- In order to reduce perceived risk levels and attract greater private participation LDC's need to develop regulatory systems which provide a reliable mechanism to resolve disputes, establish bidding guidelines, etc. It would also be most helpful if model agreements can be developed for private power projects which would streamline the project approval process and reduce potential project sponsor's time, cost, and risk during the planning and approval stage for such projects.
- Increased participation of Ex-Im banks in non-recourse financings would be of great practical assistance in funding such projects. Further attention needs to be given to the issue of how the projects' risks can be handled in such a way as to attract expanded Ex-Im bank participation.
- As was the case for the U.S. and Canada in earlier periods the private financing of major infrastructure projects could offer a large volume of lower risks securities to stimulate the development of LDC investment banking organizations, secondary markets and private placement markets.

- The financing of such projects provides a number of people with a profit motive to participate in various capital market development activities. LDC governments intent on local capital market development should seriously consider requiring sponsors and financiers to make a best efforts attempt at selling project securities locally and internationally as well as assisting in making a secondary market for such securities.
- On a country by country basis it would be useful to develop a plan identifying which parties would be involved in various activities including investor and corporate education, regulatory and tax reviews, expansion of security underwriting and distribution capacity, secondary market development, etc.

Report Organization

The remainder of this report is organized as follows: Section II discusses the historical role of utilities in economic and financial market development. Section III outlines a prototype private power project. Section IV gives the LDC capital market analysis framework and an overview of the financial systems in six Asian countries. Section V discusses the potential role of Ex-Im Banks and MIGA. Section VI gives the views of power sector and financial market experts. Section VII is the Philippines case study. Section VIII is the Thailand case study. Section IX gives the names of public and private sector experts interviewed for this project.

Table 1 NEW SECURITY ISSUES BY U.S. CORPORATIONS & UTILITY INDUSTRY
(In million of dollars)

YEAR	TOTAL SECURITY ISSUES	TOTAL BONDS ISSUES	UTILITY BONDS ISSUES	U. Bond AS A % OF TOT. BOND ISSUES	TOTAL STOCKS ISSUES	UTILITY STOCKS ISSUES	U. Stocks AS A % OF TOT. STOCKS ISSUES	TOTAL UTILITY ISSUES	U. SEC. AS A % OF TOT. SEC. ISSUES
1958	403,903	351,102	19,318	5.50%	57,802	1,898	3.28%	21,216	5.19%
57	392,156	325,648	23,004	7.06%	66,508	4,322	6.50%	27,326	6.97%
56	423,726	355,293	31,426	8.85%	68,433	4,020	5.87%	35,446	8.37%
55	239,013	203,500	13,619	6.71%	35,513	1,966	5.54%	15,615	6.53%
54	132,311	109,683	10,679	9.74%	22,628	1,624	7.18%	12,303	9.30%
53	120,074	68,495	9,125	13.32%	51,579	5,001	9.70%	14,126	11.76%
52	84,438	54,076	12,327	22.80%	30,362	7,517	24.80%	19,844	23.45%
51	69,992	44,643	8,063	20.08%	25,349	5,577	22.00%	14,540	20.77%
50	73,696	53,206	9,557	17.96%	20,490	6,230	30.41%	15,787	21.42%
1949	51,523	40,208	8,153	20.28%	11,315	5,171	45.66%	13,324	25.86%
48	47,230	36,872	7,092	19.23%	10,358	5,140	49.62%	12,232	25.90%
47	53,792	42,015	8,262	19.66%	11,777	5,865	49.80%	14,127	26.26%
46	53,488	42,380	8,297	19.58%	11,108	6,121	55.10%	14,418	26.96%
45	53,617	42,756	9,658	22.59%	10,861	6,235	57.41%	13,893	29.64%
44	38,311	32,066	8,873	27.67%	6,247	3,964	63.45%	12,837	33.51%
43	32,025	21,049	5,578	26.50%	10,979	4,691	42.73%	10,269	32.07%
42	40,228	26,132	6,349	24.30%	14,095	4,966	35.23%	11,315	28.13%
41	45,090	32,123	7,605	23.67%	12,961	4,195	32.37%	11,800	26.17%
40	38945	30,315	8,016	26.44%	8,630	3,001	34.77%	11,017	28.29%
1939	26,744	10,347	5,409	29.48%	8,396	1,326	15.79%	6,735	25.18%
38	21,966	17,343	4,407	25.33%	4,583	873	19.05%	5,280	24.04%
37	24,798	21,954	4,217	19.21%	2,844	710	25.25%	4,933	19.90%
36	18,074	15,561	3,117	20.03%	2,513	547	21.85%	3,666	20.28%
35	15,992	13,720	2,332	17.00%	2,271	604	26.58%	2,936	18.36%
34	13,957	10,865	2,139	19.69%	3,091	620	20.06%	2,759	19.77%
33	12,237	10,872	876	8.06%	1,344	246	18.04%	1,122	9.17%
32	10,705	8,969	1,295	14.44%	1,736	479	27.59%	1,774	16.57%
31	13,165	9,420	1,648	17.49%	2,744	704	25.66%	2,352	17.87%
30	10,154	8,081	1,689	20.90%	2,073	635	30.63%	2,324	22.89%
1929	9,748	7,190	1,738	24.17%	2,558	1,028	40.19%	2,766	28.38%
28	11,558	9,652	2,133	22.10%	1,905	1,027	53.91%	3,160	27.34%
27	12,854	9,957	N.A.	N.A.	2,927	N.A.	N.A.	3,872	30.05%
26	10,939	8,002	N.A.	N.A.	2,937	N.A.	N.A.	2,488	22.74%
25	10,240	7,420	N.A.	N.A.	2,820	N.A.	N.A.	2,428	23.71%
24	9,516	7,480	N.A.	N.A.	2,029	N.A.	N.A.	3,665	38.51%
23	8,898	7,033	N.A.	N.A.	1,815	N.A.	N.A.	2,972	33.40%
22	9,334	7,601	N.A.	N.A.	1,923	N.A.	N.A.	2,607	27.34%
21	7,741	5,691	N.A.	N.A.	2,050	N.A.	N.A.	2,411	31.15%
20	6,361	4,920	N.A.	N.A.	1,442	N.A.	N.A.	2,609	41.02%
1919	6,051	4,890	N.A.	N.A.	1,161	N.A.	N.A.	2,149	35.51%
18	7,078	5,973	2,570	43.03%	1,106	395	35.71%	2,276	32.16%
17	6,222	4,729	1,622	55.45%	1,496	501	33.49%	3,121	50.16%
16	6,309	4,436	1,347	37.13%	2,873	465	22.43%	2,129	32.71%
15	6,201	4,888	2,172	44.64%	1,313	182	13.86%	2,291	36.95%
14	3,112	2,600	1,262	48.54%	512	122	23.83%	1,400	44.99%
13	1,059	885	378	42.71%	174	20	11.49%	469	44.29%
12	1,042	913	430	47.10%	129	37	28.68%	464	44.53%
11	2,619	2,319	1,241	53.51%	299	134	44.82%	1,340	51.16%
10	2,762	2,435	1,119	45.95%	328	154	46.95%	1,180	42.72%
1909	2,116	1,883	1,182	62.77%	234	138	58.97%	1,246	58.88%
08	2,137	2,041	1,194	58.50%	96	22	22.92%	1,208	56.53%
07	2,434	1,673	687	41.06%	760	93	12.24%	751	30.85%
06	4,579	4,026	2,876	51.56%	552	68	8.70%	1,987	43.39%
05	2,268	2,116	1,229	58.08%	150	35	23.33%	1,250	55.11%
04	490	456	83	18.20%	44	0	0.00%	130	26.53%
03	380	197	43	21.83%	152	9	5.92%	43	11.32%
02	644	620	385	62.10%	26	9	37.50%	396	61.18%
01	2,372	2,028	1,013	49.95%	343	284	82.80%	1,297	54.68%
00	4,957	3,431	1,460	42.55%	1,526	773	50.79%	2,235	45.09%
1929	9,376	2,620	918	35.04%	6,757	1,434	21.22%	2,352	25.09%
28	7,544	3,917	1,509	38.52%	3,627	910	25.31%	2,427	32.17%
27	6,963	5,190	1,996	38.46%	1,773	842	47.49%	2,838	40.76%
26	4,966	3,648	1,374	37.66%	1,318	488	37.03%	1,862	37.49%
25	4,351	3,040	1,027	33.78%	1,311	549	41.86%	1,576	36.22%
24	3,435	2,569	800	34.25%	866	522	60.28%	1,402	40.82%
23	3,052	2,316	812	35.06%	736	262	35.60%	1,074	35.19%
22	2,920	2,304	633	27.47%	626	302	48.40%	935	31.93%

[The data for this table come from two sources. For the period prior to 1949, see American Gas Association (1949). For the period after 1949, see Federal Reserve Bulletin.]

Utility Issues As a % Of All Issues

United States 1922-1988

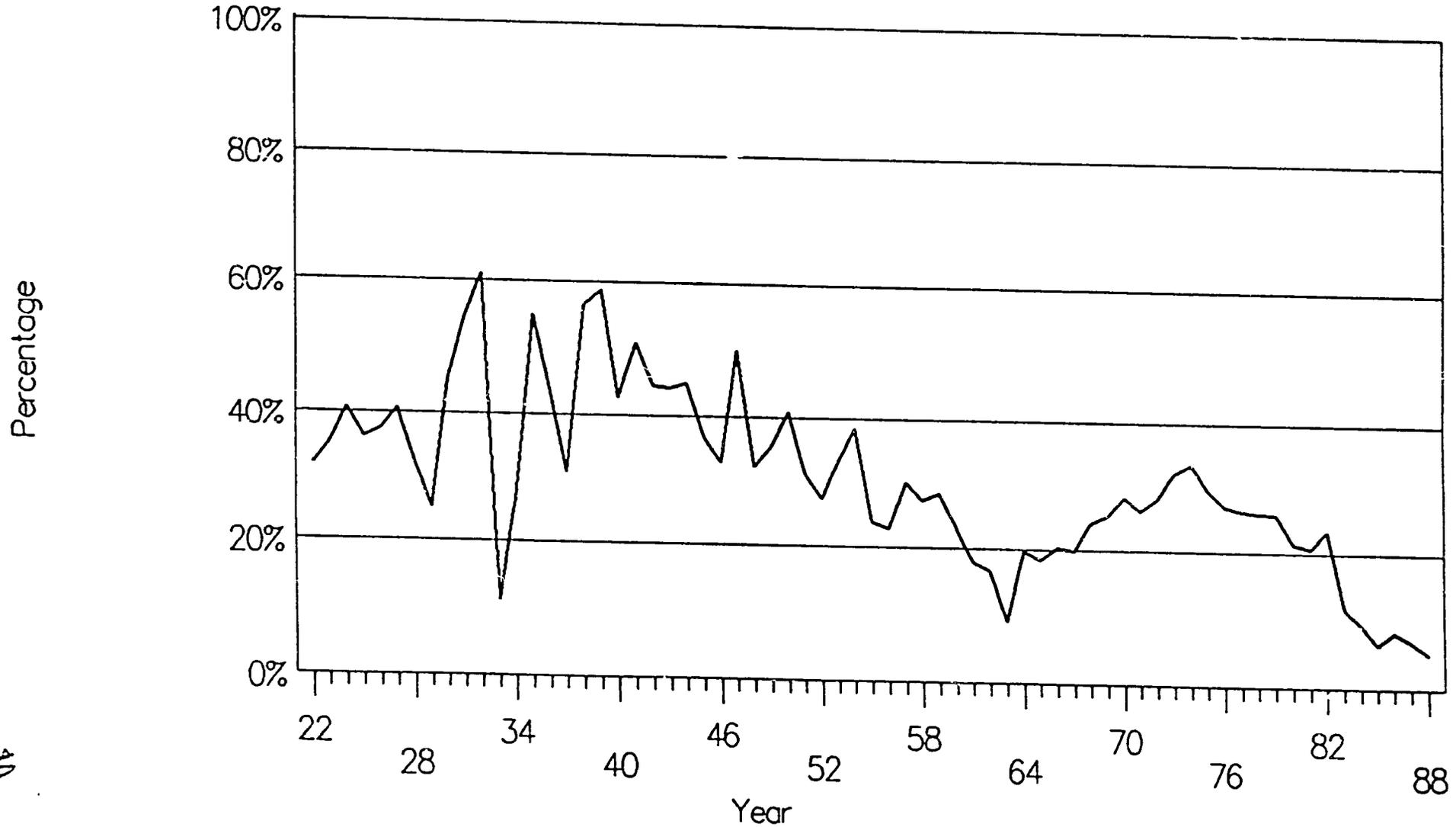


FIGURE 1
SUMMARY OF THE NUMBER OF DIFFERENT TYPE FINANCIAL INSTITUTIONS IN SIX ASIAN COUNTRIES

	INDONESIA	MALAYSIA	PAKISTAN	PHILIPPINES	THAILAND	TURKEY
FINANCIAL INSTITUTIONS						
BANKS						
CENTRAL BANK	BANK INDONESIA	BANK NEGARA MALAYSIA	STATE BANK OF PAKISTAN	CENTRAL BANK OF THE PHILIPPINES	BANK OF THAILAND	CENTRAL BANK OF TURKEY
COMMERCIAL BANKS	67	38	22	32	16	56
STAT-OWNED	5	2	5	3		12
PRIVATE	51	20	0	25	16	26
FOREIGN	11	16	17	4	25	18
DEVELOPMENT BANKS	28	YES	YES	YES	YES	YES
OFFICIAL	YES	YES	YES	YES	YES	N.I.
PRIVATE	YES	NO	NO	YES	YES	N.I.
SAVINGS BANKS	3	YES	YES	YES	YES	N.I.
NBFIS	YES	YES	YES	YES	YES	YES
FINANCIAL/INVESTMENT CO.	YES	59	YES	YES	112	YES
INSURANCE CO.	100	63	YES	132	12	YES
PROVIDENT/PENSION FUNDS	N.I.	YES	YES	YES	N.I.	YES

*N.I. = No Information

*YES = Exist but no further information available at this time

*The information presented in this figure is taken approximately as of the end of 1987

*Sources: IFC Emerging Stock Market Factbook, World Bank reports, Central bank reports, etc.

117

FIGURE 2
SUMMARY OF ASSET LEVELS IN DIFFERENT TYPE FINANCIAL INSTITUTIONS IN SIX ASIAN COUNTRIES
(In Billions of U.S.\$)

	INDONESIA	MALAYSIA	PAKISTAN	PHILIPPINES	THAILAND	TURKEY
FINANCIAL INSTITUTIONS						
BANKS						
CENTRAL BANK	BANK INDONESIA	BANK NEGARA MALAYSIA	STATE BANK OF PAKISTAN	CENTRAL BANK OF THE PHILIPPINES	BANK OF THAILAND	CENTRAL BANK OF TURKEY
	20.91	8.08	8.08	15.09	N.I.	2.17
COMMERCIAL BANKS	28.24	32.0	13.93	14.28	38.0	9.12
STAT-OWNED						
PRIVATE						
FOREIGN						
DEVELOPMENT BANKS	2.12	1.72	1.31			0.53
OFFICIAL						
PRIVATE						
SAVINGS BANKS						
NBFIS	0.8			5.43		
FINANCIAL/INVESTMENT CO.		23.4	2.16		6.4	
INSURANCE CO.		2.2	0.46		1.0	
PROVIDENT/PENSION FUNDS		28.0				0.34

*N.I. = No Information

*The information presented in this figure is taken approximately as of the end of 1987

*Sources: IFC Emerging Stock Market Factbook, World Bank reports, Central bank reports, etc.

12

FIGURE 3
A SUMMARY OF SIX ASIAN COUNTRIES' FINANCIAL MARKETS

	INDONESIA	MALAYSIA	PAKISTAN	PHILIPPINES	THAILAND	TURKEY
FINANCIAL MARKETS						
MONEY MARKET						
INTERBANK MARKET	YES	WELL-DEVELOPED	RUDIMENTARY	YES	WELL-DEVELOPED	FRAGMENTED
GOVERNMENT SECURITIES	TB	TB	TB	TB, CBB	TB	TB
OTHERS	BA, CD, PN	BA, NCD	CD	CP, REPO, COP	CP, TCD	CP, BA, CD
STOCK MARKET	JAKARTA STOCK EXCHANGE	KUALA LUMPUR STOCK EXCHANGE	KARACHI STOCK EXCHANGE	MANILA STOCK EXCHANGE	STOCK EXCHANGE OF THAILAND	ISTANBUL STOCK EXCHANGE
LISTED COMPANIES	24	242	416	144	148	50
CAPITALIZATION(US\$)	0.253 B	29.2 B	2.3 B	6.4 B	14.1 B	2.2 B
TRADING VOLUME(US\$/DAY)	N.I.	25.2 M	0.8 M	7.7 M	43.3 M	10.9 M
BOND MARKET	INFANT	DEVELOPED	UNDER-DEVELOPED	UNDER-DEVELOPED	THIN	EMBRYONIC
Characteristics	1. Mainly State Bonds	1. Dominated by Government securities 2. Infant private bond market and no market makers in medium & long term bonds 3. Secondary market inactive	1. Corporate bond market virtually does not exist since conversion to islamic banking 2. Lack of credibility 3. Pricing of new share issues is set by public authority N.I.	1. Dominated by government, st	1. Dominated by government & government agencies securities 2. Secondary market is developing	1. Issuing prices & coupon rates are set by central bank 2. Maturity 2-7 years
FOREIGN EXCHANGE MARKET	1. 27 participating banks 2. Official ceiling on foreign currency borrowings	1. Central bank is the main player	N.I.	1. Closely contro by central ban 2. Outward remittance required prior approval 3. Swap facilities are sometimes offer by the central bank	1. Controlled by central bank	N.I.
Possible Sources of long term financing	State commercial banks, development banks & insurance companies	Development banks, insurance companies, provident/pension funds & stock market	Industrial Development bank of Pakistan, insurance companies & provident/pension funds market	Development bank o Philippines, Insur companies & stock market	Development banks & insurance companies	Insurance companies & social security funds

*TB= Treasury Bill, BA=Banker Acceptance, CD=Certificate of Deposit, PN=Promissory Note, NCD=Negotiable CD, REPO=Repurchase Agreement, COP=Certificate of Participation, CP=Commercial Paper, TCD=Transferable Cd

SECTION II. - HISTORICAL ROLE OF UTILITIES IN ECONOMIC AND CAPITAL MARKET DEVELOPMENT: THE EXPERIENCE OF THE U.S. AND CANADA

1.1 The Economic Role of Utilities

Every business has a function in the economy, but the economic role of public utilities is a very distinctive one from three aspects. First, the services provided by public utilities are essential for economic growth and development. Second, a modern complex society is completely dependent on utility services. Third, utilities are very large users of economic resources. As history attests, public utility functions are extremely important in furthering economic development.¹

1.2 The Historical Role of Utilities in Capital Market Development

Public utilities, more than any other important industry, use large amounts of capital. Because of these huge capital requirements, rapid pace of expansion and regulated profit levels, utilities typically cannot generate cash flow large enough to finance their growth internally. As a result, they are frequent users of external financing. Indeed, in many countries public utility financing has represented by far the largest single segment of all corporate financing over a significant period of years. If railway financing is included the percentage is even higher.

1.2.1 United States

The capital invested in utilities in the U.S. is enormous. It has been estimated that 20% of all business assets, exclusive of banking, are held by utilities. In addition, as can be seen in Table 1 and Figure 1, utilities are large users of new capital. During the 1950 to 1982 period, U.S. public utilities account for 20 to 30% of all new securities issued by corporations. Moreover, utilities on average accounted for approximately 26% of the total capital investment in new plant and equipment. In earlier periods of economic development, U.S. utility financing as a percentage of total financing was even higher in the 40 to 60% range.

Even earlier, from the 1800's, public utilities were the giants of the American economy. First came the canal boom, then the railroad boom. Numerous railroad companies, each needing capital, came into being. To finance these companies, capital was drawn from all factors of the nation generating substantial financial market activity. By 1870 the net value of the plant and

¹For an extended discussion on this topic see Martin T. Farris and Roy J. Sampson, Public Utilities: Regulation, Management and Ownership, Houghton Mifflin Co., 1973.

equipment of the regulated industries had reached \$8 billion, measured in terms of 1929 prices. This was somewhat more than the entire GNP in that year. In the following decade, the average annual gross flow of capital to this segment of the economy, again figured at 1929 prices, exceeded \$500 million. This was about 15% of the entire nation's annual gross investment in this period. Of these, the railroads were by far the most important. They accounted for 85% of the total value of the plant and equipment of all regulated industries, and more than 80% of their gross capital formation, net capital formation, and output.²

It should be noted that at the inception of the electric utility industry, the general public was reluctant to participate in the risks of a new and untried industry. This risk aversion forced local electric utilities to resort to debt financing with some note issues taken by supplier and manufacturing companies in exchange for equipment. Many of the bond issues were based on closed end mortgages that made further borrowing difficult or impossible. However, as utilities demonstrated an ability to generate stable cash flows, they were able to issue securities to financial institutions and the general public.

The high level of national income in the U.S. after the First World War created a huge store of savings. This factor, coupled with the expanding demand for utility services produced a tremendous demand for the utilities securities. This movement of the nation's savings into the utility industry was in part accelerated by growing investor confidence as reflected in the decline in interest rates during 1920 to 1930. The demand for utility securities was further increased by the adoption of laws permitting savings banks to invest in utility securities. This not only represented a new source of capital but created an aura of safety and security around utility stocks and bonds in general. Nevertheless, with the exception of the year 1929, the majority of the utility financing during the period was still by means of long-term debt securities.

Despite the stock market crash, the utility industry carried its expansion program over into 1930, and in contrast with industry in general, floated a larger amount of new capital issues than in 1929 or in any other previous year in history. Though new capital construction fell off sharply in 1931 and declined almost to the vanishing point by 1934, utility financing was the most significant segment of all financing. After 1932, there was an increasing tendency to finance by private placements, usually to insurance companies. The scarcity of sound investments and the overabundance of investment funds made it easy for many utilities to sell their

²See Melville J. Ulmer, Capital in Transportation, Communication, and Public Utilities, NBER, Princeton U Press, 1960.

securities directly to insurance companies without the services of banking intermediaries. The financial policies of the utility industries were thus closely entwined with those of the country's insurance companies, banks, trusts and foundations. It was estimated that these institutions owned from 85% to 90% of all utility bonds in 1946. In addition, they owned possibly a quarter of the utilities' preferred stock and something less than a tenth of their common stock.³

1.2.2 Canada

Utilities, which scarcely existed in the mid-nineteenth century, rapidly became some of the biggest business enterprises in the Canada. For example, Hydro-Quebec and Ontario Hydro became the two largest companies (measured by assets) in the country. Encompassing such sums of capital as they did, utilities played a key role in the development of Canadian capital market. Utilities not only provided essential services to their users; they also supplied vast quantities of stocks, bonds, and other high-quality securities upon which finance capitalism depended.

Raising the money to build plant and equipment, and provide the systems with necessary working capital, required hundreds of thousands of dollars even in the 1890's. The scale and technological complexity of the projects later pushed capital requirements up into the tens of millions of dollars and helped coax into being a larger, more articulated Canadian capital market especially the institutionalized capital markets. However in the process of capitalization, these enterprises not only fed securities into the new issue market and the investment bankers who served it, but also the secondary market where investors traded utility securities.

Though Canadian financial markets had existed before, these capital-intensive public service companies helped widen them and change their practices. Money was raised in new ways from new sources as new classes of individuals and institutions became attracted to the securities offered for sale.

The utilities sector created obligations which in 1905 approached 63% of the outstanding liabilities of all Canadian chartered banks. Urban utilities depended heavily upon capital markets to finance expansion during these years. Company promoters could sell bonds of this sort in such large quantities partly because a new class of institutional investor appeared on the scene just as capital requirements began to soar. The utilities filled a demand for interest bearing securities on the part of banks, trust companies, private investors, and the rapidly growing life

³See Winston Clemens, Economics & Public Utilities, Appleton-Century-Croft Inc., 1950 pp. 100-126.

insurance companies. A mutually complementary, almost symmetrical relationship developed between lenders and borrowers.

Canadians even developed an international specialization in the promotion of Utilities companies. Before World War I, many of the principal figures in the development of Canadian utilities were also responsible for organizing similar ventures in Great Britain, the United States, Brazil, Mexico, Cuba, Puerto Rico, Jamaica, and Spain.⁴

1.2.3 Switzerland

Before the nineteenth century, major funding efforts took place in the context of families, clans or communities. Major economic efforts, especially in the field of mutual exploitation of natural resources, were undertaken in the framework of co-operatives rather than joint-stock corporations.

It was only during the period of industrialization and construction of the first modern infrastructure projects - particularly railways that made the common stock popular in Switzerland. So mammoth were the funding requirements of these projects that neither the families nor the cities were sufficiently wealthy to meet them. Thus, public utilities played a critical role in the invention and evolution of the common stock as an important financial instrument in the Swiss capital market.⁵

⁴See Christopher Armstong & H.V. Nelles, Monopoly's moment: The Organization and Regulation of Canadian Utilities 1883-1930, Temple U. Press, 1986.

⁵See Henri B. Meier, The Swiss Equity Market, pp. 1-5.

SECTION III. - PROTOTYPE PRIVATE POWER PROJECT

- (1) Location: Asian LDC
- (2) Plant Size and Type: 200 megawatt, combined cycle gas plant
- (3) Capital Cost: Approximately \$170 million

Table 1: Summary of Project Cost Estimate Including Import Duties*
(\$'000)

	<u>EQ. US\$</u> <u>F.C.</u>	<u>EQ. US\$</u> <u>L.C.</u>	<u>EQ. US\$</u> <u>Total</u>
Civil Works	14,000	8,000	22,000
Electrical/Mechanical Equipment	62,000	24,000	86,000
Project Management, Supervision and Administration	7,000	3,000	10,000
Initial Working Capital	8,000	3,000	11,000
Contingency	13,000	6,000	19,000
Interest During Construction	<u>15,000</u>	<u>7,000</u>	<u>22,000</u>
Total	119,000	51,000	170,000
Fraction of Total	0.70	0.30	1.0

(4) Ownership: The plant would be developed by private firms on a Build, Own, and Operate (BOO) basis with private ownership for the life of the project.

(5) Power Purchase Agreement

- Projected Return on Equity = 18 percent

Questions: What range of real rates of return on equity are reasonable? How sensitive is the required real ROE to the country selected? Why?

- Fuel Adjustment Clause

One alternative is to have a tariff provision that allows the power plant operator to increase (or decrease) the price of electricity so as to account for changes in fuel prices.

*This project cost estimate is derived from data on various similar type projects, including ones in which USAID has been involved.

A second alternative is to shift the risk of fuel price changes to a third party (i.e. LDC government, or private suppliers) by entering into a fixed price fuel purchase agreement.

Question: Which of these alternatives is preferable?
Why?

- Fixed Power Purchase Payments

Provided that the power plant becomes operational, the government owned central utility is obligated under the power purchase agreement to make certain minimum payments adequate to cover fixed costs, debt service and a minimum return on equity regardless of whether they purchase power from the plant or not.

- Variable Power Purchase Payments

For each kilowatt of electricity purchased, the central utility will pay a specified amount adequate to cover the variable cost of producing the electricity. Agreed bonuses and penalties will be added to or deducted from the projected ROE depending on the level of output.

- Conflict Resolution Procedures

In the case of conflicts concerning appropriate charges to be paid, the parties to the power purchase agreement agree to binding arbitration in a neutral international forum. Alternatives include:

- International Chamber of Commerce
- Others?

Questions: How can the risks of either party not living up to the tariff and power purchase agreements be minimized?
What set of laws should provide the framework for arbitration? The host LDC's? The project sponsor's home country? New York State? etc.?

- Currency Denomination of Payments:

Both fixed and variable power purchase payments will be made in local currency, with exchange rate risk insurance purchased from the host country's Central Bank.

• Expropriation Contingency

Specific compensation payments will be agreed upon in the case of expropriation of assets.

(6) Insurance:

A comprehensive insurance package will be assembled to cover all principal construction and operating risks. To the extent possible

private and multilateral insurers will be utilized except where costs become prohibitive. Certain political Force Majeure risks may ultimately be borne by the host country and multilateral agencies.

(7) Government Consents and Approvals:

All required government consents and approvals would be in place prior to start of construction, including host government guarantees of the publicly owned utility's performance under the power purchase agreement, permission to borrow in foreign currencies, guarantees regarding foreign exchange convertibility and availability, tax advantages if any, land concessions, and assurances regarding non-expropriation of project assets as well as appropriate compensation in the event of transfer of the plant to the host government.

Questions: How willing will private investors and lenders be to bear the risk that in the case of dramatic exchange rate changes and/or shortages of foreign exchange the Central Bank could default on such an agreement? What backstopping arrangements might be possible to assure performance by the Central Bank. What types of tax advantages would be most useful in attracting private investment?

(8) Construction Contract:

The plant will be constructed by an experienced reputable firm on a fixed price, date certain, turnkey basis.

(9) Offshore Account:

An offshore account in a recognized international bank will be set up to hold the foreign currency required to cover debt service and dividend payments. A target minimum balance adequate to cover the next six month's payments will be established.

(10) As shown below, the prototype financing plan envisions utilization of both domestic LDC and international sources of financing. It is recognized that in some LDC's the current availability of significant amounts of long-term financing is questionable. However, one of the principal objectives of this study is to identify capital market innovations which can expand the capacity of local capital markets to finance large private projects.

Table 2: Financing Plan*
(\$'000)

	<u>EQ. US\$ F.C.</u>	<u>EQ. US\$ L.C.</u>	<u>EQ. US\$ Total</u>	<u>Fraction of Total</u>
<u>Equity</u>				
Sponsor(s)	25,000	-	25,000	.15
Local Private Equity Investors		4,000	4,000	.02
Multi-Lateral Financial Institutions	-	8,750	9,500	.06
International Banks	<u>4,750</u>	<u>-</u>	<u>4,000</u>	<u>.02</u>
<u>Total Equity</u>	29,750	12,750	42,500	.25
<u>Long-Term Debt</u>				
Multi-Lateral Financial Institutions	36,000	15,000	51,000	.30
Foreign Banks/Export Credits	53,250	-	53,250	.31
Local Financial Institu- tions	<u>-</u>	<u>23,250</u>	<u>23,250</u>	<u>.14</u>
<u>Total Debt</u>	89,250	38,250	127,500	.75
TOTAL	119,000	51,000	170,000	
Fraction of Total	.70	.30	1.0	1.0

Assumptions:

How critical is the participation of multilateral organizations such as The World Bank, ADB, IFC, U.S.A.I.D., and others in terms of attracting private financing?

This prototype financing plan is based in part on information regarding the financing of other private sector projects in various LDC's. In some countries local private equity participation or loans may prove unavailable. It is recognized that more specifics regarding investment and loan guarantees are needed.

(11) Key Financial Indicators (assumed):

Overall Project Internal Rate of Return	15 per cent
Debt/Equity Ratio (Max)	3:1
Liquidity Ratio (Min)	1.4/1
Total Debt-Service Coverage Ratio (Min)	1.4/1

(12) Potential Innovations:

- Entities having an established cash flow often have an easier time raising private financing. From a financing standpoint would it be useful for the LDC government to sell, or spin off, an existing power plant to the entity undertaking the new power plant?
- In some circumstances, particularly where low cost hydro power plants are involved, it might be possible to arrange to sell a substantial portion of the power to a single credit-worthy industrial user (for example an aluminum refiner). If such a customer were willing to sign long-term take or pay contracts (with payments in appropriate foreign currencies) to purchase adequate amounts of power to cover the projects debt service, what additional guarantees would be needed to assure private financing for the project? What public policy issues would such a project raise?
- From an LDC capital market development perspective, how important is it that local investors participate in the equity financing of the project? Would it be preferable for a number of small local equity investors to participate or a few larger investors? Would listing equity shares on local stock exchanges provide adequate liquidity for equity investors? Are alternatives available to provide such liquidity such as: (1) over the counter trading, (2) a repurchase agreement between the investors and issuing firm whereby after some period of time shareholders would have the option to sell back to the project company a portion of the issued shares at a price set by some formula, provided that the firm had adequate financial resources to repurchase the shares and still meet the loan indenture provisions.

SECTION IV. - OVERVIEW OF THE FINANCIAL SYSTEMS IN SIX ASIAN COUNTRIES: INDONESIA, MALAYSIA, PAKISTAN AND TURKEY⁶

The following overview of the financial systems in Indonesia, Malaysia, Pakistan and Turkey is given as background for assessing the current environment in which the financing of private power projects would take place. It may also help in identifying needed LDC capital market reforms. Similar types of information and analysis are given for the Philippines and Thailand in their more in depth case studies and is also presented in summary form in this section. In several respects the characteristics of the financial markets in these countries are similar including:

I. Summary and Introduction

1.1. Commercial banks hold by far the largest share (average about 60%) of the financial sector's total assets and play a major role in both the mobilization and allocation of the countries capital resources. Also, the banking sector is rather concentrated either in a few state-owned or larger private commercial banks.

1.2 Banking institutions make mostly short-term commercial loans for working capital and trade financing with interest rates set on a floating rate basis.

1.3 Foreign banks concentrate on financing trade business, and on occasion extend project related long-term foreign currency loans subject to prior Central Bank approval.

1.4 Interest rate levels are typically regulated, or influenced substantially, by the government.

1.5 A small amount of long-term credits (around 5 year maturities) are extended by banks. These are typically granted on a secured basis with Real Estate Mortgage or plant and equipment as collateral. Loans for special projects usually require approval from the Central Bank.

1.6 All these countries have government-owned development banks, which extend medium and long-term loans (10-15 years) for modernization and expansion of existing plants and initiation of new projects.

1.7 Non-bank financial institutions such as finance and investment companies, insurance companies and provident and pension

⁶The information and conclusions given in this overview of the financial system of six Asian countries are drawn from the various studies cited in the attached bibliography as well as from interviews with various financial market professionals.

funds exist but are slow in developing and currently provide minimal long-term financing to private projects. Most of these institutions' assets are invested in government and government enterprises securities. Thus, the largest non-depository source of financial savings is insulated from the rest of the capital market and provides virtually no funding for the private sector. To deepen the capital market, the government needs to allow if not encourage the NBFIs to invest in credit-worthy private firms.

1.8 The bond market is under-developed and is dominated largely by government bonds and treasury bills.

1.9 Bond issues frequently require a bank guarantee. As a result, the cost of issuing a debenture may be greater than getting a loan. Also, companies find it much easier to borrow from banks than to issue bonds.

1.10 The stock market is also relatively shallow as there are few participants. Many potential investors find the stock market too volatile based on past historical incidents or scandals which have led to a loss of confidence and liquidity in the market.

1.11 For a variety of reasons, many companies who would be attractive issuers of stocks and long-term securities prefer to remain closely held enterprises and rely on bank financing for incremental funding. For example, frequently a government agency sets the issuing prices for stock issues and the coupon rates for bond issues at unfavorable levels. To encourage firms to raise more capital through such security issues and thus promote development of local capital markets, governments should allow such new issue pricing decisions to be made largely by the issuing firms and underwriters. Other reasons firms do not use security markets include easy access to DFI loans, reluctance to dilute shareholding (family business), and higher disclosure requirements, etc.

1.12 High interest rates on other financial instruments, especially the risk free assets (eg. TBs) also make it less attractive for investors to invest in equities. Hence, the development of long-term instruments needs to be promoted through rationalization of the interest rate structure with respect to risk, maturity and liquidity.

1.13 The lack of an active secondary market limits the liquidity of longer term financial instruments and thus makes it more difficult for firms to issue such securities. Institutions like discount houses, or their equivalence, should be promoted in order to facilitate the development of the secondary market.

1.14 Given the large wealth disparities in many of these countries, significant pools of private capital tend to be concentrated in relatively few hands, which often also have strong ties to the government.

1.15 In recent years, U.S.A.I.D., The World Banks, The Asian Development Bank and other organizations have studied most of these countries' financial markets and suggested various reforms to liberalize and further develop the markets. Figure 1,2 & 3 below give a brief overview of the current structure of the financial markets in the six Asian countries covered by this study. In certain countries, activate reform programs are underway which may significantly increase the capacity of the markets to finance private projects in the future.

The remainder of this section of the paper is organized as follows: Part II gives a general capital market analysis framework. Parts III to VI apply this analytical framework to the four countries identified above. Part VII gives the supporting charts, tables and bibliography.

II. Framework For Assessing an LDC Financial Market's Capacity To Assist in Financing Private Power Projects.

- Current Structure, Types and amount of Financing Available From Financial Institutions (Equity, Long-Term Debt, Bridge Financing).

BANKS

Central Bank
Commercial Banks
Development Banks/Government Banks
Foreign Banks
Other Banking Institutions

NON-BANK FINANCIAL INSTITUTIONS

Finance Companies
Investment Companies
Insurance Companies
Pension Funds
Other Non-Bank Financial Institutions

- Current Structure, Types and amount of Financing Available In Financial Markets (Equity, and Long-Term Debt).

MONEY MARKET

Interbank Loan Market
Government Securities Market
Others

STOCK/BOND MARKET

Set-up/History
Weaknesses
Brokerage Houses
Security Underwriting System
Investment Banks

PRIVATE PLACEMENT MARKET

- Regulations affecting Private Projects and Financings
New Issue Pricing Mechanisms
Limitations on issuing equity securities for new ventures
Listing Requirements on Security Markets
Limitations on Foreign Portfolio Investments
Foreign Ownership Regulations
Regulations on Foreign Joint Ventures
Tax treatment of various type securities and investments etc.

III. INDONESIA

A. FINANCIAL INSTITUTIONS

1. BANKS

Banks are classified into four categories: Central Bank, commercial banks, savings banks and development banks. In regard to the last three, four kinds of ownership are distinguished: government (national or provincial); co-operative; private and foreign. The assets of the Central Bank, the state-owned commercial banks plus development banks and insurance companies account for about 87% of all financial institutional assets.

1.1 Central Bank

Bank Indonesia's responsibilities come under three broad headings: the promotion of government economic objectives; the development of the financial sector and the maintenance of price stability.

1.2 Commercial Banks

Commercial banks include both state-owned and privately-held banks.

1.2.1 State-owned Banks

There are five state-owned banks, which provide banking services to specific sectors of the economy.

1.2.1.1 Bank Negara Indonesia - specializes mainly in finance for the manufacturing sector.

1.2.1.2 Bank Bumi Daya - specializes in finance for the state and forestry sector.

1.2.1.3 Bank Rakyat Indonesia - concentrates on financing cooperatives, as well as the agriculture and fisheries industries.

1.2.1.4 Bank Dagang Negara - specializes in finance for the mining, industry, construction, trade and service sectors.

1.2.1.5 Bank Ekspor Impor Indonesia - specializes in international trade and in particular, the production, processing and marketing of export commodities.

Today, with the exception of Bank Rakyat, which still focuses on agricultural projects, all of the state commercial banks engage in all economic sectors. All five state commercial banks are authorized to deal in foreign exchange.

1.2.2 Private Commercial Banks

Private commercial banks have grown in importance in the nation's financial system. Their principal sources of funds have been their equity capital and deposits.

The major portion of commercial bank lending has been on a short-term basis to trade and commerce, but increasingly banks have been granting loans for working capital requirements of industrial units and medium term loans for fixed assets. Banks can grant long-term credits and participate in investment enterprises with approval of Bank Indonesia. Bank lending is invariably on a secured basis; medium and long-term loans are required to be secured against collateral which adequately covers the loans. Generally there is a ceiling on loans on the basis of total investment: the borrower has to finance at least 25% of priority projects and 50% in other cases.

1.3 Development Banks

Development banks fall into three groups: The Development Bank of Indonesia (BAPINDO), the regional development banks and the private national development bank (Bank Pembangunan Industry).

1.3.1 BAPINDO

BAPINDO is the foremost state institution in the field of development financing. The bank's lending mainly takes the form of medium and long-term loans for modernization and expansion of existing plants and initiation of new projects, mainly in the indigenous private sector and particularly in the industrial, transportation and shipping sectors. Their largest source of funds are from foreign banks, IDA, ADB, WB and Kreditanstalt Ffir Wiederaufbau, together with direct loans from the government.

1.3.2 Regional Development Banks

These are owned by local authorities, or jointly owned by local authorities and private parties. They offer medium term loans for the acquisition of fixed assets or for working capital by obtaining refinance through BAPINDO.

1.3.3 Private Development Banks

These are small privately-owned development banks intended to provide investment and development services.

Long-term loans are mainly granted by state commercial banks and BAPINDO for a maximum periods of ten and fifteen years, respectively. Loans for a period exceeding 15 years are not normally granted. Loans are invariably required to be adequately

secured by fixed assets and other collateral. Foreign concerns and joint ventures cannot obtain credit from these sources.

1.4 Foreign Banks

The location and operation of foreign banks and the procedure for applying a license are subject to Government Regulation #3 of 1986.

The object of permitting foreign banks to open branches is to enable them to participate in foreign investments, finance import and export business, and assist in the development of domestic industries and production.

1.5 Other Banking Institutions

There are a number of relatively small banking institutions organized primarily to meet the needs of market retailers and farmers. They operate mainly in rural areas.

1.5.1 Savings Banks

The savings bank sector is dominated by BTN (Bank Tabungan Negara) which obtains most of its funds from two government sponsored savings programs: the national development savings scheme and the insured savings scheme which is linked to life assurance. Both schemes are very popular among small savers.

2. NON-BANK FINANCIAL INSTITUTIONS

The NBFIs often involve collaborative ventures between domestic and foreign financial institutions and are of two main types, Development finance corporations and Investment finance corporations.

2.1 Finance Companies

Development finance corporations are intended to provide medium and long-term credits to Indonesian enterprises, although they have tended to display a marked predilection for money market activities and a considerable proportion of their asset portfolio consists of short-term promissory notes and certificate of deposits.

2.2 Investment Companies

Investment Finance Corporations are intended mainly to fulfill merchant banking functions, including the underwriting of share issues by Indonesian companies.

2.3 Insurance Companies

The insurance industry is divided into four sectors: life, non-life, reinsurance and social. The industry has a number of large firms, most of which are state owned.

In regard to the assets held by insurers, it appears that by far the largest part comprises demand and time deposits as well as short term money market assets. Long-term debt (greater than 1 year) and equities are clearly of little importance.

Joint venture insurance companies are not permitted to own shares in Indonesian firms; this is somewhat paradoxical, given the government attempts to promote the development of an active stock market and very limited availability of other kinds of assets for investment. The industry as a whole has been otherwise relatively free of government regulation.

2.4 Other Non-Bank Financial Institutions

Other non-bank finance include government pawnshop services, moneylenders and retailing credit group. These organizations fall more under the informal financial market.

2.4.1 Leasing Companies

Leasing is a form of financing whereby capital goods are supplied for a fixed term on the basis of periodical repayments, often with the option to purchase the assets or to extend the lease. Leasing companies are regulated by the ministry of finance. These companies include both domestic firms and joint venture enterprises with US, European and Japanese participation. The firms are not permitted to accept deposits being regarded as a non-financial institution. They must finance their activities through off- and onshore loans or the issuing of promissory notes, which cannot, however, be discounted as can similar papers issued by banks and NBFIs.

B. FINANCIAL MARKETS

1. MONEY MARKET

The Indonesia money market has been slow to develop, as its growth has long been hampered by a lack of T-bills and other high quality negotiable paper. Until recently the market has been dominated by 'bearer' certificates of deposit and interbank deposits in the form of call or short-term deposits.

1.1 Interbank Loan Market

An organized interbank call money market has been functioning since 1 April 1974 under the auspices of Bank Indonesia. Dealings are at present confined to members of the Jakarta Clearing House.

1.2 Others

In Feb 1985, Bank Indonesia introduced three additional short-term securities, including: Promissory Notes issued by banks or a NBFI in the course of interbank borrowing; bills of exchange drawn by participants in trade transactions and accepted by a bank or an NBFI; Promissory Notes arising from credit extended by banks and NBFIs to commercial and industrial borrowers.

These securities were intended to enhance the liquidity of both bank and corporate borrowers in the money market and to create a money market instrument appropriate for open market operations. In order to encourage the development of a secondary market in these securities, a private securities house has been authorized to trade money market securities that have been endorsed by banks or NBFIs.

2. STOCK MARKET

2.1 History/Set-up

The Jakarta Stock Exchange (JSE) owes its origins to the colonial era, when there was a thriving stock market serving Dutch enterprises and individuals. The market was closed during the Japanese occupation and the nationalization of Dutch firms in the late 1950's.

The exchange was relaunched in August 1977 following comprehensive institutional reforms, which resulted in the establishment of several official agencies designed to promote a rapid development of the exchange.

2.2 Weaknesses

The stock market is under-developed. It caters largely still (as in Dutch colonial days) to foreign multinational companies as well as Indonesian/foreign joint ventures and a few local "blue chip" companies. Despite numerous official measures to spur the market, Jakarta Stock Exchange have been slow to develop. At the end of 1985, there were only 24 listed companies with a total capitalization of just Rupiahs 132 billion or roughly \$80 million.

The main reason why a lot of companies are not listed is the general reluctance by Chinese businessmen to reveal their financial affairs beyond the immediate family circle and the dominance of the banks in Indonesia. A more important or special factor is that most Chinese business tycoons in Indonesia are supremely sensitive to the resentment and envy of their wealth among the pribumi population so they have to keep an ultra-low public profile.

An important characteristic of Indonesia's financial markets is the extent of government ownership of financial institution. One reason for all this is the fact that the Indonesian government has for some times collected huge oil revenue and used the financial system as a conduit for redistributing these revenues rather than as a means of collecting and investing people's savings. The enormous wealth disparities in Indonesia also mean that pools of private capital are concentrated in relatively few hands which also have strong government ties.

3. BOND MARKET

The bond market has grown only slowly as the government has been slow to tap domestic savings by issuing state securities or bonds; it is only since 1983 that some official enterprises have begun to issue bonds.

4. OTHERS

4.1 Foreign Exchange Market

At present 27 banks, comprising Bank Indonesia, all five state commercial bank, 10 private national commercial banks, 10 foreign banks, and a joint-venture bank, can conduct foreign exchange business.

Swaps up to six months can be made with Bank Indonesia to cover exchange risks. Financial institutions, including foreign banks, are not permitted to borrow from abroad beyond certain ceilings fixed by Bank Indonesia. Financial institutions must report all offshore loans to Bank Indonesia.

IV. MALAYSIA

A. FINANCIAL INSTITUTIONS

1. BANKS

In terms of structure and organization, the Malaysian banking system is basically similar to the U.K.'s, being based on branch rather than unit banking. It is also dominated by a handful of large banks with an extensive branch network. It comprises mainly the central bank, commercial banks, finance companies, merchant banks, the National Savings Bank and the Credit Guarantee Corporation. Financial institutions in Malaysia operate under predominantly competitive conditions. Commercial banks' share in total assets of the financial system is about 40%. The shares of nonbank financial institutions together with the Central bank total about 30%, with the rest belong to provident, pension and insurance funds, saving institutions and development finance institutions.

1.1 Central Bank

Bank Negara Malaysia was established under the Central Bank Ordinance 1958, and commenced operation on 26 January 1959. It is responsible for formulating and implementing monetary and credit policies within the structure of the country's overall financial and economic objectives. It also acts as the issuer of currency. In addition, the bank also operates in foreign exchange and administers exchange control regulations.

1.2 Commercial Banks

The role of commercial banks in Malaysia has evolved from the traditional one of merely providing depository facilities and using such deposit funds for the finance of trade and commerce to that of motivating private investment and supporting economic development generally in the country.

The commercial banks are the largest and most important credit institutions in the country. At 31 December 1984, Malaysia was served by a network of 38 commercial banks, of which 22 are locally incorporated and 16 foreign banks. They operate a total of 770 banking offices located throughout the country. The commercial banks had a total assets of M\$74.2 billion at the end of 1985.

In the last 15 years, the commercial banking sector has grown even more rapidly than the financial system as a whole. Growing at a compound average annual rate of 20.6%, the commercial banks increased their share in the financial system from 38% in 1970 to 45% of the total assets at the end of 1985.

The commercial banking system is quite concentrated, with the largest two banks, mainly government owned, accounting for about 64% of its total assets. Commercial banks are allowed to determine their own interest rates on deposits and loans. However, a ceiling on lending rates is continued for special categories of borrowers and for housing loans.

1.3 Development Banks

The development banks in Malaysia are mainly public sector established institutions aimed at financing specific areas of the economy not serviced by existing types of institutions. They specialize in encouraging investment in key industries and priority sectors by providing medium and long term development finance.

These institutions are mainly funded by other financial institutions or by government. They include the Malaysian Industrial Development Finance Berhad, the Development Bank of Malaysia, the Industrial Development Bank of Malaysia, the Sabah Development Bank, Agricultural Bank of Malaysia, and the Borneo Development Corporation.

1.4 Foreign Banks

At the end of 1984, there were 16 foreign banks with a total of 146 offices operating in Malaysia. Until the 1970's, commercial banking was largely dominated by foreign banks. While the relative importance of foreign banks in Malaysia has declined, they continue to play an important role in the economy. The foreign banks represent 28% of the banking assets; entry into this part of the sector is presently closed.

1.5 Other Banking Institutions

There are two Apex co-operative societies in Malaysia - the Cooperative Central Bank and Bank Kerjasama Rakyat Malaysia. The CCB is established in 1958 with the main objective of mobilizing funds from individuals and co-operative societies and of directing these funds to viable co-operative enterprises. Bank Rakyat was established in 1954. It is a major source of funds for the co-operative societies; it also provides loans directly to individual members. But loans provided by the bank have been largely for the financing of industry; agriculture and fishing, and housing.

1.5.1 National Saving Bank

The Bank Simpanan Nasional Malaysia was established in December 1974. The NSB mobilizes savings from small savers, particularly in small towns and rural areas, through a wide network of Post Offices in addition to its own branches.

2. NON-BANK FINANCIAL INSTITUTIONS

2.1 Finance Companies

The 47 finance companies constitute the second largest group of deposit-taking institutions, with 10.7% of financial assets at end of 1985 and a network of 372 branches. The growth of finance companies has been phenomenal, with assets expanding at a compound average annual rate of more than 26% during 1970-85; their share in the financial system's total assets has increased from less than 5% to more than 10% during the same period. Over half of the total assets of the finance companies are held by companies owned by commercial banks.

Unlike commercial banks, they are prohibited from accepting deposits repayable on demand. The finance companies are engaged principally in installment credit for retail sales, financing wholesale trade, housing loans, factoring, personal loans, leasing, bridging finance, refinancing and other commercial loans.

2.2 Investment Companies

The merchant banks in Malaysia were established to complement and supplement the services provided by the commercial banks and finance companies. At the end of 1984, there were 12 merchant banks operating, most of them joint ventures between Malaysian and foreign interests. While their activities have been concentrated in money market and lending operations, they also provide corporate finance and advisory services relating to underwriting of share issues; loan syndications; corporate reconstructions; acquisitions; portfolio management; and investment feasibility studies.

There are now 12 such banks, whose assets represent 3.8% of total financial assets at the end of 1985. The sector is highly concentrated, with the largest merchant bank accounting for 40% of the sector's assets. Compared with the commercial banks and finance companies, their assets and liabilities are relatively short term.

2.3 Insurance Companies

Although the insurance industry was initially dominated by foreign companies, since the 1970's domestic insurance companies have increased significantly. A high proportion of their funds are invested in long term instruments such as long term government securities, corporate securities, loans to public corporations, and mortgage and policy loans. At the end of 1984, there were a total of 63 insurance companies, of these 50 companies are incorporated in Malaysia. The ten foreign companies play a key role in the system and have a large market share.

Of the total 63 companies, 14 conducted both life and general insurance business, 4 specialize in life insurance, and the

remaining 45 companies are general insurance companies. Total resources of the insurance companies at the end of 1985 amounted to M\$5 billion. There were about 1.6 million life insurance policies in force, i.e., one in ten Malaysians owned a life policy.

The life insurance companies are relatively liquid and are interested in holding long-term debt instruments. At the end of 1985, Government securities accounted for 27% of the total assets, followed by loans for real estate and loans to policy holder (20%), cash and deposits (24%), corporate securities (15%) and others (14%).

2.4 Discount Houses

Discount houses are the only nonmonetary institutions which can accept deposits of less than one month's maturity. They were set up to develop a secondary market in money instruments and are required to keep at least 85% of their resources in treasury bills and government securities of less than three years in maturities.

The growth of discount houses has been fairly rapid and by the end of 1985, their total assets accounted to about M\$5.0 billion, accounting for 1.7% of the assets of the financial system. The rapid growth is mainly due to the growth in the primary liquidity requirement of the banking institutions.

2.5 Other NBFIs

Other NBFIs include the Urban credit societies, Rural credit co-operative societies, Building society and Borneo Housing mortgage finance.

2.5.1 Provident and Pension Funds

Provident and pension funds in Malaysia are significant in the financial system in terms of total resources. They have been so effective in the mobilization of savings that they rank second, next to commercial banks.

The Employees' Provident Fund (EPF), the largest, covers more than 70% of Malaysia's labor force, and represents an important source of finance for the government. EPF was set up in 1951 under an ordinance. It is essentially a forced savings scheme. The contributions are deducted monthly at source and paid directly to the EPF. EPF is currently the single largest source of long-term funds in Malaysia. It is also the single largest source of funds for the Federal Government. In 1985, EPF invested M\$3.4 billion in Government securities which accounted for about 94.7% of the net domestic financing requirements of the Federal Government.

Most of its assets are in government securities, which are purchased at face value and held to maturity and, therefore, return

a pre-set yield, annually between 8.0% and 8.6% depending on maturity. Hence, the largest non-depository source of financial savings is insulated from the rest of the capital market and provides virtually no funding to the private sector. As of December 1985, the EPF had invested about 86% of its funds in long-term Federal Government securities; such investments amounted to M\$545 million, or 2.2% of its total portfolio at the end of 1985.

B. FINANCIAL MARKETS

1. MONEY MARKET

The money market in Malaysia consists of the direct interbank market and the market through the intermediary of the discount houses. Besides call money, the main instruments of the money market are treasury bills and, lately, bankers acceptances.

The major intermediaries in the money market are local and foreign commercial banks, discount houses, and large corporations. Although the money market is efficient, the volume of transactions is relatively small in comparison to the overall size of the banking system and the short-term funds available for money market operations. This is mainly due to the openness of the Malaysian economy which enables intermediaries to raise funds through other channels.

The money market instruments in Malaysia include overnight and 7-day call money, short-term fixed deposits or loans of one to 12-month maturities, T-bills, Bankers Acceptances, and Negotiable Certificates of Deposits and Repurchase Agreements.

1.1 Interbank Loan Market

The largest component of the money market is the interbank market. The interbank market is an important source of short term funds for the banking system. With the increased importance of liability management, the interbank money market has grown rapidly. An alternative to the interbank money market is to place funds at the discount houses. The discount houses accept deposits from the general public, commercial banks and NBFIs, but do not lend funds in the domestic money market.

1.2 Government Securities Market

Treasury bills market is the second largest component of the money market. Treasury bills have been issued on a tender system since August 1973. The T-bills are offered weekly to the public. The commercial banks, however, remain the main holder of TBs. To encourage the development of the market for TBs, the Central Bank provides rediscounting facilities for these securities.

1.3 Others

Bankers' acceptances and Negotiable certificates of deposits were introduced by the Central bank in 1979 to further develop the money market. The growth of BAs has been rapid, however, foreign banks are more active than local banks in this market. The Central bank also offers rediscounting facilities for BAs.

NCDs are in bearer form and, therefore, can be transferred easily. Unlike BA's, the NCDs are not eligible for discounting at the central bank and, therefore, these are not as marketable as the BA's.

2. STOCK MARKET

2.1 History/Set-up

The Malaysian stock market dates back to the early 19th century. Until 1965, Singapore was a part of the Federation of Malaysia and Singapore and there was a joint exchange, the stock exchange of Malaysia and Singapore, with two separate trading rooms, one each in Kuala Lumpur and Singapore. On July 1973, a separate and distinct Malaysian stock exchange, the Kuala Lumpur Stock Exchange (KLSE), was established. There is also a small, nearly defunct second exchange, the Bumiputra Stock Exchange, on which eligible firms may be listed subject to less stringent conditions. Only 7 firms are listed on this exchange. Even after a prolonged and sharp decline, the market capitalization of KSLE at the end of 1985 was around US\$24 billion.

Although the KLSE is largely a self-regulatory body, with its own rules, by-laws, listing requirements and corporate disclosure policy, it is subject to the administrative control of the Capital Issue Committee (CIC), a body established by the Central bank to supervise the security industry. All companies seeking listing on KLSE must sell at least 30% of the shares to Bumiputra or the Bumiputra designed organizations. Also, since CIC determines the issue price and seeks to encourage the widest possible participation from small investors, especially Bumiputras, its pricing policy has tended to favor the investors, resulting in low initial price to earning ratios and over subscriptions.

The bulk of the companies listed in KLSE represent industrial and commercial concerns, although significant numbers in the fields of hotels, banking, property, plantation, agriculture and tin-mining are also represented. The securities listed include companies incorporated in Malaysia, Singapore, the U.K. and Hong Kong, and bonds issued by the federal, state and local governments.

The Singapore and Malaysian stock markets have been reputed to be a theater of operations for "syndicate" operators whose size or identity was always difficult to establish. Though the two

exchanges were separated in 1973, many of their Siamese-twin characteristics persisted, most notably the cross listings of companies on both exchanges. They were to all intents and purposes mirror images of each other and the regulatory systems and legislative framework in which they operated were broadly similar. The only difference was that Singapore had a reputation both locally and overseas for being more developed and efficient financial center.

2.2 Weaknesses

The 1985 crash of the Pan-Electric company and subsequent stock market crisis brought to awareness several major weaknesses in the structure of the stock market. First, brokerage houses were shown to be undercapitalized and have engaged in over-trading. Second, large local operators and syndicators dominated a relatively shallow market.

Pan-Electric's default on repayment of debt to a syndicate of local and foreign banks was brought about by the company's issuance of a large amount of "forward contracts" with share buy-back arrangement where Pan-El was able to honor them. The height of the forward contract affair was evident within the stock market during the 70s. To rescue the country's stockbroking profession, Malaysian authorities injected a M\$80 million fund into the KLSE to protect innocent third party clients of brokers hit by the forward contract failure.

Some of the remedial measures instigated by the authorities were:

- corporatization of the brokerage industry
- authorization of at least partial foreign ownership of brokerage industry
- limitation on branch networks so as to avoid a dominant control of a certain company or bank over the whole brokerage industry
- closer official supervision of the securities industry

3. Bond Market

3.1 Government Bond Market

The Malaysian debt securities market is dominated by Government paper. The net borrowing by the government amounted to only M\$2.6 billion during 1961-70. Securities issued during this period were mainly to meet the New Economic Policy in early 1970's. With the formal adoption of NEP in the early 1970's, the Government became much more involved in development financing. The net borrowings by the Government during 1971-80 amounted to M\$13.2

billion. Most Government securities were subscribed by provident and pension funds, and life insurance companies.

3.2 Corporate Bond Market

In contrast to the equities market, the private fixed income securities market in Malaysia is in an infant stage. Due to the emphasis on the issuance of equity shares and the absence of the capital gains tax, the development of the long-term fixed income securities market has been slow. Consequently, Malaysian firms, by and large, are not very highly leverage.

Moreover, the top tier companies in Malaysia which would normally be issuing bonds in the market, generally find the cost of bond issues to be prohibitively high. For them, the alternative to issuing bonds is to borrow from commercial banks.

The lack of an active secondary market for corporate bonds is another major constraint on the development of the bond market. None of the very few existing bonds are actively traded and the quotations are generally indicative only. There are no market makers in medium and long-term bonds.

4. OTHERS

4.1 Commodity Exchange Market

The Kuala Lumpur Commodity Exchange (KLCE) was established in 1980, to trade commodity futures contracts within Malaysia, and to provide domestic palm oil producers with an opportunity to hedge their activities locally. The KLCE operates under the Commodity Trading Act 1980, and is supervised by the Commodities Trading Council.

4.2 Foreign Exchange Market

Only the licensed banks are authorized by Bank Negara to deal in foreign exchange. Since 1975, the official value of the Malaysian Ringgit has been determined in terms of the currencies of a group of countries which are significant trading partners of Malaysia. Under this exchange rate agreement, the Kuala Lumpur foreign exchange market operates in the normal manner, with Bank Negara intervening whenever necessary to maintain orderly market conditions.

V. PAKISTAN

A. FINANCIAL INSTITUTIONS

1. BANKS

The structure of the financial sector of Pakistan comprises a wide variety of institutions, ranging from deposit-taking institutions to development finance, collective investment and contractual savings institutions. The Pakistan banking system is of fairly recent origin, having started in the late 1940's. Up until nationalization in 1974, banking was almost entirely in the private sector (12 out of 13). After nationalization, the 13 banks were merged into 5 banks. In Pakistan, the process of Islamization of the financial system was initiated in 1979/80 and was largely completed by mid 1985. The first phase of interest-free banking was introduced with effect from January, 1981. As of July, 1985 all savings accounts were on profit and loss basis.

The key issues covering the entire banking system are: inadequate competition, concentration of lending, and high reserve requirements. In addition, the NCB system also faces the following specific problems: lack of freedom in portfolio selection, high level of non-performing loans, inadequate spreads, inadequate profitability, under capitalization, and weak organization, managerial and operation policies and procedures.

1.1 Central Bank

At the center of the financial system is the State Bank of Pakistan (SBP) which, in addition to its traditional central banking functions, also plays an important developmental role.

1.2 Commercial Banks

The commercial banks include 5 state-owned Pakistan banks - the nationalized commercial banks (NCBs) - and 17 foreign banks. Together, they have total domestic deposits amounting to about Rs 178 billion, total domestic advances and loans amounting to about Rs147 billion, 6658 domestic branches and 119 overseas branches of NCBs. Three of the NCBs have a fairly extensive branch network overseas, with most of it concentrated in the UK and Western Europe. There are no private commercial banks.

Within the commercial banking sector, the NCBs have the lion's share of the business which account for about 90% of the deposits and 80% of the loans. The NCBs are the largest public enterprises in the country. Each NCB is a state owned corporation with the Government of Pakistan holding 5.9% of ownership, SBP 92.7% and others 1.4%. The five NCBs effectively enjoy the protection of the full faith and credit of the state. After nationalization, the government established an advisory/coordinating council - Pakistan

Banking Council (PBC) - to perform the coordinating role in the management and development of the NCBs.

The NCBs are active in all segments of the market. They compete with foreign banks in the financing needs of large 'blue chip' private and public companies. In the deposit market, they face competition from the national savings centers. There is some rivalry among the big banks but the degree of effective competition is limited by the extensive array of controls imposed on the operations of banks.

1.3 Specialized Banks

All specialized banks are government owned; they are - the Federal Bank of Cooperatives (FBC), the Agricultural Development Bank of Pakistan (ADBP), the Industrial Development Bank of Pakistan (IDBP). FBC functions as a apex bank for the credit cooperatives. ADBP plays a central role in the financing of agriculture. IDBP is highly important for the financing of long-term industrial projects.

The specialized banks are treated as deposit-taking institutions even though they rely on central bank support for the vast majority of their funding. For example, 81% of agricultural and 94% of housing bank's lending is supported by loans provided by SBP. Low on-lending rates, high reserve requirements, assured low cost funds and associated institutional complacency, and government's desire to ensure maximum flow of credit to priority sectors are the main reasons for high reliance on the SBP.

1.4 Development Finance Banks/Institutions

There is a large number of development oriented financial institutions, most of them are owned by the government. The most important of these are the Pakistan Industrial Credit and Investment Corporation (PICIC) and the National Development Finance Corporation (NDFC).

PICIC has majority private ownership and provides long-term foreign currency financing to the private manufacturing sector funded from financial resources obtained mostly from multilateral development institutions and bilateral official sources.

NDFC which is wholly government owned, lends to both public and private manufacturing enterprises and funds itself both from foreign institutions and through issuing deposit certificates. NDFC recently established the National Development Leasing Corporation to engage in hire-purchase and leasing operations under the Islamic system as well as the Regional Development Finance Corporation to provide finance for projects undertaken by private entrepreneurs in less developed areas of the country.

Other development finance institutions include the Housing Building Finance Corporation which specializes in providing finance for residential construction and home purchases and is funded almost entirely from the State Bank of Pakistan and a number of entities that have been established jointly with governments from the oil producing Islamic countries such as Saudi Arabia, Kuwait and Libya.

1.5 Foreign Banks

Following the more liberal economic policies adopted by the government of Pakistan since 1977, the number of foreign banks operating in Pakistan has increased considerably. However, there have been discriminatory restraints on foreign banks activities, particularly on branch expansion.

1.6 Post Office Bank

The Post Offices offer passbook savings accounts but they have not been particularly successful in attracting personal deposits.

1.7 National Savings Schemes (NSS)

The NSS have two objectives: to enable government to raise funds directly from the public, and equally importantly, to encourage the saving habit among people of modest means and to provide stable flows of income to these groups.

NSS which tapped directly by the government for its own use, through the national savings centers, the post offices and the banks, have grown very fast in response to the introduction of the highly attractive financial instruments. There are a network of 320 national savings centers, which operate government savings schemes. NSS provides a range of financial assets with highly attractive features carrying an appeal for a diverse group of investors. Among the NSS instruments, Khas Deposit Accounts/Certificates (KDCs) have emerged as the most popular financial asset in the 1980's. The fact that they can be encashed anytime, and they pay tax free interest after six months make KDCs the highest yielding, risk free liquid asset. On an annual basis, KDC offers 15% per year, payable semi-annually, for the first two and one-half years and 17% p.a. for the last 6 months. These features explain why KDCs showed a very high annual growth rate of 62% since 1982. Indeed, KDCs accounted for about 70% of NSS at the end of 1986.

1.8 Other Banking Institutions

There are no building societies or saving and loan associations in Pakistan nor any credit unions. However, there are several agricultural and rural credit cooperative societies.

2. NON-BANK FINANCIAL INSTITUTIONS

2.1 Collective Investment Institutions

Collective investment institutions include open-end and closed-end mutual funds. There are two basic groups offering collective investment facilities. The first is the Investment Corporation of Pakistan (ICP), which is authorized to manage closed-end mutual funds, underwrite and distribute public issues of shares, purchase term finance certificates (TFCs), and manage individual investment accounts.

The ICP was established in 1966 with the objective of broadening the base of investments and developing the capital market. ICP currently operates 16 closed-end mutual funds with a total capitalization of Rs170 million and a state-enterprise mutual fund which has been created as part of the government's divestment program.

The other group is the National Investment Trust (NIT), a unit trust, which was established in 1962 with the objective of channelling individual savings into the stock market. NIT operates the only open-end mutual fund. As of June 30, 1987 it had 60,000 unit account holders with net mobilized funds of Rs2.9 billion.

2.2 Insurance Companies

The insurance industry is dominated by the state-owned State Life Insurance Corporation of Pakistan (SLIC). SLIC offers various types of life policies that provide financial protection both on an individual and group basis.

2.3 Pension and Provident Schemes

All civil servants must join the Government Provident Fund which is a compulsory savings scheme rather than a provident scheme since only the employees contribute. Most public enterprises have provident fund and gratuity schemes for their employees; employers contribute to provident funds at the same rate as employees.

The coverage of retirement schemes in the private sector is not as wide as in the public sector. There is no statutory requirement of the establishment of provident funds by employees, but firms of a certain size that do not have provident funds schemes are required to pay gratuities to employees on their resignation or retirement. The coverage of private retirement schemes expanded with the introduction of the employee's Old-age Benefits Scheme (EOBS) in July 1976. All commercial and industrial establishments employing at least 10 persons are required to contribute in respect of workers earnings up to Rs1000 per month; no contributions are required from employers or employees.

B. FINANCIAL MARKETS

1. MONEY MARKET

1.1 Interbank Loan Market

There is a rudimentary market in interbank deposits and some bearer instruments.

1.2 Government Securities Market

The market for fixed income securities essentially comprises the public sector debt market as there is at present no commercial paper or corporate debt market.

The government's present offerings do provide a range of instruments designed to appeal to different groups but the average maturity of the debt is rather short. Moreover, marketable securities are sold infrequently and unpredictably in large blocks rather than in digestible amounts that might match the flow of savings. At present there are only a limited number of financial instruments with a maturity of less than one year available to investors: bank deposits, certificates of deposit and bearer certificates of deposit issued by NDFC.

Instruments designed for non-bank investors have to offer a return of over 15% to compare favorably with Khaas and compensate the investor for the taxable income and the credit risk. (While the Khaas deposit certificates have a maturity of 3 years, they operate effectively as instruments with a 6 month maturity). Consequently, borrowers are typically unwilling to issue paper at these rates as short-term and long-term foreign exchange financing with exchange risk cover is available at 14%.

2. STOCK MARKET

2.1 History/Set-up

Historically, the capital markets have played a relatively minor role in the mobilization of capital, accounting for less than 1% of the total private fixed investment in Pakistan.

There are two stock exchanges in Pakistan, one in Karachi and the other in Lahore. The Karachi Stock Exchange is by far the most important with 365 listed companies. Market capitalization has increased substantially in recent years and now corresponds to 5.5% of GNP. There are 240 companies listed on the Lahore exchange, all of which are also listed on the Karachi exchange. Trading is principally in the common shares of the companies registered in Pakistan. Aggregate market value of the stocks was about Rs32 billion in June 1987.

Over the last few years the following have probably been the key events with respect to the stock market: (1) Issuance of a new Companies Ordinance; (2) the floatation of Modarabas; (3) the Government's divestment program; (4) the Banker's Equity Limited (BEL) issue; and (5) changes in tax laws.

2.2 Weakness

The equity markets are poorly developed and their growth is hampered by easy access to loan funds from government financial institutions, lack of credibility of the stock market, administered approach to pricing of issues, and the anomalies in the interest rate structure. The Stock Exchanges are currently largely self-regulated and, do not inspire investor confidence. The credibility of the exchanges and brokers in the public eye needs to be enhanced through tighter government oversight.

Trading is principally in common shares of companies registered in Pakistan. There is hardly any trading in corporate debentures, preferred shares, and government securities. Government securities, such as Treasury bills, government bonds and government treasury deposit receipts are predominantly held by banks and financial institutions to satisfy liquidity requirements; trading in government securities is negligible as these are placed with public financial institutions by SBP which maintains their value at or close to par. (About 35% of the banking systems assets are made up of government securities).

None of the major financial institutions appears to trade actively their equity portfolios in the market. Institutions like ICP and the development banks often acquire shares through their loan conversion option or through their underwriting obligations. In general they hold these assets and, when they wish to divest, there is a tendency to sell directly to other institutional shareholders, thereby avoiding the market completely and provoking a substantial loss of market liquidity. At best, they are one-way participants with occasional sales during periods of overheating.

As a result of the understandable reluctance on the part of the institutional investors to trade their portfolios, the secondary market has been left largely to individual investors, in particular those with a short-term, speculative outlook. This makes for an illiquid market for other than a handful of shares and has created a market imbalance, as such any change in the demand supply position has an immediate and inordinate impact on prices, thus with spurts and halts marking the pattern of trading.

The number of shares traded on the Karachi Stock exchange has increased to about 257 million shares in 1986. Turnover in the 25 most active shares accounted for 48.4% of total market turnover in 1987. While public sector companies as a whole accounted for 32% of market capitalization, they amount to only 12.5% of turnover.

Also, multinationals accounted for only 5.8% of turnover despite their 25% share in market capitalization.

Listing on a stock exchange in Pakistan is, in general, not the outcome of an independent initiative by a company. Rather, it reflects the requirements of either regulatory authorities or financial institutions, which impose the requirement as a condition for the provision of credit. A company is required to secure public status when its issued capital exceeds Rs10 million or Rs5 million in the case of nonindustrial companies. A public company is obliged to offer 50% of its shares to the public. This requirement is relaxed in the case of subsidiaries of multinational companies, so that the sponsors can retain 60% of the shares. All public companies require a minimum of 250 individual shareholders.

Although the increase in listings has been over 450% in the last 25 years, the number of companies listed on the market in Pakistan is only a small proportion (2.4%) of the estimated 15,000 closely-held companies. Companies are unwilling to go public for a variety of reasons: higher cost of equity compared to debt, easy access to DFI loans, reluctance to dilute shareholding, unfavorable method for pricing new issues of shares, and higher disclosure requirements.

Other government policies have also led to a paucity of suitable stock. Since banking, life insurance, most utilities and local authorities are entirely in the public sector as is a large portion of industry, their stocks are not quoted to any significant extent on the market.

3. BOND MARKET

Bond and commercial paper market is not well developed because of higher returns on risk free assets and prohibition (under companies ordinance) against corporate entities issuing bonds or debentures. The World Bank (Report No. 7049-PAK) recommends that the development of the fixed income instruments needs to be promoted through rationalization of the interest rate structure with respect to risk, maturity and liquidity, and changing companies ordinance to allow companies to issue fixed income securities.

3.1 Corporate Bond Market

There is at present virtually no corporate bond market. Under the Companies Ordinance, corporate entities are not permitted to issue bonds/debentures or preference shares to the general public. Since Islamization, debentures have been replaced by Participation Term Certificates (PTCs) and Term Finance Certificates (TFCs), both of which have currently been issued to commercial banks, DFIs and financial institutions such as NIT. Debentures are a little used

source of corporate finance and have been nearly always privately placed, while government securities are predominantly held by banks to satisfy liquidity requirements. There have been a few instances (probably no more than 10) when corporations have issued bonds. These corporate instruments have been held by the promoting banks and a few other financial institutions.

Normally companies find it much easier to borrow from DFIs than to issue bonds. As good clients are scarce, there is considerable competition between commercial banks and DFIs to lend to top rate companies. These loans are made against personal guarantees while in the case of a debenture, a first charge on assets would be required. In addition, the cost to a company of issuing a debenture is significantly greater than getting a loan particularly as most debentures need a bank guarantee. Consequently, the very few companies who have issued debt have done so because the promoting bank has been willing to reduce substantially its cost in return for ancillary business generated by the client.

3.2 Government Bond Market

The Government of Pakistan is presently trying to get some of the large public sector institutions to borrow from the market instead of relying solely on the budget. Consequently, the floatation of bearer investment certificates to finance the development program of Telephone & Telegraph and the Water & Power Development Authority is being considered. However, the key feature in determining the success of these issues will be the creation of a secondary market which would be greatly facilitated by the presence of discount houses or their equivalents.

VI. TURKEY

A. FINANCIAL INSTITUTIONS

1. BANKS

As in most developing countries, the banking system in Turkey is the centerpiece of the financial system. Its share in the total financial assets of the country is 93% versus only 7% of the assets for the non-bank financial institutions. The principal types of banks in Turkey are the central bank, commercial banks and development banks.

1.1 Central Bank

Recent financial sector studies (WB 6095-TU) have pointed out that the Central bank has been acting like a development bank and has become the refinancier of special credit schemes. Suggestions have been made that the central bank should concentrate on the formulation and implementation of appropriate monetary policies, and the supervision of the banking sector.

1.2 Commercial Banks

The environment in which commercial banks traditionally operated in Turkey was protected, non-competitive and generally designed to ensure profitable operations. The opening of branches of foreign banks were restricted and deposits rates were kept low.

However, in the last few years, the environment has changed markedly. Increases in the cost of deposits has reduced the profitability and increased pressures to improve efficiency of the large retail banks with a wide branch networks. At the same time, the strain of the economic adjustment program on the corporate sector has had an effect on the portfolio quality of commercial banks. Moreover, entry of new banks has increased competition, assets have grown rapidly, new financial instruments have been introduced and, more generally, the efficiency of intermediation has improved.

At the end of 1987, there were 56 commercial banks operating in Turkey. Of which, 12 were specialized public banks, 26 were private domestic banks and 18 were private foreign banks. The share of public and private banks in total assets are about equal and have not changed significantly since 1980. The 12 public sector banks accounted for 52% of total assets as against 44% for the private banks and 4% for the group of foreign banks.

The banking system has also remained highly concentrated. The share of the four largest banks in total assets in 1986 was 52%. The share of the four largest private banks in total private banks' assets has also remained high and constant, around 70%. The banking

system has a large number of branches; in total, there are about 6,400 branches throughout the country, of which 55% belong to private banks and 45% to public banks.

1.3 Foreign Banks

The number of foreign banks licensed to operate in Turkey has grown considerably in recent years as the Government sought to encourage greater competition and the introduction of modern techniques in banking. In practice, however, the foreign banks concentrate their efforts on a relatively limited clientele of two to three hundred of the better firms operating in Turkey, and they specialize in trade finance rather than working capital or project finance.

There are now 18 foreign banks which provide vigorous competition to local banks in providing trade finance and other services. The share of foreign banks has also remained small despite the entry of 14 new foreign banks between 1980 and 1986, partly due to foreign banks concentrating their operations on foreign trade financing.

2. NON-BANK FINANCIAL INSTITUTIONS

2.1 Securities Companies

Securities firms have the advantage of more specialized expertise, but their contribution to the financial markets is limited by (a) their being often related to large business groups, in whose securities they specialize; (b) legal limitations prohibiting them from entering repurchase agreements, trading bank instruments and managing mutual funds; (c) scarcity of capital and lack of a liquidity mechanism.

2.2 Insurance Companies

The Turkish insurance industry has suffered from years of high inflation which have undermined the demand for insurance products. Life insurance in force in 1983 was only about 0.7% of GNP in Turkey. Total assets of the Turkish insurance industry amounted to only TL 114 billion in 1983. Of these, securities accounted for 31.6% (6.8% equities and 24.8% bonds, mostly government bonds). Furthermore, portfolio management by insurance firms has often been oriented towards investment in affiliated or otherwise related companies, which probably accounts for an overall unsatisfactory return on earning assets.

2.3 Social Security System

Social security entities include four public sector and about 60 (mostly bank related) private pension funds. Their total assets exceeded TL 900 billion at end of 1984, with only 14% of assets invested in securities, mostly low-yield bonds of the State Investment Bank, which the Social security system is required to purchase. Equity holdings of private pension funds are mostly in related companies, and control-oriented.

B. FINANCIAL MARKETS

Money and capital markets have traditionally been a weak link in the Turkish financial sector. Their growth has been hampered by an inadequate institutional and regulatory environment and, more recently, by high inflation. Under these circumstances these markets have been characterized by low level of activity, segmentation, high intermediation costs and occasional speculative bursts.

1. MONEY MARKET

Money market in Turkey encompass instruments as varied as interbank deposits, CDs, Treasury Bills, commercial paper and bankers' acceptances.

1.1 Interbank Loan Market

The interbank market is widely considered a success after about two years of operation. Daily volume is estimated to be around TL 150-200 billion. Nevertheless, the market is also highly fragmented, transaction costs are high and yields vary greatly even for deposits of comparable risk and maturity.

The most active participants in the interbank market are the foreign banks operating in Turkey. There seems to be a general unidirection pattern to the interbank market, with funds flow from the larger domestic banks with extensive branch networks to foreign or smaller banks in need of funds. The development of this market has reduced the banks' holding of excess reserves.

Recently, the Central bank has entered the interbank market itself, to overcome the traditional reluctance of Turkish banks to deal directly with each other and as a tool for control of liquidity in the system.

1.2 Government Securities Market

There has been considerable progress in the development of the Government fixed income securities markets. After years of reliance on inflationary financing of deficits by recourse to the Central bank, the Government began to issue securities priced at competi-

tive rates in 1984. In may 1985, a market pricing mechanism was introduced through weekly auctions of 6-month, one-year, and two-year securities. The volume of Government bonds outstanding has thereafter increased rapidly to TL 1,526 billion as of December 1985. Treasury issues now account for 95% of total bond market issuances.

The major problem with regard to Government securities is their restricted distribution. Since most of these securities are held by banks, there is little arbitrage activity between securities and deposits. The secondary market for government securities has grown in volume to TL 410 billion in 1985. Commercial banks account for 85% of the trading and ten licensed firms for the rest.

2. STOCK MARKET

2.1 History/Set-up

In the past three years, public offerings of equities have substantially exceeded, in real terms, the levels achieved in the late 1970's and early 1980's. This was partly due to a more favorable market environment, stimulated by a law. Also, the Government took a number of steps to favor the development of the equity market. These include: (a) complete repeal of taxation of dividends; (b) repeal of taxation of the premium of newly issued shares over par value; and (c) opening of a new Istanbul Stock Exchange.

The opening of the Istanbul Stock Exchange at the beginning of 1985 has improved transparency and efficiency of both the equity and bond markets. The system of dealers/market makers adopted by the new exchange as opposed to the old one based on agents has provided listed securities with a certain degree of liquidity through market-making services.

2.2 Weakness

In the past, the lack of efficient secondary capital markets and thus of liquidity has limited the potential for developing longer term financial instruments in Turkey. Trading in corporate equities and bonds has mostly occurred over-the-counter, with the old and obsolete Istanbul Stock Exchange being practically inactive. Furthermore, the market has been characterized by fragmentation, lack of transparency and high intermediation costs, with trading spreads as high as 10-20% for equities. In the bond markets, dealers have mostly confined themselves to making markets in the securities they had underwritten, trading only with their own clients and never with other dealers.

The embryonic corporate equity and fixed income security market accounted for less than 3% of the financial system in 1986.

As of December 1986, there were 375 companies listed on the Istanbul Stock Exchange with a total market capitalization of TL 641.6 billion (US\$855 million). The size of the market is extremely small in comparison to stock markets in other developing countries. The growth of the market has been inhibited by several factors: high inflation, low dividends and the lack of adequate disclosure requirements and audited financial statements. High interest rates on other instruments, especially T-bills, also makes it less attractive for investor to invest in equities.

3. BOND MARKET

3.1 Corporate Bond Market

According to Capital Market Board regulation, minimum and maximum maturities of corporate bonds are set at two and seven years. In practice, most recent issues have had 2-3 year maturities. Issuing prices and coupon rates are set by the Central Bank according to a formula which determines a minimum and maximum yield to maturity. All-in cost to issuers of bonds have recently average 66-68%, well below the cost of bank loans, while net yields to individual investors have been 56-58%.

The corporate bond market grew very fast in the late 1970's, as a tool for both borrowers and investors to bypass the high intermediation costs of the banking system. Bond issue have however declined after 1980, partly because of the collapse in 1981-82 of many bond dealers and partly because of increasing competition from time deposits and Government paper, now carrying more attractive yields than in the past. This trend has been partly that could be offered, which previously limited the competitiveness of bonds.

Consequently, new issues increased to TL 32 billion in 1985. All bonds issued thus far have been either been straight unsecured debentures or, more rarely, guaranteed by banks. The number of companies issuing bonds rose from 76 to 211 and the amount of funds raised increased from TL 55 billion during the first 9 months of 1986, to TL 317 billion in 1987. The surge in corporate bond issues was due to the sharp increase in the commercial banks' lending rates brought about by the partial deregulation of the deposit rates in 1987, as well as a new decree permitting corporations to issue commercial paper up to six times their equity.

IX. TABLE OF CHARTS

INDONESIA

1. Table 1 : Share of Bank Credit by Economic Sectors
2. Table 2 : Growth and Structure of the Financial System
3. Table 3 : Growth and Structure of the Financial System
(Percentage Distribution)

MALAYSIA

1. Table 1: Assets of Various Financial Institutions
2. Table 2: Interest Rates in Malaysia
3. Table 3: Banking Industry Structure
4. Table 4: Term Distribution of Commercial Banks Lending
5. Table 5: Allocation of Bank Credits
6. Table 6: Stock Market Profile

PAKISTAN

1. Table 1: Market Share by Type of Bank
2. Table 2: Nominal and Real Interest Rates/ Rates of Return
on Bank Deposits and National Saving Scheme
3. Table 3: Stock Market Profile

TURKEY

1. Table 1: Key Financial Sector Indicators
2. Table 2: Composition of the Banking System
3. Table 3: Public Issues of Securities
4. Table 4: Stock Market Profile

Indonesia Table 1*

Share of Banking Systems Credits by Economic Sector, 1974-1986
(In Percent)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Agriculture	7.4%	8.0%	7.5%	6.9%	6.4%	7.0%	6.8%	8.0%	7.9%	8.0%	7.0%	7.5%	7.9%
Mining	0.7%	26.9%	29.1	27.0%	31.5%	30.2%	23.7%	16.7%	11.3%	5.3%	2.0%	1.2%	1.5%
Manufacturing Industry	22.0%	26.1%	27.0	29.4%	30.1%	30.8%	28.1%	27.2%	30.1%	34.0%	35.4%	34.3%	32.3%
Trade	39.0%	27.9%	24.1%	23.2%	20.7%	21.3%	25.1%	30.1%	31.7%	33.5%	33.7%	32.7%	31.8%
Service Rendering Industry	7.8%	6.3%	7.3%	8.1%	7.2%	6.7%	12.0%	13.6%	14.3	14.9%	16.8%	18.9%	10.2%
Others	21.5%	4.8%	4.4%	5.6%	4.1%	3.9%	4.2%	4.4%	4.7%	4.3%	4.9%	5.5%	8.2%
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%

Source: Bank Indonesia.

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho and Deena Khatkhate, p. 185.

Indonesia Table 2*

GROWTH AND STRUCTURE OF THE FINANCIAL SYSTEM

Type of Institution	NUMBER			GROSS ASSETS (IN BIL OF RUPIAH)					GROWTH IN ASSET (ANNUAL %)	
	1982	1984	1987	1981	1982	1983	1984	1987	78-82	82-87
Bank Indonesia	1	1	1	11067	13707	16740	21618	34500	26.4	20.3
Deposit Money Banks	113	113	110	13153	15952	20918	27768	46600	31.8	24.0
National Foreign										
Exchange Banks	15	15	15	10764	12724	16369	21634	36800	32.6	23.7
Foreign Banks	11	11	11	918	1172	1696	2192	2700	23.4	17.6
Other Commercial										
Banks	59	59	56	517	720	1096	1666	3600	29.5	38.8
Development Banks	28	28	28	954	1336	1757	2276	3500	33.1	21.9
Savings Banks	3	3	3	256	452	683	-	1900	86.5	30.6
Nonbank Financial										
Intermediaries	13	14	14	557	805	1108	1327	2100	42.6	21.3
Insurance Companies	83	89	100	386	528	708	-	3000	35.0	21.9
Leasing Companies	34	38	83	60	114	380	386	1400	44.0	69.5
State Pawnshops	471	474	-	42	44	54	59	-	29.4	-
Other Credit Institution	5809	5826	5789	-	69	83	-	400	-	32.0
Total	6106	6556	6100	25530	31615	40606	51773	89900	30.0	23.1

Source: Bank Indonesia and Indonesian Insurance Council.

(Continued)

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho and Deena Khatkhate, p.186

Indonesia Table 3*
Growth and Structure of the Financial

Type of Institution	Gross Assets					Growth in Assets (Annual %)	
	1981	1982	1983	1984	1987	78-72	82-87
Bank Indonesia	43.3%	43.4%	41.2%	41.8%	38.4%	26.4	20.3
Deposit Money Banks	51.5%	50.5%	51.5%	53.6%	51.8%	31.8	24.0
National Foreign Exchange Banks	42.2%	40.2%	40.3%	41.8%	40.9%	32.6	23.7
Foreign Banks	3.6%	3.7%	4.2%	4.2%	3.0%	23.4	17.6
Other Commercial Banks	2.0%	2.3%	2.7%	3.2%	4.0%	29.5	38.8
Development Banks	3.7%	4.2%	4.3%	4.4%	3.9%	33.1	21.9
Savings Banks	1.0%	1.4%	1.7%	-	2.1%	86.5	30.6
Nonbank Financial Intermediaries	2.2%	2.5%	2.7%	2.6%	2.3%	42.6	21.3
Insurance Companies	1.5%	1.7%	1.7%	-	3.3%	35.0	33.8
Leasing Companies	0.2%	0.4%	0.9%	0.7%	1.6%	44.0	69.5
State Pawnshops	0.2%	0.1%	0.1%	0.1%	0.0%	29.4	-
Other Credit Institution	-	0.2%	0.2%	-	0.4%	-	32.0
Total	100.0%	100.0%	100.0%	100.0%	100.0%	23.1	32.1

Source: Bank Indonesia and Indonesian Insurance Council. (Concluded)

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho and

Malaysia Table 1*
Assets of Various Financial Sectors

Unit: Mil of Ringgit

	1960	1970	As at end of 1980	1985	1986
Banking System	2356	7455	54346	118293	129470
Monetary Institutions	2346	6882	45180	91342	100237
Central Bank	184	2227	12994	16525	20201
Currency Board	930	195	-	-	-
Commercial Banks	1232	4460	32186	74817	80036
Non-Monetary Institutions	10	573	9166	26956	29233
Finance Company	10	531	5635	17833	19635
Merchant Banks	-	-	2229	6296	6374
Discount Houses	-	42	1292	2827	3224
Credit Guarantee Corporation	-	-	10	-	-
Non-Bank Financial Intermediaries	1197	4167	19807	49977	57656
Provident, Pension and Insurance Funds	836	3156	13846	32643	37225
Employees Provident Fund	633	2265	9481	24708	28467
Other Provident Funds	100	452	1889	2904	3265
Life Insurance Funds	83	324	1657	3646	4080
General Insurance Funds	20	115	819	1385	1413
Development Finance Institutions	1	133	2193	4044	4348
Savings Institutions	267	645	2463	7434	6565
Other Financial Intermediaries	93	233	1305	5856	7518
Total	3553	11622	74153	168275	187126

Source: Bank Negara Malaysia

(Continued)

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho and Deena Khatkhate, p.145

Malaysia Table 2*
Interest Rates in Malaysia
(% p.a.)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	Sep
Commercial Banks															
Deposit Rates:															
Fixed - 1 Month	4.50	3.50	3.50	3.00	5.00	5.25	8.50	9.10	9.00	8.25	10.00	7.25	6.00		2.00
6 Months	7.00	6.00	6.00	5.50	5.75	5.75	8.50	10.50	9.25	8.50	10.00	7.50	6.75	3.00	3.25
12 Months	9.00	7.50	7.50	6.50	6.50	7.00	9.00	11.00	10.00	9.00	10.00	7.50	7.00		4.00
Saving	-	-	-	5.50	5.50	5.00	6.00	7.00	6.50	6.00	7.50	6.00	6.00		3.50
Loan Rates:															
Price Rates/b	10.00	8.50	8.50	7.50	7.50	7.50	8.50	8.50	8.50	8.50	8.50	10.75	10.00		7.50
Average Lending Rate/c	-	-	-	9.47	9.34	9.42	10.13	11.99	12.30	11.40	12.01	12.11	12.02		9.82/d
Finance Companies															
Deposit Rates:															
Fixed - 1 Month	-	-	-	-	-	-	9.50	10.50	9.00	9.00	10.75	8.00	7.50		3.00
6 Months	-	-	-	-	6.00	7.00	9.50	11.00	9.25	9.50	11.00	8.00	7.50		3.50
12 Months	-	-	-	-	7.30	8.00	10.50	12.00	10.00	9.75	11.00	8.25	7.75		4.50
Saving	-	-	-	-	7.00	7.00	7.00	7.00	8.00	8.00	9.00	7.00	7.00		5.50
Loan Rates:															
Average Lending Rate/c	-	-	-	-	10.45	10.23	10.39	11.76	12.33	12.01	12.23	14.66	13.96		12.93/d
General															
Treasury Bill Rates/c															
3 Months	4.884	4.973	4.379	3.564	4.212	3.470	4.460	4.500	5.124	5.196	5.040	4.129	3.887		2.615
Interbank Rates/f															
Overnight	2.728	4.205	2.623	4.829	2.470	4.372	3.308	3.467	5.237	8.354	5.931	4.973	1.653		3.010/d
Seven-Day	5.025	7.849	4.941	5.681	4.116	5.250	5.946	6.297	7.947	9.412	9.087	6.594	3.038		2.625/d
3 Months	-	-	-	-	-	-	9.367	8.628	8.628	9.256	9.210	7.785	6.350		2.992/d
Memo															
Inflation Rate/e	17.4	4.4	2.6	4.7	5.0	3.6	6.6	9.7	5.8	3.7	3.9	0.3	0.7		1.5

/a May 1985. Except for consumer price index which has been estimated for 1985. /b On advances

/c Refers to weighted average lending rate aggregated from quarterly data. Prior to september 1986 only quarterly are available /d August 1987

/e Average discount rate on 3-months bills /f Daily average for week, refers to interbank lending rates of ten banks.

/g Annual percentage change in consumer price index

Source: Bank Negara Malaysia. Quarterly Economic Bulletin. March-June 1986. Table IV. 2. IV.3. IV.4. IV.5, Database Table 6.1 for inflation rate.

*This table comes from lessons of Financial Liberalization in Asia by Yoon-Je Cho and Deena Khakhsate, p.147

Malaysia Table 3*
Banking Industry Structure, 1975-1983
(in Percent)

	1975	1978	1981	1982	1983	1984 June
Share in Total Deposits of:						
Top 3 Banks	44.3	43.9	43.9	43.9	42.1	39.4
Top 5 Banks	63	61.9	57.8	57.5	54.9	53.8
Top 10 Banks	83.7	81.7	78	77.5	76.2	75.9
Smaller Banks	16.3	18.3	22	22.5	23.8	24.1
Ratio of Profit to Total Assets						
	2.15	2.66	1.91	2.03	-	-

Source: Bank Negara Malaysia.

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho and Deena Khatkhate, p.148

Malaysia Table 4*
Term Distribution of Commercial Bank
Lending, 1970-85

Unit: Mil of Ringgit

	1970	1975	1980	1983	1984	1985
Total Loan and Advances	2359.6	6468.4	21031.1	36781.8	43504.3	48981.7
Trade Bills	284.1	717.0	2570.9	3979.7	3923.8	4375.4
Overdraft and Loans						
Less Than 1 Year	1917.0	4228.3	11876.6	18627.9	22276.7	24912.9
Term Loans						
1-4 Years	56.3	268.1	1167.7	2537.8	2916.2	3383.8
Term Loans Over 4 years	102.2	1255.0	5415.9	11636.4	14387.6	16309.6
Term Loans Over 4 Years/Total (%)	4.3	19.4	25.8	31.6	33.1	33.3

Source: Bank Negara Malaysia.

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho and Deena Khatkhate, p.148

21

Malaysia Table 5*
Allocation of Bank Credit/a

	1979	1980	1981	1982	1983	1984	1985	1986
Agriculture	7.96%	8.66%	8.54%	8.44%	7.95%	7.56%	7.03%	6.97%
Mining & Quarrying	0.92	1.02	1.09	1.53	1.62	1.13	1.01	0.88
Manufacture	20.63	20.40	21.47	19.44	19.05	16.51	15.50	15.05
Construction	6.74	6.52	6.70	6.40	6.61	7.26	7.39	7.15
Real Estate	5.88	8.11	10.34	11.64	12.47	14.23	15.07	15.34
Housing	13.57	13.81	14.09	14.96	14.54	14.76	15.48	16.33
General Commerce	18.66	18.48	18.26	17.04	16.45	15.79	15.28	15.66
Business Services	0.00	2.35	2.20	2.06	2.41	3.06	3.12	3.08
Transport & Storage	2.32	2.39	2.95	2.87	2.46	2.20	0.84	1.75
Consumer Credit	0.00	3.42	3.50	3.70	3.91	4.34	4.32	3.75
Other	23.31	14.84	10.85	11.91	12.53	13.16	14.95	14.05
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

/a Includes commercial banks, finance companies and merchant banks
Source: Bank Negara Malaysia.

*This table comes from Lessons of Financial Liberalization in Asia by Yoon-Je Cho

10

Malaysia Table 6*
Stock Market Profile
MALAYSIA

	1980	1981	1982	1983	1984	1985	1986	1987	1988
A. NUMBER OF LISTED COMPANIES									
Kuala Lumpur Stock Exchange	182	187	194	204	217	222	223	232	238
B. MARKET CAPITALIZATION									
1) In Ringgit	27,548	34,307	32,273	53,309	47,048	39,380	39,214	46,106	63,183
2) In US Dollars	12,395	15,300	13,903	22,798	19,401	16,229	15,066	18,531	23,318
C. TRADING VALUE									
1) In Ringgit	5,600	8,059	3,251	7,887	5,218	5,799	3,046	9,647	6,858
2) In US Dollars	2,572	3,498	1,392	3,398	2,226	2,335	1,180	3,829	2,623
3) Turnover Ratio	20.3	23.5	10.1	14.8	11.1	14.7	7.8	20.9	10.9
D. LOCAL INDEX									
1) KLSE Composite Index (Jan, 1977-100)	366.7	300.8	291.4	401.6	303.6	233.5	252.4	261.2	357.4
2) Change in Index (%)	78.4	3.8	-23.5	37.8	-24.4	-23.1	8.1	3.5	36.8
E. EMERGING MARKETS DATA BASE									
1) Number of Stocks in EMDB Sample	-	-	-	-	40	40	40	40	82
2) EMDB Share of Market Cap.(%)	-	-	-	-	49.1	54.6	63.8	53.9	79.8
3) EMDB P/E Ratio	-	-	-	-	25.7	19.4	32.7	30.7	24.1
4) EMDB P/BV Ratio	-	-	-	-	2.4	1.9	2.3	2.1	2.6
5) EMDB Dividend Yield (%)	-	-	-	-	-	1.3	2.9	2.4	2.0
6) EMDB Tctal Returns Index (Dec.84-100)	-	-	-	-	100.0	86.1	96.4	97.9	126.5
7) Change in EMDB Index (%)	-	-	-	-	-	-13.9	11.9	1.6	29.2
F. ECONOMIC DATA									
1) Gross Domestic Product (In US \$)	24,488	25,006	26,796	29,969	33,944	31,231	27,580	31,231	33,729
2) Consumer Price Index (1980-100)	100.0	110.0	116.0	120.0	125.0	126.0	126.0	128.0	130.8
3) Exchange Rates (End of Period)	2.2224	2.2423	2.3213	2.3383	2.4250	2.4265	2.6000	2.4880	2.7100
4) Exchange Rates (Average of Period)	2.1769	2.3041	2.3354	2.3212	2.3436	2.4830	2.5800	2.5196	2.6147

Data for Malaysian-Incorporated companies only

Estimated

Currency amounts in millions.

- not available.

*This table comes from IFC Emerging Stock Market Factbook 1989, p.102

PAKISTAN TABLE 1 *

PAKISTAN Table : MARKET SHARE BY TYPE OF BANK
(Percentage)

	1975	1980	1986	Annual Growth (1975-86)
<u>Domestic Deposits (Rs billion)</u>	29	72	181	18.1
Market Share (%)				
- NCB's	91	90	88	17.1
- Foreign	7	8	11	23.5
- Specialized	2	2	1	13.5
	<u>100</u>	<u>100</u>	<u>100</u>	
<u>Domestic Loans (Rs billion)</u>	25	56	160	18.4
Market Share (%)				
- NCB's	88	82	78	17.7
- Foreign	8	11	11	22.0
- Specialized	9	7	11	21.5
	<u>100</u>	<u>100</u>	<u>100</u>	

Source: SBP Quarterly Bulletins.

*This table comes from World Bank Report #7049-PAK, p.140

PAKISTAN TABLE 2*

Table PAKISTAN: Nominal and Real Interest Rates/ Rates of Return on Bank Deposits and MSS Instruments: Early 1980s (in percent per annum)

Interest Rates ^a	1982	1983	1984	1985	1986	Annual Average Growth Rate During the Early 1980s
A. Bank Deposits:						17.26
1. Fixed Deposits						9.70 ^b
a. For six months and over but < 1 year						
Nominal Rates (before Zakat)	9.50	9.50	9.50	9.50	9.50	
Nominal Rates (after Zakat)	7.00	7.00	7.00	7.00	7.00	
After-Zakat real rate	-3.00	2.52	-1.36	-0.46	2.17	
b. for 3 years and over but < 4 years						
Nominal Rates (before Zakat)	11.75	11.75	11.75	11.75	11.75	
Nominal Rates (after Zakat)	9.25	9.25	9.25	9.25	9.25	
After-Zakat real rate	-0.75	4.77	0.82	1.79	4.42	
3. PLS Deposit Accounts						47.68 ^c
a. For six months and over but < 1 year						
Nominal Rates (before Zakat)	10.94	10.62	9.51	10.93	9.76	
Nominal Rates (after Zakat)	8.44	8.12	7.01	8.43	7.26	
After-Zakat real rate	-1.56	3.64	-1.35	0.97	2.43	
B. MSS Instruments:						39.04
Khas Deposit Acc./Certificates ^{dd}						61.68
Nominal Rates (before Zakat)	15.00	15.00	15.00	15.00	15.00	
Nominal Rates (after Zakat)	12.50	12.50	12.50	12.50	12.50	
After-Zakat real rate	2.50	8.02	4.14	5.04	7.67	
Defence Saving Certificates						44.00
Nominal Rates (before Zakat) ^{fa}	12.00	12.00	12.00	12.00	12.00	
Nominal Rates (after Zakat)	9.50	9.50	9.50	9.50	9.50	
After-Zakat real rate	-0.50	5.02	1.14	2.04	4.67	
Key Items:						
Annual Average Rate of Inflation (based on CPI)	10.00	4.48	8.36	7.46	4.63	

^a As of June 30.

^b Nominal interest rates refer to the statutory rates, and they do not reflect effects due to compounding. They are also not adjusted for the income tax in the case of bank deposits.

^{dd} KDCs carry a 17% interest during the last 6 months of the 3-year statutory maturity period.

^{fa} Nominal interest rate, if DSC is held for one or two years. If DSC is held for three years, then the investor can also benefit from a special income tax rebate. This raises the nominal effective yield to 23% (before-Zakat).

^{fb} This is the growth rate of fixed interest accounts in the early 1980s, prior to July 1985.

^{fc} Refers to the 1982-1985 period. Since July 1985, all new accounts are opened on PLS basis.

Source: State Bank of Pakistan

*This table comes from World Bank Report #7049-PAK, p.29

Pakistan Table 3*

PAKISTAN

	1980	1981	1982	1983	1984	1985	1986	1987	1988
A. Number of Listed Companies									
Karachi Stock Exchange Ltd.	314	311	326	327	347	362	361	379	404
B. Market Capitalization									
1) In Rupees	6,361	8,554	11,267	15,201	18,834	21,900	29,491	34,300	45,508
2) In US Dollars	643	864	877	1,126	1,226	1,370	1,710	1,960	2,460
C. Trading Value									
1) In Rupees	-	-	-	-	2,523	3,757	2,583	2,813	3,181
2) In US Dollars	-	-	-	-	180	236	155	162	177
3) Turnover Ratio	-	-	-	-	14.2	16.9	8.8	8.2	7.0
D. Local Index									
1) SBP Index (1980-1981=100)	94.0	99.4	114.8	148.3	168.3	166.5	199.9	228.4	262.7
2) Change in Index (%)	-16.8	5.7	15.5	29.2	13.5	-1.1	20.1	14.3	15.0
E. Emerging Markets Data Base									
1) Number of Stocks in EMOB Sample	-	-	-	-	52	52	52	51	50
2) EMOB Share of Market Cap.(%)	-	-	-	-	40.6	42.6	38.0	32.9	33.3
3) EMOB P/E Ratio	-	-	-	-	-	-	8.2	6.8	9.4
4) EMOB P/BV Ratio	-	-	-	-	-	-	1.9	1.7	1.7
5) EMOB Dividend Yield (%)	-	-	-	-	-	6.7	8.2	6.5	7.9
6) EMOB Total Returns Index (Dec.84=100)	-	-	-	-	100.0	117.8	142.3	151.8	174.0
7) Change in EMOB Index (%)	-	-	-	-	-	17.8	20.8	6.7	14.6
F. Economic Data									
1) Gross Domestic Product (in US\$)	23,690	28,077	27,155	27,610	29,773	30,008	32,864	34,953	36,980 a
2) Consumer Price Index (1980=100)	100.0	112.0	119.0	126.0	134.0	141.0	146.0	153.0	164.3 a
3) Exchange Rates (End of Period)	9.9000	9.9000	12.8400	13.5000	15.3600	15.9800	17.2500	17.5000	18.5000
4) Exchange Rates (Average)	9.9000	9.9000	11.8475	13.1170	14.0463	15.9284	16.6480	17.3990	17.9594

a Estimated

Currency amounts in millions.

- not available.

*This table comes from IFC Emerging Stock Market Factbook 1989, p.114

TURKEY TABLE 1*
 Turkey - Financial Sector Adjustment Loan
 Key Financial Sector Indicators

Indicators	Target Range (1990-91)
A. Relating to Financial Policies	

1. M2/GDP	30%-35%
2. Rate of growth of deposits	Greater than Inflation rate
3. Deposit rates	Positive in real terms a/ International levels
4. Lending rates (Non-preferential)	
5. Lending rates (Preferential)	Positive in real terms b/ Gradual Decline
6. Ratio of total preferential credit/ Total credit c/	
7. Ratio of preferential credit to productive sectors/ Total credit d/	Decline to zero
B. Relating to the banking system	

1. Intermediation margins (in percent of assets)	3% - 5%
2. Cost of reserve & liquidity requirements (as percent of deposit base)	5% -6%
3. Average level of non-performing loans (as percent of assets)	Under 5%
4. Ratio of provisions for non-performing loans (as percent of portfolio)	2%
C. Relating to capital markets	

1. Level of corporate bond issues	50% increase annually in real terms
2. Trade volume in the stock exchange	Double each year in real terms
3. Average return on equity holding	Equal to return on time deposits
4. Volume of interbank transactions	30% increase each year in real terms
5. Volume of transactions in the secondary market for Govt. securities	Double each year in real terms

a/ " Positive in real terms " means that deposit rate ceilings set by the Central Bank should be higher than the rate of inflation as measured by the change in the WPI during the preceding 12 months.	
b/ " Positive in real terms " means interest rates set to result in an effective cost to the borrower higher than the relevant index calculated according to the method described in the Attachment to this Annex.	
c/ " Preferential Credit " defined as credit made available at an interest rate which would result in an effective cost to the borrower lower than the inflation rate as measured by the change in the WPI during the preceding 12 months.	
d/ " Productive Sectors " mean agriculture, industry, mining, tourism and trade.	

68
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Turkey Table 2*
Composition of the Banking System

	1980			1986		
	Number of Institutions	Number of Branches	Share in Total Assets (in %)	Number of Institutions	Number of Branches	Share in Total Assets (on %)
1. Public Banks	13	2.469	51.5	12	2.732	50.1
2. Private Domestic Banks of which	26	3.380	45.7	26	3.499	46.2
2.1 Development Banks	2	6	3.1	2	6	2.1
2.2 Commercial Banks	24	3.374	42.6	24	3.493	44.1
3. Private Foreign Banks	4	105	2.8	18	117	3.7
4. Total	43	5.954	100.0	56	6.348	100.0

Source: Banks' Association of Turkey

*This table comes from World Bank Report #P-4784-Tu, p.43

Turkey Table 3*
Public Issues of Securities
(amounts in TL billions)

	1983		1984		1985	
	No.	Amt.	No.	Amt.	No.	Amt.
Corp. Equities	130	35	121	64	175	76
Corp. Bonds	54	16	26	11	43	32
Govt. Revenue Bonds	-	-	1	10	2	140

Source: Capital Markets Board

*This table comes from World Bank Report #6095-TU, p.45

5

TURKEY TABLE 4* STOCK MARKET PROFILE
TURKEY*

	1980	1981	1982	1983	1984	1985	1986	1987	1988
A. NUMBER OF LISTED COMPANIES Istanbul Stock Exchange	-	-	-	-	-	-	40	50	50
B. MARKET CAPITALIZATION									
1) In Lira	-	-	-	-	-	-	708,801	3,181,715	2,048,000
2) In US Dollars	-	-	-	-	-	-	935	3,221	1,135
C. TRADING VALUE									
1) In Lira	-	-	-	-	-	-	8,703	98,701	142,867
2) In US Dollars	-	-	-	-	-	-	13	115	101
3) Turnover Ratio	-	-	-	-	-	-	1.2	3.1	7.0
D. LOCAL INDEX									
1) ISF Index (Jan. 1986=100)	-	-	-	-	-	-	170.9	673.0	373.9
2) Change in Index (%)	-	-	-	-	-	-	-	293.9	-44.4
E. EMERGING MARKETS DATA BASE									
1) Number of Stocks in EMDB Sample	-	-	-	-	-	-	14	14	14
2) EMDB Share of Market Cap. (%)	-	-	-	-	-	-	39.9	44.4	47.2
3) EMDB P/E Ratio	-	-	-	-	-	-	4.3	19.8	2.6
4) EMDB F/BV Ratio	-	-	-	-	-	-	-	-	1.5
5) EMDB Dividend Yield (%)	-	-	-	-	-	-	-	2.9	11.2
6) EMDB Total Returns Index(Dec.86=100)	-	-	-	-	-	-	100.0	453.0	287.2
7) Change in EMDB Index (%)	-	-	-	-	-	-	-	353.0	-36.6
F. ECONOMIC DATA									
1) Gross Domestic Product (In US \$)	56,919	57,668	53,031	51,149	49,668	52,783	57,396	67,125	71,220 ^b
2) Consumer Price Index (1980=100)	100.0	137.0	179.0	238.0	352.0	511.0	688.0	955.0	1,671.3 ^b
3) Exchange Rates (End of Period)	90.1500	133.6200	186.7500	282.8000	444.7400	578.8600	757.7900	987.8200	1,805.1000
4) Exchange Rates (Average of Period)	76.0380	111.2190	162.5530	225.4570	368.6800	521.9800	674.5100	950.5800	1,410.1965

* In 1986, the Istanbul Stock Exchange was reorganized, with a Senior Market created for actively traded stocks.

^b Estimated

Currency amounts in millions.

- not available.

*This table from IFC Emerging Stock Market Factbook 1989, p.134

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Section V. - POTENTIAL ROLE OF EXPORT-IMPORT BANKS AND THE MULTILATERAL INVESTMENT GUARANTEE AGENCY

The following information and opinions come from various references cited at the end of this section as well as interviews with knowledgeable professionals.

1. Summary of Possible Sources of Funds, Guarantees and Insurance from EXIM Banks and MIGA

1.1 Most industrialized countries have established national agencies such as the U.S. Exim bank, the Japan Exim Bank, the United Kingdom's Export Credit Guarantee Department (ECGD), or France's Comapgnie Francaise d'Assurance pour le Commerce Exterieur (COFACE) to encourage the financing of the nation's exports.

1.2 Power projects are very capital intensive investments, as such developed countries' Exim banks can potentially assist the developing countries' energy corporations in obtaining the necessary equipment by providing either direct loans or some forms of repayment guarantee. For example, the Japanese Exim Bank has lent money to Thailand's electric power corporation, EGAT, for the purchase of Japanese electric generators. Ideally, the loans should be long-term (minimum five years) and on a fixed rate basis.

1.3 Power projects have significant political risks due to:

- Government controls on both the input and output prices.
- The history of government actions to hold down rates to achieve political objectives.
- The history of government actions to maintain employment even if workers are not really needed.

1.4 The U.S. Ex-Im Bank's policy is to seriously consider all proposed projects including non-recourse BOT/BOO project financings. It is recognized that these and other limited recourse project financing approaches could promote private sector activity in LDC's. However, to date the U.S. Ex-Im Bank has not been involved in any BOO/BOT projects due to concerns over project risks and creditworthness. In general, if the host government is in pretty much total control of the project then Ex-Im banks view a sovereign guarantee of debt is being appropriate.

In the past Ex-Im has been involved extensively in financing the export of U.S. electric generating equipment. In most cases the purchasers have been government entities and the financings have received a sovereign guarantee. In some cases (ie. Korean Electric Power and others) private power companies have received financing or guarantees also with a host government sovereign guarantee. In a few cases (for example, Hong Kong Electric) private power companies have received financing without government guarantees. In such cases the private power company must be clearly creditworthy.

1.5 It is conceivable that a BOO/BOT project could be financed without a sovereign guarantee if:

- Tariff and power purchase agreements are clearly adequate to cover debt service.
- A substantial portion of financing is equity.
- Sponsors are experienced and reputable.
- The builder is a world class contractor.
- Someone, for example the builder, provides a completion guarantee.
- The LDC government gives adequate assurances against political risks including expropriation, currency convertibility restrictions, civil unrest, etc.

1.6 International energy/power development is a politically sensitive and financially risky undertaking. Thus, in order to ensure a smooth running of LDC projects from the initial planning to the actual operation, participation by multilateral agencies (e.g. World Bank, regional development banks, and MIGA, etc) is frequently desirable. Often times international investors/lenders are concerned about the political risks involved, i.e., nationalization, expropriation or intervention. In this regard, MIGA can play a crucial role not only in providing the appropriate guarantee or insurance for the equity investment or loan, it can further act as the intermediary whenever when conflicts arises. Most important, the participation of MIGA will boost the credibility of the project, which in turn may raise the confidence of international investors/lenders and attract additional private/commercial funding.

1.7 In addition, MIGA's breach of contract coverage is of special importance to investors under production and profit-sharing agreements or in "build, operate and transfer" (BOT) contracts. Basically, BOT is a variant of a turnkey contract where a construction syndicate delivers a plant (e.g., a power plant), retains ownership of it and operates it for a specified period, after which it transfers ownership to a host government agency. In essence, the construction syndicate recoups its investment from the sale contract with the host government or a state-owned utility company. In this example, MIGA conceivably could cover the construction syndicate's rights in the sale contract. Moreover, the fact that investors can on a case-by-case basis negotiate with MIGA is particularly suitable for complex energy projects such as BOT contracts.

1.8 The collaborative efforts among the World Bank, MIGA and Exim banks in providing support for the developing countries' power projects will greatly enhance the developing countries' chances in obtaining the essential capital from the private/commercial lenders. On the other hand, through the mechanism of co-financing, the overall capacity of the developing country to repay the external borrowings is indirectly improved.

2. U.S. Export & Import Bank (EXIM)

2.1 History and Mission of U.S. Exim Bank¹

2.1.1 History

U.S. Eximbank was founded in 1934 to stimulate foreign trade during the Great Depression. Since then, Eximbank has supported nearly \$200 billion in U.S. exports through a variety of loan, guarantee, and insurance programs. Over the years, Eximbank has played a critical role in American exports of large projects and equipment -- such as power plants, mining equipment, commercial aircraft and pipelines -- as well as smaller manufactured goods raw materials, and services.

These programs have provided valuable support for small and mid size firms that previously could not enter the exporting arena for financial or other reasons. In particular, Eximbank has helped new exporters to break into foreign markets by assisting in financing where commercial banks would not finance on their own. More importantly, it has helped established exporters to sustain their overseas markets in the midst of international financial uncertainties and intense foreign competition.

2.1.2 Mission

U.S. Eximbank supplements and encourages, and does not compete with, commercial financing. By neutralizing the effect of export credit subsidies from other governments and by absorbing risks that the private sector will not accept, Eximbank enables U.S. exporters to compete effectively in overseas markets on the basis of price, performance, delivery and services. To achieve its export finance mission, Eximbank has authority to provide loans, guarantees and insurance.

2.2 EXIM's Institutional Structure, Capital and Financing Operations²

2.2.1 Institutional Structure

Eximbank is an independent, corporate agency of the U.S. Government, chartered by Congress. Eximbank's organizational structure is designed to provide easy access to and administration of its programs. The bank is divided into the following sections:

The Export Finance Group administers the Bank's loan, guarantee and insurance programs. The four geographic area divisions administer the Bank's medium and long-term lending and guarantee activities.

¹ For more details, see "Export-Import Bank of the U.S.," by U.S. Export & Import Bank.

² Ibid

The Engineering Division evaluates the technical feasibility of proposed projects and monitors projects in progress.

The United States Division is responsible for loans and guarantees to U.S. borrowers, specifically, the Working Capital Guarantee Program.

The Insurance Division is responsible for the Bank's export credit insurance programs.

The Claims and Recoveries Division processes claims filed under the Bank's guarantee and insurance programs and is responsible for collections and recoveries.

2.2.2 Capital

Eximbank has capital provided by the U.S. Treasury in 1945. Although it does not receive appropriations for its normal operations, Exim bank's annual authorization ceilings are set by Congress. It receives funds from repayments of principal on outstanding loans, interest and fees charged for its services and recoveries on previous claims payments. It also borrows funds, principally from the U.S. Treasury and the Federal Financing Bank.

2.3 Scope of Financing Program³

The Eximbank facilitates the exportation of U.S. goods and services by small and mid size firms. Eximbank extends direct loans to foreign buyers of U.S. exports and intermediary loans to fund responsible parties that extend loans to the foreign buyers.

Programs of particular interest to small and mid size companies fall into two categories: pre-export and post-export assistance.

2.3.1 Pre-Export Assistance

Eximbank's Working Capital Guarantee assists small and mid size companies in obtaining funding for export-related activities. Such pre-export financing is key to thinly capitalized firms that need working capital to market and sell effectively overseas.

The Working Capital program guarantees repayment to eligible private or public lenders that would otherwise be unable or unwilling to extend financing to ventures in unknown markets and potentially risky environments. Eximbank will also guarantee payments on cross-border or international leases structured as either operating or finance leases. Notes covered by Eximbank's guarantee may be freely transferred. Guarantee is available for fixed or floating rate export loans in dollars or convertible foreign currencies.

³ This section based largely on Tinsley, "The New & Improved Eximbank," Small Business Report, Nov 1988.

Eximbank's guarantee covers up to 90 percent of the loan amount, with the lender at risk for the remaining 10 percent. For transaction-specific loans, repayment schedules typically are 12 months or less. In the case of a line of credit, Eximbank usually grants an availability period of 12 months, renewable on an annual basis.

As a rule, loans provided under the Working Capital Guarantee program must be fully secured. Eximbank will consider many types of collateral, provided these are fairly liquid. Common forms of acceptable collateral include inventory, short-term receivables and marketable securities. Eximbank allows the guaranteed lender to disburse funds against 90 percent of the assessed collateral value of the pledged security.

2.3.2 Post-Export Assistance

For companies currently exporting, Eximbank offers medium-term (one to five years) and long-term (more than five years) fixed-rate loans and loan guarantees. These programs require the buyer to make a minimum 15 percent cash payment, with Eximbank covering a maximum 85 percent of the contract price.

There are two types of fixed rate loan programs: 1) direct loans to foreign buyers of U.S. exports; and 2) intermediary loans to fund responsible parties who "re-lend" the funds to the foreign buyer. These programs allow U.S. dollar-denominated, fixed-rate loans to be made to a foreign buyer at the lowest permissible interest rate specified by the OECD.

With one exception, Eximbank will provide a direct loan to a foreign buyer only when there is evidence of "foreign officially supported and subsidized competition". The exception is any transaction involving both a small exporter, as defined by Small Business Administration guidelines, and a loan amount of \$2.5 million or less.

Intermediary loans are principally intended to fund medium-term transactions of up to \$10 million. As with direct loans, government supported and subsidized foreign competition must exist. The exception again applies in cases of transactions of no more than \$2.5 million involving a small exporter.

2.3.3 Repayment Guarantees

Eximbank will guarantee to a private or public lender that loans made to a foreign purchaser (i.e., importer) will be repaid. The guarantee may be combined with an intermediary loan or obtained separately. It may be a comprehensive guarantee covering both political and commercial risks, or it may cover political risks only.

Political risks include war, revolution, insurrection, government intervention, expropriation, cancellation of export or import license, and inconvertibility of foreign exchange. Commercial risks are all other risks, including bankruptcy, insolvency of the purchaser, and protracted default.

Eximbank's comprehensive guarantee covers 100 percent of political risks and most of the commercial risks. A small portion of the commercial risk is assumed either by the lender or passed on to the exporter in the form of a counter-guarantee to Eximbank. Interest is at the U.S. Treasury rate plus 1% or the rate on the loan, whichever is lower.

Maximum repayment periods for both guarantees and direct loans can extend from two years for loans under \$50,000 to a maximum of five years for medium-term loans in excess of \$200,000 to over seven years but usually not exceeding 10 years for long-term loans. Fees are risk-based depending on the repayment term, the type of issuing bank and the country that receives the exports.

Under the guarantee program, the exporter's bank must certify that it would not make a loan without a guarantee. The Eximbank looks to the exporter rather than the foreign customer for reasonable assurance of repayment. The exporter receives the needed working capital and its commercial bank obtains protection against default.

2.3.4 Foreign Credit Insurance Association (FCIA)

The FCIA is an association of private insurers, such as The Hartford Insurance Group, Liberty Mutual, The Traveler's and American Credit Indemnity. It works as an agent for the Eximbank and guarantees payment for goods shipped to less stable countries.

FCIA (headquartered in New York City with branch offices in Chicago, Houston, Los Angeles and Miami) offers U.S. exporters and U.S.-based financial institutions insurance that provides protection against political and commercial risk of nonpayment on export credit transactions. With FCIA protection against nonpayment, the exporter is often able to obtain more attractive financing terms from his commercial lender and also offer more competitive credit terms to his foreign customer.

FCIA has numerous insurance policies which are tailored to fit most of the export community's trade finance needs. For instance, FCIA insurance may be obtained for export sales, leasing

of equipment, and consignments in foreign markets. As with Eximbank guarantees, the insurance coverage may be comprehensive or limited to political risk only. FCIA handles all short-term (up to 180 days) export credit business whereas Eximbank does not offer support for this market. Moreover, FCIA offers coverage for medium-term (181 days to five years) export sales.

In addition, the "New-to-Export" policy, is of particular interest to inexperienced exporters. It provides coverage for short-term export sales by small firms whose average annual export revenues have been less than \$750,000 over the last two years, or by companies that are just beginning to export. FCIA insurance may be combined with or used to supplement Eximbank's Working Capital Guarantee and intermediary loan programs.

2.3.5 Eligible Investor

The bank's policies are coordinated with overall U.S. government foreign and economic policy objectives. Eximbank does not normally support sales of goods and services to most Marxist-Leninist countries. To be eligible for Eximbank's support, goods or services exported must have at least 50 percent U.S. content and valued at either cost or market value, whichever is lower.

3. JAPAN'S EXPORT-IMPORT BANK (JEXIM)

3.1 History and Role of JEXIM

3.1.1 History

Jexim was established in 1950 to promote Japanese exports. Exim began making direct loans to developing countries in 1959, but it was not until the early 1970s that a strict demarcation was introduced between the bank and Japan's Overseas Economic Cooperation Fund (OECF) which provides all soft loans with a grant element of 25% or more, which qualify as official aid. Exim lends on harder terms at or near the long-term prime rate which is currently 5.7%, compared with 3% for OECF.

However, in recent years, its work of financing the country's sales abroad has dwindled as the government has sought to deflect international criticism of Japan's huge external surplus.

3.1.2 Role of Japan's Eximbank

Jexim has long been more than an export-credit agency. It provides import credits to Japanese companies and since 1983, loans for the development of energy and natural resources for export to Japan. Jexim also makes loans to foreign governments to finance their capital contributions to joint ventures with Japanese firms and a variety of operations unmatched by similar agencies.

As President of Jexim, Takashi Tanaka, calls it "a total-service financial institution dedicated to encouraging the flow of private-sector funds".

3.2 JEXIM's Institutional Structure and Capital

3.2.1 Institutional Structure

Jexim is directly under the supervision of the Ministry of Finance. Jexim's president traditionally comes from the ministry and the deputy is appointed from the central bank. As a bank, it still has to assess the credit-worthiness of the borrower and is ultimately responsible to parliament.

3.2.2 Capital

Most of the funding comes from the postal-savings system through the Ministry of Finance's (MOF) Trust Fund Bureau, though Jexim intends to raise an increasing amount of capital abroad.

3.3 Financing Operation

Recently, Japan's Exim Bank has moved towards the center of the country's efforts to recycle its current account surplus. Indeed, Jexim has been given the task of making untied loans "in parallel" with the IMF in support of developing countries' structural-adjustment programmes. In past co-financing of projects

with the World Bank, Jexim has not lent more than the amount offered by the World Bank. Jexim is not expecting the parallel financing to do much more than supplement its main recycling activity of providing untied loans to governments of developing countries.

Jexim channels aid through governments or state banks and is handling 9 billion of Japan's 20 billion extra recycling program of aid to strapped LDCs. The untied loans provide foreign governments and public financial institutions with funds for use in projects that are not tied to specific imports from Japan. The loans are quick-disbursing with very long maturities, and are made at or slightly below market interest rates. However, untied lending is just one of the four ways Jexim finances Third World's projects. The other three are export credits (not guarantees), import credits and finance to help Japanese corporations invest directly abroad (in joint ventures). In addition, Jexim is now studying ways to lend money to foreign (or Japanese subsidiary) exporters to Japan. Up to now it has only helped Third World goods into Japan by financing the importer.

Of Japanese overseas investment (public and private), East Asia gets 20%. Most goes to China, Hong Kong and Taiwan; only 5% goes to the ASEAN six. However, \$2 billion dollars has been earmarked for the ASEAN-Japan Development Fund (AJDF) for direct investment that goes to the ASEAN SIX. This amount is more than Japan has invested in West Germany or China over the past 36 years.

4. MULTILATERAL INVESTMENT GUARANTEE AGENCY (MIGA)⁴

4.1 History of MIGA and Market Niches

4.1.1 Summary of Important Relative To Private Power Projects

- MIGA has received at least one BOT/BOO project proposal and will consider it.
- If the host government is involved in the project MIGA would prefer that they not have a controlling interest.
- Before MIGA will consider issuing political risk insurance a country must have signed and ratified the MIGA convention and their proportional capital contribution.
- Before issuing insurance MIGA would have to be confident that the country would have the ability to make required foreign currency payments under power purchase or currency convertibility agreements.
- The present limits on MIGA coverage are \$50 million per project and \$150 million per country. However MIGA can, and has, worked with other agencies such as OPIC and the Export Development Agency of Canada to insure larger projects.
- MIGA could guarantee any of the following:
 - Equity investments
 - Loans to project
 - Loan Guarantees
 - Technical assistance fees
 - Leases (possibly)
- The risks MIGA might cover include:
 - Restrictions on transferring funds out of the country including currency convertibility problems
 - Expropriation
 - War and Civil Disturbance
 - Breach of Contract on the part of the host government.
- At present MIGA requires a company to pursue arbitration on any dispute with a sovereign government pursuant to the agreement before MIGA will pay a claim.

⁴ The content of this section is extracted mainly from "MIGA's Investment Guarantee Program," MIGA's General Information Booklet.

4.1.2 History

MIGA was established on 1988 as the newest member of the World Bank Group. MIGA's purpose is to encourage equity investment and other forms of foreign direct investment in developing countries by alleviating investors' concerns about non-commercial risks.

MIGA carries out its mandate through investment guarantee operations, provision of advice and technical assistance to governments of developing countries, and facilitation of consultation on investment policies and programs among member governments and between them and the international business community. MIGA's guarantee operations and advisory and consultative activities are designed to be mutually supportive.

4.1.3 Market Niches

MIGA supplements and complements existing investment insurance underwriters. It expands the available insurance capacity and the range of protection offered. MIGA offers unusually complete coverage of contractual forms of investment. It has innovated in designing coverage of breach of contract by host governments. MIGA expects to offer transfer risk protection in countries where some other insurers have suspended coverage.

Multi-national syndicates of investors may find it more convenient to obtain protection from MIGA than by dealing with several different national agencies. Developing country businessmen with investment opportunities in other developing countries have no practical alternative to MIGA for most of their investment insurance needs.

MIGA's initial limited financial capacity may required a pooling of coverage of large investment between MIGA and national and/or private insurers. Whether as sole underwriter or co-insurer, MIGA's participation enhances confidence that the investor's rights will be respected by the host country. This advantage is inherent in MIGA's nature as a voluntary association of developing and developed countries, sharing financial risks in its guarantee business.

4.2 MIGA's Institutional Structure, Capital and Guarantee Capacity

4.2.1 Institutional Structure

MIGA is an international organization established, funded and controlled by member governments. It is both legally and financially independent of the World Bank and any other institution but it cooperates closely with the Bank and IFC.

MIGA's structure is similar to that of a corporation. Its financial resources are provided by its member countries in the form of share capital. Membership is open, on a voluntary basis, to all member states of the World Bank and Switzerland.

4.2.2 Capital

MIGA was initially set up by a group of 42 member countries that subscribed 63% of the Agency's authorized capital of US\$1,082,000,000. The capital will be fully subscribed if all potential member join. Each member must subscribe its shares of MIGA capital stock in proportion to the size of its economy, as reflected in its share allocation in the World Bank. Thus developing as well as developed member countries have a financial interest in MIGA's avoidance of underwriting losses. This common self-interest reinforces MIGA's ability to avert actions by host governments that might cause an insured loss by an investor.

4.2.3 Guarantee Capacity

Generally, MIGA does not allocate more than five percent of its overall guarantee capacity to cover any one investment. As of October 21, 1988, MIGA's guarantee capacity was slightly above US\$1 billion. Thus in the beginning, guarantees of a single investment should not exceed US\$50 million.

4.2.4 Sponsorship Facility

In addition to issuing guarantees on account of its share capital, MIGA is authorized to underwrite additional investments that individual member countries wish to sponsor. In these cases, MIGA acts as administrator of a separate sponsorship account. Revenues from sponsorship operations are accumulated in a sponsor trust fund and kept separate from MIGA's own assets.

4.3 Scope of Guarantee Program

4.3.1 Eligible Investor

To qualify for coverage by MIGA, investors must be nationals of a member country other than the country in which the proposed investment is made (host country). MIGA coverage is available to foreign-owned corporations domiciled in a member country (other than the host country), as well as to companies established in a non-member country but majority-owned by nationals of member countries.

Eligible investor include both private individuals and corporations. Publicly-owned corporations qualify for coverage if they operate on a commercial basis.

4.3.2 Eligible Host Countries

MIGA can normally guarantee only investments that are located in one of its developing member countries. Under the sponsorship facility, MIGA can also cover investments made in its developed member countries.

4.3.3 Eligible Investment

Three broad types of investment qualify for coverage by MIGA:

(a) All forms of equity investments, including project loans and guarantees of loans made by equity investors. Coverage of loans and guarantees is currently limited to those with mean maturities of at least three years;

(b) "non-equity direct investments," including service contracts, management contracts, franchising agreements, licensing agreements, operating/lease agreements, and turnkey contracts -- all on condition that (i) they have terms of at least three years, and (ii) the contractor's returns substantially depend on the performance of the investment project;

(c) medium and long-term subordinated debentures of the project enterprise and securities for loans to the project enterprise, on condition that the debentures are held and the securities are provided by an equity investor or non-equity direct investor in the project enterprise.

4.3.3.1 Investment Currency and Investments in Kind

Investments in any freely usable currency qualify for coverage. Also eligible for coverage are investments in any other currency that is freely convertible at the time of the underwriting decision.

4.3.3.2 New Investment

MIGA only guarantee new investments. A new investment is defined to include a contribution to the expansion, modernization or financial restructuring of an existing enterprise or an investment that facilitates the privatization of a state enterprise, e.g., certain debt-for-equity swaps.

4.3.3.3 Portfolio Equity

Eligibility extends to portfolio equity investments. MIGA is prepared to cover investments made by offshore funds in developing member countries' emerging stock markets. When a fund is established within the host country, MIGA may guarantee foreign investors' shares in the fund itself rather than the fund's

4.3.3.4 Debt-Equity Swaps

Equity resulting from a conversion of debt is, in principle, eligible for coverage by MIGA.

4.3.4 Coverage Risks

MIGA offers coverage of three broadly defined types of non-commercial risk, namely:

(a) Transfer and Convertibility Restrictions - This coverage embraces both active blockage and passive blockage. Coverage also includes exchange rate discrimination, i.e., the inability to convert local currency except at an exchange rate less favorable than a reference rate of exchange specified in the guarantee contract.

(b) Expropriation and similar measures - This coverage is designed to broadly encompass direct, indirect and creeping expropriation.

(c) War/Revolution/Civil Disturbance - This coverage usually embraces (i) the removal, destruction or physical damage of tangible assets of an investment project and (ii) a substantial interference in the enterprise's business operations as a result of acts of war, revolution or other organized political violence designed to overthrow the host government.

In addition to these conventionally offered coverage, MIGA also offers special breach of contract protection. It encompasses losses resulting from any repudiation or breach by an entity of the host government of a contract with the guarantee holder.

4.4 Salient Features of MIGA's Guarantees

4.4.1 Contract and General Conditions of Guarantee

The rights and obligations of insured investors and MIGA, respectively, are set forth in contracts of guarantee. The contracts normally refer to MIGA's General Conditions of Guarantee.

Investors may, on a case-by-case basis, negotiate with MIGA departures from the General Conditions to tailor coverage to their specific needs.

4.4.2 Period of Guarantee

MIGA offers long-term coverage with periods of guarantee ranging from 3 to 15 years at the election of the investor. Insurance policies may be extended up to a total of 20 years, and guarantee holders are entitled to terminate the policy after the initial 3 years.

4.4.3 Amount of Guarantee

Guarantee contracts specify in each case an amount of guarantee. This amount sets the maximum compensation with MIGA may pay under the guarantee and it provides the basis for the computation of premiums. It may initially be any percentage of the value of the guarantee holder's contribution to the investment project, subject to a 90% maximum.

4.4.4 Currency of Guarantee

MIGA offers its guarantee in any freely usable currency or any other currency freely convertible at the time of the conclusion of the guarantee contract which the investor may choose.

SECTION VI. - VIEWS OF POWER SECTOR AND FINANCIAL MARKET EXPERTS

The following comments and views are summarized from interviews with private business and financial sector professionals. Topics covered include general observations regarding private power projects, private power project risks, financing issues and methods, and the views of potential project sponsors.

1. General Observations Regarding Private Power Projects

1.1 There are two justifications for BOO/BOT power projects. First, is possibly greater operational efficiency. Second, is possibly expanded sources of financing.

1.2 The concept of private development and ownership of power plants is good in that it could encourage private initiative and greater efficiency. However, in the end BOO/BOT projects can only be undertaken if the public sector wants them.

1.3 Other private sector power initiatives are under consideration. Chile is considering selling off Hydroelectric plants to private parties under a debt/equity swap plan. However, establishing the currency of the financing has been a problem. Also, in the late 1970's an Indonesian hydro plant was financed in part based on contracts to sell electricity to an aluminum smelting company. The Industrial Bank of Japan could provide financial advise on this type project.

1.4 In addition, Turkey has talked a lot about BOT power projects but has not done much. Everyone involved have run up big planning costs. It would be very useful to develop "model agreements" between developers and governments to streamline the project approval process.

1.5 The \$1 billion size of the Hab river project may be too large for the first BOO/BOT power project. A smaller, easier to finance project would be more reasonable.

2. Private Power Project Risk

2.1 BOT/BOO projects have had a difficult history particularly with regards to risk transference.

2.2 The real problem and risk is whether the government will actually pay. Government guarantees are direct. Take or pay contracts are indirect and less secure. An important role the World Bank and other multilateral organizations might play in such projects is to help resolve possible conflicts.

2.3 Major risks on the Pakistan Hab river project are (1) WAPDA's ability to live up to the power purchase agreement, (2) central bank's ability to provide foreign exchange and (3) long-term political stability questions.

2.4 In the power industry politics are always extremely important. Governments tend to want to set and keep rates at low levels.

2.5 As for the risks faced in a BOO scheme, the most probable risks are not likely to be those connected with outright expropriations or contract renegeing by the government or government agencies. Rather, they may be related more to inefficiency or environmental decay, such as labor strikes, fuel supply disruptions, bottlenecks in critical part imports, catastrophic economic and currency collapses, etc.

2.6 A prominent recent BOT project was the Cogasco pipeline in Argentina built in 1979 to 1981 which was a disaster. Because of the war with Great Britain, the Argentinean government ran out of foreign exchange and could not pay. Legally the BOT company debt was not guaranteed by the Argentinean government. In spite of the fact that the company had a take or pay contract the government refused to pay the tariff after two months due to technicalities. The BOT company tired hard to get nationalized but ultimately a Dutch government agency had to pay off lenders.

3.0 Financing Issues and Methods

- To develop confidence in BOO/BOT projects you need to "learn to walk before you run." Financing feasibility is at least as important as economic feasibility. Smaller easier to finance projects may be better even if unit production cost are higher. Everyone involved must consider:
 - completion risks
 - capital availability etc.
- To undertake such projects one needs a credit analysis of both the power project and the country. To arrange financing in many LDC's the government must guarantee:
 - Tariff and power purchase agreement, and
 - Currency convertibility

Under such circumstances BOO/BOT power projects are really just "off balance sheet" government financing.

- Also, sponsors are interested in only putting up a small amount of equity (10% max). The real incentive is to make money on the construction by having a less competitive bidding process.
- Sponsors and financial advisors should look closely at Pakistan for innovative financing strategies to tap:
 - Value of land
 - Money in expatriates overseas, etc.

They should also look closely at the experience of utility agencies in India and Thailand which have sold long-term debt in recent years.

- Power project financing needs are approximately 40% local currency, 60% hard currency. If all financing comes in hard currency then exchange rate risks are very high.
- Commercial banks might be considered as agents to sell equity securities in the project.
- Financing in local capital markets will of course be mostly in local currency. This raises the issue of how to get foreign currency for needed imports.
- It may be worth considering the issuance of local currency bonds payable on an index based on U.S. dollar exchange rate.
- Sponsors should also consider issuing subordinated debt convertible into equity. This would offer potential equity investors a lower risk and may offer the project lower interest costs for some period.
- Assuring adequate foreign exchange earnings is very hard for power projects. Possibly this is something that MIGA or host governments may have to do.
 - guarantee of price of output,
 - convertibility of currency, and
 - in exchange collect a fee.

4.0 Views of Potential Project Sponsors

4.1 There are willing sponsors for LDC private power projects at the right rate of return. Such sponsors would likely include: (1) Unregulated affiliates of domestic power companies, (2) Fuel and equipment suppliers, (3) Construction companies (4) Local LDC entities who understand the local political and economic environment (5) Major private power users. It is best to use a "team approach" to constructing the sponsoring group.

4.2 Three significant differences between domestic and international projects are: (1) currency convertibility risk (2) inflation risk, and (3) political volatility. In many other respects domestic and international power projects are quite similar.

4.3 The U.S. is unique in having in place a regulatory system which acts as a referee between the power companies and consumers. This type system does not exist in LDC's and some reliable mechanism needs to be created to resolve disputes, establish bidding guidelines, etc.

60

4.4 The way to motivate private investors to invest in LDC power projects is to offer handsome returns. A major question is whether projects can both pay such returns and deliver power at a competitive price. The answer is likely yes since private projects run by competent managers can achieve much greater efficiencies in many cases. However, BOT/BOO projects will in the long run be more expensive than if the government had borrowed money, installed generating equipment and operated the power plant efficiently.

4.5 A major task is to educate the LDC countries that private investors and lenders, as opposed to multilateral and bilateral aid agencies, really expect to get repaid on time. This preoccupation on the part of private financiers regarding timely repayment will lead to more complex structures for deals.

4.6 While political risks are significant, if the power contract is fair and the project provides reliable power then changes in government should not pose insurmountable problems.

4.7 A major benefit to LDC's of having BOT/BOO projects is to gain technological know how regarding maintenance, procedures, scheduling, etc. Another advantage is that these larger more efficient projects may in some cases allow LDC's to cut back on higher cost sources such as diesel generators.

4.8 In terms of project financing equity financing is typically on the order of 20% to 40% of total, and local currency financing is 30% to 40% of total.

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PRIVATE POWER PROJECTS AND CAPITAL MARKET DEVELOPMENT

**The Financial Market Factors of the Philippines
Affecting the Feasibility of Undertaking Private Power Projects**

A Report to

United States Agency for International Development

FMIRI, INC.

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92

PRIVATE POWER PROJECTS AND CAPITAL MARKET DEVELOPMENT

The Financial Market Factors of the Philippines Affecting the Feasibility of Undertaking Private Power Projects

Table of Contents

	<u>Page</u>
Executive Summary	3
I. Recent Economic Development	6
II. The Financial Institutions	11
The Central Bank of the Philippines	14
Commercial Banks	14
Universal Banks	16
Rural Banks	17
Specialized Government Banks	17
Foreign Banks	19
Non-bank Financial Institutions	20
a. Investment Houses	20
b. Financing Companies	20
c. Securities Dealers/Brokers	21
d. Investment Companies	21
e. Fund Managers	21
f. Lending Investors	21
g. Pawnshops	22
h. Government Non-Bank Financial Institutions	22
i. Insurance Companies	22
j. Non-Stock Savings and Loan Associations	22
III. The Financial Markets	23
Money Market	23
Capital Market	24
a. Introduction	24
b. Non-Securities Market	25
c. Securities Market	26
d. Equity Market	27
IV. Capacity of the Philippine Financial Market	29
Straight Loans	30
a. Banks	30
b. Insurance Companies/Pension Funds	31
c. Multilateral Financial Institutions	31
Syndication of Loans	31
Private Placement of Equity Issues	32
a. Insurance Companies/Pension Funds	32
b. Debt to Equity Funds	32
c. Foreign Mutual Funds	32
d. Local Mutual Funds	33
Debt to Equity Swaps	34

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Underwriting of Equity Issues	34
Problems of the Financial Market	35
Prospects of the Financial Market	36
V. Legal and Regulatory Issues	39
Foreign Investment Regulations	39
Guarantee for the Safety of Foreign Investments ...	40
Incentives for Foreign Investments	40
Regulation of the Securities Market	40
Stock Exchanges	43
Listing Requirements	44
Investment Houses and Underwriting	46
VI. Economic and Financial Issues for the Energy Sector	47
Electricity Tariffs	49
MERALCO Transmission/Distribution Issues	49
Financial Issues	50
a. Local Currency Investment Funding Constraints	50
b. Equity Capital Constraints	50
c. Retailing Constraints	50
VII. Potential Role of Multilateral and Bilateral	
Credit Agencies	53
Potential Role of the World Bank	53
The Pakistan Example	54
Financing Sources for Private Sector Power Plants .	56
Hopewell Philippines Case	56
VIII. Conclusions and Recommendations	58
Advantages of the BOT/BOO Scheme	58
Potential of the Philippine Financial Markets	59
Recommendations for A.I.D.	60
Bibliography	62
Annexes	
1. Total Resources and Investments of the Financial Sector	64
2. List of Foreign Banks, Offshore Banking Units and Representative Offices, and Local Commercial Banks ..	65
3. Financial Performance of Selected Banking Institutions	67
4. Financial Performance of Selected Non-Bank Financial Institutions	69
5. Money Market Transactions	71
6. Number of Listed Corporations and Aggregate Market Capitalization of Companies	72
7. Manila Stock Exchange Offering	73
8. Selected Transactions in the Local Capital Market ...	74
9. Table of Nationalization Laws and Their Requirements	75
10. Regulated Framework for Financial Institutions	79

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EXECUTIVE SUMMARY

With the energy demand expected to grow by an estimate of 4.5 percent for the next five years, the Philippine government should take the initiative to draw up a phased program to improve the energy sector operations. Demand for energy projects is very high due to the country's economic boom and investment upsurge. However, a power supply shortage represents a real constraint on future economic growth. The Philippine Board of Investment has disapproved some investments, especially those in power intensive industries, that promised to be lucrative foreign exchange earners, simply because certain area's power grid was unable to provide enough electricity. This results in a real opportunity loss for the country's economic development.

It is in this context that the country needs new innovative ways to increase its power supply both economically and speedily. In view of the financial constraints faced by both NPC and the government, the private sector can play an important role in power production, given the proper financial incentives. The BOT/BOO scheme can supplement the nation's power supply relatively quickly without the expenditure of large up-front capital costs by the public sector. The BOT/BOO concept is a mechanism for private enterprises to participate effectively in the formulation, construction, operation and maintenance of infrastructure facilities under private ownership and financing. While there are several variations in the basic model, all involve the establishment of a private sector company as a vehicle for ownership, financing, construction and operation of the project for a certain period. Thereafter, ownership may be transferred to the public sector (BOT) or still retained by the project entity (BOO) at its own discretion. These new schemes involve limited privatization of the public utility to the extent that the power project is privately owned and operated, with the project completion and operational risk shifted to the private sponsors of the project.

The project sponsors, who are usually from the private sector, make equity investments of 10 to 30 percent of the total project cost in a private project company which will build and operate the project for a period of time. The balance of the project cost is raised by the project company in the form of debt from commercial sources, usually backed by export credit guarantee agencies, and from bilateral and multilateral lenders. Senior lenders to the project company typically are not covered by direct "full faith and credit" sovereign guarantees, but substantial support from host governments is required, including guarantees of the performance of government entities involved in the project and guarantees of foreign exchange risks. In some cases, government support has included a government standby credit facility to provide subordinated loans to the project company when necessary to cover

senior debt service.

If a private power project is to be undertaken on a BOT/BOO basis, how feasible is the Philippine financial market to raise the required local currency financing for the project, estimated to range from 25 to 30 percent of the total project cost? The financial market of the Philippines is underdeveloped. There are generally two basic reasons why this is the case. On the supply side, there is an insufficient number of high-grade securities, due to the fact that many companies have been reluctant to list on the exchanges. On the demand side, there is a limited number of investor participants actually involved in the stock market.

The small number of listed companies makes the market prone to price manipulations because of the absence of the market depth, breadth and liquidity. A lot of companies do not want to go public for a variety of reasons in the Philippines. Families and businessmen have the tradition of wanting to retain control of their companies. There is a prevailing belief that owners of family-controlled companies would lose management control once they go public. Aside from this fear, there is an attitude, particularly among family-owned corporations, of wanting to corner all the profit they stand to make without necessarily sharing them with outsiders.

The Philippine capital market has developed unevenly. The short-term money market is active, the corporate bond market is moribund and there is no long-term government bond market. The stock market has been speculative, centering on resources-related stocks, and thus has not marshalled a significant amount of savings. In order for the Philippine economy to continue to grow, it must mobilize increasing amounts of savings through the equity markets and create a medium to long-term corporate and government bond market.

Even though the Philippine financial institutions and financial markets are limited in their capacity compared to other more developed financial markets, there appears to be the potential for raising the required local currency funds for a private power project for 200 MW combined cycle gas plant, with a total project cost of \$170 million. Assuming that the local currency portion is 30 percent of the total project cost, about \$51 million equivalent in pesos is needed. This funding can be raised in several ways, including some combinations of the various alternatives. First, one may use the syndication method. We have discussed the syndication practices in the Philippine financial market, where there have been many precedents for such type of financing. Second, a private placement may be used with a group of institutional investors, such as insurance companies and pension funds.

Third, a bridge financing may be arranged with commercial

banks for the initial period of several years, after which it can be refinanced by the equity issue. Both stock exchanges in the country require at least three years of profitable track record before a company can issue its shares publicly. Fourth, a long-term convertible bond issue may be floated, with the conversion to take place at least three years after the start of the operation. Finally, the project sponsors may be able to access to the energy sector development fund, financed by the World Bank and possibly other multilateral and bilateral credit agencies, a la Pakistan energy sector development fund.

The Philippines, through its Hopewell project, has already demonstrated that it can successfully attract foreign private investors who are able and willing to develop power plants on a BOT/BOO basis. The Hopewell project has acted as the trail blazer for similar ventures in the country, as both the government and the private sector in the Philippines have become familiarized with the BOT/BOO concept. All the necessary legal, regulatory and administrative procedures have been clarified through the Hopewell project. In this sense, the Philippines can be said to be one of those developing countries that are well prepared to encourage further private power plant projects on the BOT/BOO basis.

The BOT/BOO concept has been introduced recently in a number of countries to establish infrastructure projects, especially for power plants, toll roads, port terminals, bridges and airports. As a result, the concept is now understood more widely by governments which are increasingly considering its adoption. However, the application of the concept is complex partly because such projects have traditionally been handled by the governments or their public entities. Thus, no credible framework or government policies for developing BOT/BOO projects and private participation in public infrastructure projects exist in most countries. Legislation to adopt a suitable policy framework is often lacking and its enactment is time-consuming. Therefore, a host government which wishes to promote BOT/BOO projects must understand and be willing to accept the complexity and time consuming nature of the process.

I. RECENT ECONOMIC DEVELOPMENT

Conventional wisdom is that the Philippine economy is totally dependent upon political stability, which has had its share of turbulence in the past couple of years. But the reality seems to be that the Philippine economy has developed its own momentum and dynamism despite recent political troubles. Despite the traumatic coup attempt last December, when the dissident troops carried out a successful siege of the country's financial center itself, investments hardly slackened in the following months despite the widespread pessimism over the Philippine economic prospects expressed by many foreign observers.

Records of the Securities and Exchange Commission show that corporate investments during the four months of this year totalled P 2.8 billion (US\$122 million), or about 37 percent more than the same period last year. A recent survey of 233 firms by the Central Bank indicated that 57 percent of the respondents expected better business for the year. Exports in the first quarter of the year still expanded 9 percent from the year-ago level. Industrial expansion has not sputtered; imports of capital and intermediate goods jumped 28 percent in the first quarter of the year. The Board of Investments (BOI) also reports that costs of 630 projects approved in the first quarter of the year amounted to P 28.4 billion, a 15 percent improvement over the same period last year. Since implementation of the projects, at least the bigger ones, approved by BOI has normally one to one-and-a-half year gestation period, this could mean that, discounting the possibility of a political upheaval that would force investors suddenly to drop their projects, economic expansion in the past three years has not yet peaked, as the surge in BOI-approved investments occurred only in 1989.

While central bank data indicate that foreign investors reacted sharply to the December coup attempt, withdrawing US\$91 million in the first quarter of the year, as against the US\$21 million in the similar period last year, inflow of new foreign investments still expanded 41 percent in the first quarter. Thus, despite the country's frightening political volatility and the deterioration of basic services, many Philippine and foreign businessmen think that 1990 might even be a better year than last year.

Several factors seem to explain this puzzling economic phenomenon in the face of scarce and unreliable infrastructure such as power and communications, inefficient bureaucracy, continuing threat of another coup attempt, and political volatility. First, in the Philippines the business and political elites have had a remarkable history of collaboration and conciliation after short contests for control of the state. This has resulted in the continuity of some of the country's biggest enterprises throughout

the many regimes. On the other hand, the system has allowed the emergence of successful new business groups which had expanded partly by exploiting political connections in a particular regime. As a result, these firms, along with foreign companies which have an estimated equity of at least US\$3 billion, have constituted the country's strong capitalist core, acting as a catalyst for expanding a vibrant business culture. From 1975 to 1985, an annual average of 4,600 corporations were organized, and this has increased to about 6,000 since 1986.

Profit margins in the country are high, reflecting the inherent capital risk in a developing country. A survey made for 1987 showed an average return on equity of multinationals of 48 percent and a return on sales of 11 percent. A survey in 1988 of the country's largest 5,000 firms showed a return on assets of 4.5 percent and a gross profit margin of 8.7 percent. All the while, the core of corporate giants have been the excellent training grounds for a steady stream of entrepreneurs and management executives versed in some of the latest business techniques. Combined with an English-speaking and very easily trainable work force, the available managerial pool make up one of the major attractions for operating in the Philippines. Business schools in the country are considered among the best in the whole Asia, and Filipinos have professionalized accounting in most Southeast Asian countries.

The Philippines also has been known as a country where there is a close interweaving of business and politics, resulting in the notorious "crony capitalism" phenomenon during the Marcos era. Yet this has an antithesis: except for an excessive tariff protection for a few industries, which is being rapidly dismantled, this is a country where the complex of government regulations, precisely because of sheer bureaucratic inefficiency or corruption, is mere appearance, concealing a quite unregulated laissez-faire economy. Some knowledgeable Asia hands claim that the Philippines is the easiest place to do business, even easier than Hong Kong. Inexperienced foreign executives may grumble at the difficulty of repatriating capital or at the restrictions on foreigners' land ownership. But veteran expatriates here seem to know how to prosper in the environment. Despite the existence of formal foreign exchange restrictions, Manila's foreign currency deposit units and the underground informal market network virtually allows free flow of capital.

Developers here, particularly those from Taiwan and Hong Kong, found in the restrictions on land ownership a window of opportunity and went on massive projects for condominium constructions, with the land technically owned not by a foreign national but by the condominium association. Some foreign companies are skirting the land-ownership restriction by leasing the land on a 25- or even 50-year term from a company which can be at any rate 40 percent controlled by the foreign firm.

Another factor favoring the Philippines is that the country has not only one of the biggest overseas work force, but a large immigrant community in North America as well. Officially registered overseas workers are put at 618,750, but the figures could be up to 700,000 if unregistered workers are included. Excluding the money sent to relatives in the country by immigrants, repatriation of the incomes of overseas workers has been estimated to amount to at least US\$2 billion a year, constituting a massive base for consumption demand in the country even during its times of economic crisis. However, of these remittances, only about US\$800 million are through official channels, with the rest entering the country through informal venues. The US\$1.2 billion that does not appear in central bank's records of inward remittances amounts to about 5 percent of GNP.

This represents a huge consumption demand, which combined with the Aquino administration's pump-priming program (mainly through increases in wages) and the rise in coconut and sugar prices in 1986 and 1987, contributed strongly to the economy's boom in the past four years. It explains the brisk sales and growth of manufactures of electronic items and durable goods in the past several years, and the sprouting of shopping malls not only in Metro Manila but in other regional centers as well. The role of overseas workers' remittances was highlighted in the country's first quarter economic statistics: while GDP grew only 4.7 percent, GNP grew at 6.3 percent annual rate, largely explained by the net factor income of overseas workers' earnings. The role of unreported workers' remittances is the tip of the iceberg of the vast underground economy of the country, which some believe is equal to the known figures, hence creating a gross underestimation of the real GNP figure.

Apprehension over the country's business prospects are based on the view that political convulsions could jolt the economy and cripple business. What is missed here is that each of the two major political turmoil in the past two decades had led to bursts of investment expansion, and the opening of windows of opportunity for successful companies. The general liberalization measures under the Aquino administration has proved to be quite timely for the country. Chinese-Filipinos here mostly come from Fukien province of China, where most of the Chinese who fled to Taiwan also have their roots. The two Chinese groups therefore share not only the same language but even blood-ties. When Taiwan investment started outside the island, Manila emerged as an ideal place to do business, with no lack of like-minded partners. As the Marcos era was marked by the massive entry of Japanese investors to challenge the dominance of U.S. firms here, the Aquino era signals the influx of Taiwanese investments. Capital from Hong Kong investors is also expected to expand Chinese businesses in the country. Official figures here reported that in 1989, Hong Kong investments in the country totalled P 802 million, the second largest after the

Japanese with P 1.4 billion. Altogether, capital from Hong Kong and Taiwan made up 30 percent of total corporate investments last year.

The Aquino administration has declared its intention to allow for a greater play of market forces in the economy and to achieve a greater degree of growth and economic stability. Important steps have been taken to liberalize the economy, and a more prudent stance exists in monetary management. Bank credit to the private sector has continued to increase, while pricing policy has been geared toward providing the correct signals for private investment decisions and, despite an up trend, interest rates have remained essentially moderate. To strengthen the financial system and make it more supportive of economic objectives, a privatization program intended to reduce the scope and size of the presence of government in banking has continued.

Recent policy measures in the external sector can also be characterized as market-oriented and geared toward improving economic efficiency and enhancing the country's competitive position in the international market. The peso exchange rate, which was determined by the free interplay of market forces in the foreign exchange market, has generally maintained export competitiveness while helping to contribute to domestic price stability.

Among the negative points in the current government's financial management is the continuing and, to a certain extent, growing, fiscal deficit. Fiscal operations in 1989, for instance, resulted in a budgetary deficit equivalent to 2 percent of GNP, which was lower than the 1988 figure of 2.5 percent but still relatively high. The financing of this deficit, primarily from net domestic borrowings through the sale of Treasury securities, has led to upward pressures on interest rates and to the crowding out of the private sector. It has been noted, for instance, that the Philippines has had, for a number of years, the highest interest rates among its Asian neighbors. Also, the fiscal deficit has led to greater inflation as the Central Bank has attempted to accommodate demand for credit.

Another factor that adversely affects the economy is the large foreign debt the country has accumulated and the relative slowness in the taking off of the debt-equity conversion scheme. In contrast to similar programs in other countries, the Philippine program was launched not so much to reduce the country's external debt; its primary objectives were to stimulate long-term equity investments and encourage the repatriation of Filipino capital from abroad. Although a significant number of applications have been received, the program has proceeded at a slow pace. The Central Bank has been cautious in implementing the program because of the inflationary effect of monetizing its debt, establishing an

absolute limit on annual conversions and encouraging conversions using private sector debt paper. However, the level of the absolute limit on Central Bank conversions has been too restrictive and the program has, for all practical purposes, been suspended, as the capacity of the private sector to prepay its obligations is quite moderate.

II. THE FINANCIAL INSTITUTIONS

The financial institutions in the Philippines are divided into two broad groups, namely bank and non-bank financial institutions. Commercial banks are composed of "expanded commercial banks" and regular commercial banks, while non-bank financial institutions consist of thrift banks, investment houses, finance companies, etc. The functions of bank and non-bank financial institutions are overlapping and the same requirements are applicable to similar aspects of their respective operations. Expanded commercial banks or universal banks (unibanks) can function as commercial banks and investment houses, and they can invest in non-allied enterprises. These banks are also granted additional functions such as trust operations, foreign currency deposit unit operations and quasi-banking operations. Quasi-banking refers to engaging in commercial paper dealership. Regular commercial banks can also undertake trust operations, foreign currency deposit unit operations and quasi-banking like expanded commercial banks, but they cannot act as an investment house unlike unibanks.

Thrift banks can undertake domestic banking including extending personal and mortgage loans. Thrift banks can also have additional operations such as trust, limited foreign currency deposit unit, foreign exchange dealership and quasi-banking. Investment houses, on the other hand, underwrite and trade securities, participate in securities dealing and in equities financing. Investment houses can also have additional operations such as trust, limited foreign currency deposit unit, foreign exchange dealership and quasi-banking like the thrift banks. Finance companies with quasi-banking functions undertake financing, leasing and quasi-banking.

The following table shows the total financial resources of the Philippines financial institutions for the years 1988 and 1989.

Total Resources of the Philippine Financial System
1988-1989

<u>Institution</u>	<u>1988</u>	<u>1989</u>
	(P Billion)	
Commercial Banks	342.3	382.2
Thrift Banks	24.9	28.0
Specialized Gov't Banks	13.8	13.9
Rural Banks	11.0	11.5
Sub-total banks	----- 392.1	----- 435.7
Non-Bank Fin. Institutions	----- 131.1	----- 140.4
Total	----- 523.2 =====	----- 576.1 =====

Source: The Central Bank of the Philippines

It is also interesting to observe from the table above that it is the private sector financial institutions that have experienced significant growth, whereas government institutions have grown at substantially lower rates.

The minimum paid-in capitalization required for a unibank is P 500 million while new commercial banks require P 300 million. New thrift banks require a minimum capitalization of P 20 million and P 10 million for banks based in Metro Manila and outside Metro Manila, respectively. Newly established investment houses and finance companies with quasi-bank functions require a minimum paid-in capitalization of P 50 million. The commercial banks, thrift banks and investment houses are the forms of financial institutions which can have upward conversion. A thrift bank can become a commercial bank, then a unibank. A commercial bank can become a unibank. An investment house can be converted directly to a unibank.

The net worth to risk ratio required by the Central Bank for all types of financial institutions averages 10 percent. The single borrower's limit (SBL) is the portion of total capitalization of a bank that is used to measure the loan for a single borrower. The SBL required for unibanks and commercial banks is 15 percent of net worth plus another 15 percent if the financing is for housing of low and middle income borrowers.

Investment houses and finance companies with quasi-banking operations are both allowed an SBL of 80 percent of net worth.

Total resources of the financial system aggregated P 576 billion in 1989, compared to P 523 billion in 1988. Banking institutions contributed about 75 percent of the resources of the financial sector, while non-bank financial institutions contributed about 25 percent of the resources of the financial sector in 1989.

The Philippines financial system is in an advanced stage of development. At the end of 1988 there were 6,916 financial institution offices (headquarters and branches) in the country, up by 6.3 per cent from December 1987 and largely on account of the establishment of non-bank financial institutions. As of 1989, there were 977 financial institutions, consisting of:

Commercial banks	29
Rural banks	838
Saving banks	8
Private development banks	41
Stock savings and loan associations	61
Specialized government banks	3

In addition, there are over 1500 pawnshops and numerous registered money lenders called "lending investors".

The Philippine financial system has evolved gradually over a span of more than four centuries, starting with the establishment of the first organized credit institution, the "Obras Pias", to a multifaceted system which supplies funds to almost every sector of the economy. Organized during the Spanish Colonial era in 1554, the Obras Pias was a religious foundation whose resources were channelled into trade financing which in those days meant financing the country's galleon trade with Acapulco, Mexico.

Formal banking system was established in 1851 with the opening of the first commercial bank, the Banco Espanol Filipino de Isabel II, now the Bank of the Philippine Islands. The country's first savings bank started operations in 1882. Other banks soon followed, especially with the American and Commonwealth periods. Thus, just before the outbreak of World War II, there were 17 banks in operation, 22 provincial branches, 54 provincial agencies and 1,000 sub-agencies.

The financial system grew into a sizable sector after the Second World War. In 1946, the Rehabilitation Finance Corporation was organized to provide financial aid in rehabilitating the country and to help in broadening and diversifying the Philippine's economic structure. This institution later evolved into a much larger and expanded development banking institution, the Development Bank of the Philippines. In 1948, the General Banking

Act was passed which contained the first major rules and regulations governing banks' operations, particularly those affecting commercial and savings banks. Moreover, the establishment of the Central Bank in 1949 defined the framework for monetary policy formulation and the role of the financial system in the economy as a whole.

The Central Bank of the Philippines

The Central Bank of the Philippines (CBP), with P 355 billion in assets as of September 25, 1989, is almost equal in size to the combined total assets of the country's commercial banks, which stood at P 364 billion. The statistics are deceptive, however, since many "assets" of CBP are accounting constructs, which do not correspond to an equal liability to CBP. For example, CBP assets include an item called "Revaluation of International Reserves" which arose in part from losses incurred by CBP in foreign exchange swap and forward cover operations entered into in the past. Likewise, the accumulated interest expenses and issuance and servicing costs of CBP securities and open market instruments like CB bills and Reverse Repurchase Agreements as well as the costs of printing and minting of currency are added to another asset item called "Monetary Adjustment Account." These two items account for almost half of the total assets of CBP. If these accounting constructs are eliminated, CBP's share of the total financial assets in the country would fall appreciably.

CBP has instituted major reforms to improve the development of the capital market and reduce the difficulty in obtaining long-term peso credits. Among these reforms are the enforcement of a policy to broaden the capital base of banks, resulting in a series of bank mergers, and the adoption of the universal banking concept since 1981 to enable commercial banks to diversify their activities. On the other hand, since September 1989, the Central Bank has increased the legal reserve for long-term deposits from a low of 9 per cent to a high of 20 per cent, while reducing the legal reserve rate for short-term deposits from 23 to 20 per cent. As a result of this policy, the cost of long-term funds has increased for banks, leading to a decrease in the rate of interest on long-term deposit, and potentially encouraging lenders and borrowers to seek alternative financial instruments through the securities market.

Commercial Banks

There are 29 commercial banks, of which twenty-five are domestic (including government-owned banks), and four are branches of foreign banks, with P 364 billion in total assets as of

September 25, 1989. Of twenty-five domestic banks, seven are universal banks (or unibanks) and the rest are commercial banks. The financial services provided by the commercial banking system are generally characteristic of those in a developed country, including full service commercial banking (but with a marked absence of significant long-term lending), consumer credit cards and automated teller machines, trust services and investment banking. Bank management are well trained, and can be expected to provide any financial service that is profitable and legal.

Commercial banks constitute the largest sector of the financial system in terms of financial resources. They hold approximately 85 percent of the total deposits and 65 percent of the total loan and investment portfolio of the financial system. Top six commercial banks held approximately 50 percent of the total deposits of the 29 commercial banks. These six banks also belong to the largest banks in the country in terms of net worth, deposits and loans. The following table shows the top six banks in terms of total assets.

Top Six Commercial Banks in Terms of Total Assets
as of September 25, 1989
(in million pesos)

Philippine National Bank	50,681
Far East Bank and Trust Co.	34,020
Bank of the Philippine Islands	33,600
Metropolitan Bank and Trust Co.	29,760
Philippine Commercial International Bank	21,974
United Coconut Planters Bank	17,192

Source: SGV Financial Studies, December 1989.

Total contingent liabilities of the commercial banking system stood at P 196 billion as of the third quarter of 1989. Major contingent liabilities consist of trust department accounts, unused letters of credit, forward exchange contracts bought and sold, and others. Total contingent liabilities are equivalent to 54 percent of the total assets of commercial banks.

Efforts to strengthen the financial system have continued with the full scale implementation of the divestment program for the six government-owned/controlled banks, which resulted in the sale of four government banks to the private sector. In order to encourage competition in the banking industry, the requirement to purchase special five-year government securities as condition in the opening of new branches was lifted effective October 1988. The lifting of this requirement was also expected to provide banks with greater flexibility to channel more funds for initial operation of new branches and other credit purposes which otherwise would have been tied-up in long-term investments on government securities.

Through a series of financial sector reforms and deregulations adopted by the government, the commercial banks have been encouraged to expand their operations and services, especially those related to the capital market development, including participation in the equity market. A number of commercial banks have established trust departments for managing investment portfolios for their clients. It is anticipated that their financial resources, organizational strength and professionalism would, in most cases, be welcome contributions for building stronger markets in the Philippines where the securities market is in a developing stage. However, there are conflicting views among securities market professionals regarding the appropriateness of the intermediation by commercial banks in the securities market. In certain European countries the participation of banks in equity investments has provided stability to the securities markets.

There is, however, a certain degree of potential conflict of interest with the mostly short-term lending activity of commercial banks, although limitations placed on banks' exposure to a single borrower reduce this potential. Also, commercial banks, by their conservative nature, lack the dynamism and innovation which are the major ingredients in securities market development.

Universal Banks

Commercial banks that have obtained "expanded commercial banking" licenses under the 1981 universal banking law amendments are authorized to act also as merchant banks and engage in underwriting. Currently, seven commercial banks have received this status. The objective of universal banking was to encourage term transformation, whereby banks would provide longer term financing to companies. In 1973 brokers were eliminated from acting as underwriters when underwriting authority was given to investment companies. In 1981, the right to engage in underwriting was given also to commercial banks which qualify as universal banks.

The underwriting operations of universal banks can be carried out either in-house, that is, by establishing a separate department in the bank, or through the establishment of a separate subsidiary. While universal banks may directly or indirectly exercise the underwriting functions, they may not directly go into the finance company business or leasing. It is a requirement that these two undertakings be engaged in by universal banks through separate subsidiary companies.

Universal banks could be the "engines" that make the new-issue securities markets function. They are allowed to make "new business calls" on potential client companies to persuade them to

use their services to raise finance through public offerings of securities, compared to direct loans from banks. They should compete to create new types of financing approaches and instruments, and to get companies to use their services for raising funds in the securities market. Universal banking, however, has not brought any appreciable increase in merchant banking activities, term transformation, or underwriting and public offerings.

Universal banks could strengthen the brokerage industry through consolidation, increased capitalization, and improved management of their securities market activities in order to provide more and better financial services. With strong financial backing from corporate parents and the basic public confidence enjoyed by the universal banks, their securities market affiliate firms should prosper and contribute to the improvement of the image of the securities industry as a whole.

Rural Banks

As of late 1989, there were 838 rural banks, whose total assets accounted for about one percent of the financial system. These banks, which lend to local farmers and rural entrepreneurs and also engage in some deposit taking, were set up as part of a program to encourage development of 1,600 rural banks in each significant rural community throughout the country. Market entry requirements were easy, with low capital, while management's banking experience was often limited to no more than few weeks of training. This program achieved a peak of 1,040 rural banks in 1981. Initial funding was provided by the government in an effort to stimulate agricultural development, much of which was lent on an unsecured basis and has proven unrecoverable.

A number of rural banks have failed each year. At the same time, however, a number of rural banks are thriving. A common characteristic of the successful rural banks is that they acted conservatively by lending only against collateral. Rural banks have the advantage in their respective market of a substantially lower cost structures than the commercial banks through low-cost refinancing facilities with the central bank, a relatively deeper knowledge of their clients, and the ability to compete with local money lenders and the traditional usurious discounting of crop proceeds by commodities dealers.

Specialized Government Banks

There are three government-owned specialized banks: Development Bank of the Philippines (DBP), Land Bank of the Philippines (LBP) and the Philippine Amanah Bank. They account for about 3 percent of the financial system as of late 1989. These

banks serve the special needs of certain sectors. The DBP was by far the largest of the three institutions until 1985. However, the bulk of its assets was transferred to the Asset Privatization Trust (APT) in 1986, following its restructuring and rehabilitation, which has resulted in a reduction in its total assets from P 74 billion in 1986 to about P 11 billion in 1988. It is now even smaller than LBP, whose assets stood at P 13 billion in 1988.

The DBP is the principal source of long-term credit in the Philippines. The bank gives priority to projects with high development impact and socio-economic benefits. The DBP obtains its funds from government equity, deposits (mostly government), proceeds from the sale of bonds, borrowings from the central bank and foreign borrowings guaranteed by the government. DBP has made available U.S.\$65 million or P 1.43 billion to industrial borrowers under its wholesale lending program launched in December 1989. Under the program, loans will be granted to medium and large-sized industrial borrowers. For this purpose, DBP accredited ten financial institutions to serve as conduits for the relending of the foreign currency fund, which was obtained from the World Bank as a loan.

The LBP was designed to further agricultural development, and has been particularly active in financing the government's agricultural reform programs. The LBP finances the acquisition of landed estates by the government under the Comprehensive Agrarian Reform Law. As has been the experience with agricultural banks in other countries, its repayment experience has been poor, since lending to agriculture presents many problems which defy easy solutions. The LBP along with several commercial banks that are attempting to develop agricultural lending, are increasingly focussing on lending in kind to formal and informal cooperatives in which peer pressure helps ensure that the weaker borrowers are encouraged to honor their obligations.

The problems of agricultural lending may be further complicated by the need for land reform, which has the undesirable side-effects of breaking up creditworthy landholdings into smaller units for which no positive credit track record exists. Some concern is evident that the land reform may reduce the availability of credit to agriculture, thus acting to reduce agricultural yields. The LBP has been moving into commercial banking in an effort to generate a new source of revenues to offset its losses on agricultural lending, and given the separate cultures involved, has de facto established two separate but parallel institutions for agriculture and commercial banking.

The Philippine Amanah Bank is a small commercial bank that operates on Islamic banking principles that avoid reba (payment of interest) through negotiated profit sharing. The bank provides credit overwhelmingly to the Muslim communities in Mindanao.

Both DBP and LBP were formed as niche banks to fulfill a role not satisfied by the private banking sector, but each is moving rapidly away from its unprofitable specialized role and towards the role of commercial bank. The same is true for the six private development banks, which are: Planters Development Bank, Urban Development Bank, Asiatrust Development Bank, BPI Agricultural Development Bank, Premiere Development Bank, and Luzon Development Bank. The private development banks were established to promote agriculture and industry by providing medium and long term credit at low cost. They have been financially supported by the government through the DBP, by way of counterpart capital in the form of preferred stock and rediscounting facilities for long-term papers.

Foreign Banks

There are four foreign bank branches in the Philippines: Citibank, Bank of America, Hongkong and Shanghai Banking Corp., and Standard Chartered Bank. As of September 25, 1989, their combined total assets stood at P 49.3 billion, or about 13 percent of the total commercial bank assets in the country. Of the four foreign banks, Citibank accounts for over 55 percent of the total foreign bank assets, as the following table demonstrates.

Financial Profiles of Foreign Banks
As of September 25, 1989
(in million pesos)

	<u>Total Assets</u>	<u>Total Deposits</u>
Citibank	27,376	7,274
Bank of America	9,506	2,570
Hongkong Shanghai	9,236	4,819
Standard Chartered	3,135	1,357
	-----	-----
Sub-total	49,253	16,019
	-----	-----
ALL BANKS	363,734	227,860
	=====	=====

Source: SGV Financial Studies, December 1989.

In addition to the four foreign commercial bank branches, there were 46 offshore banking units (OBUs) and representative offices of foreign banks in the Philippines as of late 1989. These OBUs can accept only foreign currency deposits. OBUs may extend project-related long-term foreign currency loans subject to the central bank approval.

112

Non-Bank Financial Institutions

Non-bank financial institutions are intended primarily to be long-term sources of financing for the expansion and modernization of productive ventures and, to a minor extent, for the facilitation of short-term placements in other financial institutions.

Non-bank financial institutions employ methods of gathering funds other than through traditional deposit taking from the public for purposes of relending or purchasing of receivables and other obligations. Non-bank financial institutions include investment houses, financing companies, securities dealers/brokers, investment companies, fund managers, lending investors, pawnshops, government non-bank financial institutions, venture capital companies, non-bank thrift institutions and insurance companies and non-stock savings and loan associations. Licensed money brokers are also considered under this category.

a. Investment Houses

Investment houses are enterprises engaged in guaranteed underwriting of securities of another person or enterprise, including securities of government and its instruments. The Private Development Corporation of the Philippines (PDCP) is the biggest investment house. PDCP generated gross revenues of P 318 million in 1988. The total assets of PDCP decreased by 11.0 per cent from P3.1 billion in 1987 to P 2.7 billion in 1988. PDCP's stockholders' equity also decreased from P 141 million to P 127 million from 1987 to 1988 respectively.

Pathfinder Holdings Philippines, Inc. (PHPI) is the second largest investment house in terms of gross revenue, which was P 132 million in 1988. It is followed by Anscor Capital and Investment Corp. with gross revenues and net income after tax of P 77 million and P 34 million respectively in 1988. The other investment houses in 1988 are Philippine Commercial Capital, Inc. and State Investment House, Inc.

b. Financing Companies

Financing companies are primarily organized for the purpose of extending credit facilities to consumers and to agricultural enterprises either by discounting or factoring commercial papers or account receivables or other evidences of indebtedness or by leasing motor vehicles, heavy equipment, industrial machinery and equipment, and appliances.

BA Finance Corporation, the largest financing company,

generated gross revenues of P 365 million in 1988, 29.0 per cent higher than the 1987 gross revenue of P 282 million. The net income after tax of BA Finance Corp. also increased from P 60 million in 1987 to P 64 million in 1988.

c. Securities Dealers/Brokers

Securities dealers are institutions organized either as partnerships or corporations that buy and sell securities of another or acquire securities for the purpose of reselling or offering for sale to the public for their own account. Dealers do not get any commission but derive income from trading, representing the difference in buying and selling prices of securities. Securities brokers on the other hand are institutions engaged in the business of effecting transactions in securities for the account or risk of others. Brokers earn commissions out of the intermediary transaction.

The largest securities dealer/broker in terms of gross revenues in 1987 and 1988 is M.E. Holding Corporation followed by Philippine Exchange Co., Inc. and Susana Securities and Development Co.. The gross revenues of M.E. Holding Corp. increased to P 67 million in 1988 from P 57 million in 1987. The other securities dealers/brokers include, among others, International Capital Corporation, Astrotrade, Inc. and First Pacific Securities Philippines.

d. Investment Companies

Investment companies are engaged primarily in investing, reinvesting or trading in securities. SM Investment Corp. generated gross revenues of P 154 million in 1988 followed by Trans-Philippine Investment Corp. and Jaka Investment Corp. with P 123 million and P 104 million respectively.

e. Fund Managers

Fund managers are institutional and personal administrators of funds created or constituted for the benefit of others. The only major fund manager in the Philippines is Home Development Mutual Fund (HDMF), with assets of P 8.1 billion and P 9.5 billion in 1987 and 1988 respectively. HDMF generated a net income after tax of P 454 million in 1987 and P 624 million in 1988.

f. Lending Investors

Lending investors are persons or corporations who make a practice of lending money for themselves or others. Lending

investors use their own capital for the purpose of extending all types of loans, oftentimes without collateral. Interpacific Transit, Inc. is the major lending investor in the Philippines with gross revenues of P 21 million and P 22 million in 1987 and 1988. The total assets of the corporation is P 40 million in 1987 and this increased by P 27 million to P 67 million in 1988.

g. Pawnshops

Pawnshops are business establishments engaged in lending money on personal property delivered as security or pledge. A.J. Raymundo and Co. Inc. is the largest pawnshop in the country in 1988 in terms of gross revenue, net income after taxes, and stockholders' equity. A.J. Raymundo registered gross revenues of P 23 million and P 21 million in 1987 and 1988 respectively. The company's net income was P 2 million in 1987 and 1988. All the other corporations in the Pawnshop business registered a net income of less than P 1 million in 1987 and 1988.

h. Government Non-Bank Financial Institutions

The non-bank government financial institutions consist of Government Service and Insurance System (GSIS), Social Security System (SSS), Armed Forces of the Philippines-Retirement and Separation Benefits System (AFP-RSBS), Philippine Veterans Investment Corporation (Phividec), National Home Mortgage Finance Corporation (NHMFC) and National Development Corporation (NDC).

i. Insurance Companies

Insurance companies include life and non-life such as fire, marine, accident, health, title, financial obligations, casualty, fidelity and surety. Private insurance companies include insurance agents' and brokers' organizations servicing insurance carriers, consultants for policy holders, adjusting agencies and independently organized pension funds.

j. Non-Stock Savings and Loan Associations

Non-stock savings and loan associations are organized primarily for mutual self-help and common interest of its members who must belong to a well-defined group and shall not transact business with the general public.

III. THE FINANCIAL MARKETS

The financial market of the Philippines is composed of various component markets, such as money market, bond market, and equity or stock market. These financial markets play different roles in the process of financial intermediation in the economy. Typical of many developing countries, the Philippines also suffers from the relative underdevelopment of the financial markets as compared to the commercial banking system, which tends to play the dominant role in the financial system. However, the commercial banking system is limited in its capacity to allocate financial resources throughout the economy. Only when there is a relatively well developed financial market, both savers and investors can enjoy the flexibility and variety in their savings and funding operations.

Commercial banks plays the intermediation role by taking deposits and making loans, whereas the financial market provides a wide variety of marketable financial instruments. The recent worldwide trend towards securitization increases the importance of promoting the financial market in competition with the traditional commercial banking system. The Philippine government has also recognized the critical role to be played by the efficient financial market for the economic development and has adopted various measures to develop and strengthen the financial markets of the country.

Money Market

Traditionally, the Philippine government focused on mobilizing domestic savings through the banking system rather than a more balanced approach by also using the securities market. Similarly in the allocation of savings, the concentration has been on short-term credit rather than long-term investment, resulting in a less developed long-term capital market. The Philippines money market, however, is relatively well developed and a variety of short-term instruments exist. The money market's most active instruments are interbank call loans, Treasury securities such as Treasury bills, notes and bonds, commercial paper, certificates of deposit, and promissory notes. The volume of money market transactions rose considerably in 1988 and stood at P 780 billions at year-end, 69.3 percent higher than that of the preceding year. However, the market's growth rate slowed down measurably in 1989, at an annual growth rate of about 6 percent.

The Treasury securities market is assisted by 18 primary dealers, which come from universal banks, commercial banks, and investment houses. Each Friday, they submit bids to the central bank, which makes the final decision on the following Monday for its weekly auction of Treasury bills. The maturity structure of

Treasury bills is composed of three, six and twelve months, while Treasury notes have 3-year maturity.

The commercial paper market is still primarily for the blue chip companies, such as San Miguel Corporation and Philippine Long Distance Telephone Company. Every CP issue, whose maturity ranges normally from six to twelve months, has to be approved by the Securities and Exchange Commission. In contrast, CP issues in the United States, whose maturity ranges up to only nine months, are not registered with the U.S. SEC. The interest rate of CP in the Philippines follows closely that of Treasury bills.

A money market that reflects demand and supply conditions in the short-term funds market is important if an efficient allocation of resources is to be attained. Also, in order for other short-term securities to develop further, such as commercial paper or banker's acceptances, it is necessary that a reference rate be established which is widely accepted by all potential investors as reflecting market conditions. Treasury bills are considered the ideal instrument for this type of role because they carry the lowest risk (as it is backed by the Government) and can easily achieve the largest market depth due to the size of the Government's financing needs.

Because of the excessive financing requirements resulting from the Government's deficit, and a desire to maintain nominal low interest rates, the Central Bank can be tempted to increase its use of quantitative controls for liquidity management, rather than through the sale of treasury bills. There are indications that this may be occurring. Examples are 1989's increase in reserve requirements for term deposits. Abandoning open market operations can have several undesirable effects on the financial system, as has been experienced in other developing countries.

Capital Market

The capital market consists of that component of the financial sector involved mainly in the mobilization and intermediation of private savings, and the allocation of medium and long-term financial resources through a variety of debt and equity instruments for both private and public sector domestic investment. The intermediation and allocation of medium and long-term financial resources for industrial development focus mainly on two areas of capital market operations, namely, the non-securities market and the securities market.

a. Introduction

There is some informal degree of specialization among financial institutions in the capital market. Banks are involved

mainly in debt financing such as syndication while non-bank financial institutions are involved mainly in equity financing such as underwriting and placements. Non-bank financial institutions are also involved in syndications.

The banking sector has been the most important segment of the capital market both in terms of institutional development and in terms of total medium and long-term investment funds channeled to projects until the early 1980s. However, the non-bank financial institutions are beginning to have an important role in the capital market. Non-bank financial institutions have been able to meet the needs of the clients of the capital market.

Banking institutions are mostly concerned with loan financing while clients are often averse to loans because of high interest rates. Banking institutions are also more focused on short-term financing than non-bank financial institutions. The prevailing situation indicates that banks are showing less ingenuity in financing instruments. The trend at present is towards equity financing. This manifests the confidence of investors towards the country's economic and political stability. More fund sources also prefer investment in equity because they are expecting a good performance among the corporations raising more funds. Likewise, corporations are aggressive with their expansion programs and need additional financing as their existing capacities are not sufficient to meet the demand for increased production.

Financing through debt is expected to burden many corporations as annual interest charges were high at around 25 to 30 per cent in 1989. The more a corporation increases its loans, the less bankable it becomes. Also, the banks' single borrower limits (SBLs) have already been reached by many corporations. It normally takes six to eight months to arrange for project financing. Underwriting for debt and equity issues take 12 months and five months respectively. The attractive industries in the capital market at present are real estate, shipbuilding and manufacturing. The utilities and transportation industries, on the other hand, are the industries in most need of financing.

b. Non-Securities Market

The non-securities market provides non-negotiable medium and long-term debt funds through financial institutions which mobilize savings, and then lend directly to corporations and other users of funds. The institutions involved in the non-securities and specialized banks for housing, industry and agriculture, and a variety of smaller non-bank financial institutions which include financial corporations and trust pension funds. Financial instruments in the non-securities markets (traditional loans, mortgages and trust certificates) are available in the local capital market.

c. Securities Market

There are two types of instruments traded in the securities market, namely, equity claims or stocks and debt claims or bonds. The securities market mobilizes individual savings which are not necessarily already in financial institutions and channel funds to productive activities. The securities market's medium and long-term equity and debt funds are in negotiable form and issued by corporations and the national government through financial institutions such as commercial banks, investment/merchant banks, venture capital firms and government securities lenders, directly to individual and institutional investors, and are then traded among different holders.

Commercial banks assist in providing capital by subscribing to bonds with or without government guarantees that are issued by the national government, state-owned or controlled corporations and financial institutions. Government securities which consist of the National Government issues, government corporate issues and the CB securities dominate the bond market. Treasury and CB securities are the most important components of the bond market in terms of outstanding amount.

The Securities and Exchange Commission (SEC) is responsible for regulating the securities market. The Revised Securities Act provides for the registration of securities and for periodic submission of corporate information and financial statements. The SEC screens all potential candidates for listing in line with the listing committees of the stock exchanges. The stock exchanges also require all listed corporations to submit a semi-annual financial report as part of the general reporting requirements.

The Philippine market for debt securities is very limited in terms of type and nature of instruments available. The bond market is predominantly composed of government securities except for a handful of private bonds issued by some of the country's large companies. The three types of government securities are: (i) the treasury bills sold by the national government; (ii) the bonds floated or offered to the public by government owned and controlled corporations; and (iii) the CB bills. Government securities, the treasury bills in particular, are the most common form of borrowing.

The private sector accounted for 63 per cent of investments in government securities in 1988. Private banks accounted for 15 per cent of investments while trust funds and the CB accounted for six per cent and four per cent of investments in 1988 respectively. The SSS, GSIS and the DBP were the sources of about 11 per cent of investments in government securities in 1988. The large holdings of government securities by the banking system results from the

combined effect of excess liquidity and the presence of features such as reserve eligibility, government guarantee and tax deductions. Holders of outstanding government securities were also more concentrated in the public sector.

There was little demand for government securities emanating from the private non-bank sector. The main reasons for the lack of participation from this sector are:

- (a) the erosion of confidence in the government during the early 1980s;
- (b) the tight credit situation which prevailed beginning in 1983; and
- (c) the reduction in business activities of most corporations due to economic crisis beginning in 1983.

The volume of trade for long-term corporate bonds has been insignificant in the 1980s. Volumes are more significant for traditional short-term commercial papers and promissory notes issued by private companies in the money market. Available instruments are limited in volume and in type. The largest issuer so far is Paper Industries Corporation of the Philippines (PICOP) and this issue was made in the 1970s. Demand for corporate bonds was practically nil as the domestic bond market experienced a drastic shift toward government securities in 1985. The primary consideration of investors was centered on carrying risk-free and easily convertible assets in their portfolio. It was very difficult to create a favorable market for corporate bonds in light of the serious economic crisis and the lack of investor confidence. The most important consideration was establishing the credit reputation of the issuer.

The lack of a secondary market for the trading of corporate bonds is also a primary factor which has resulted in the poor performance of corporate bonds. Virtually no secondary trading in these issues exists as there are too few issues to sell.

d. Equity Market

The Manila Stock Exchange (MSE) and the Makati Stock Exchange (MKSE) were established in 1927 and 1963 respectively. Securities listed and traded in either of the stock exchanges are deemed to have been admitted to the other although in practice both stock exchanges require that separate applications be made for the listing of securities. MSE and MKSE are private non-stock corporations regulated by the SEC. The SEC sets specific qualification requirements for listing on either of the stock exchanges. The exchanges also impose additional requirements. There are 144 corporations listed in the exchanges as of January 1990. The stock exchanges have three indices, namely, mining, commercial-industrial and oil sector. The Philippine stock market is in a more volatile position compared to other stock markets

because it has to contend with other developments aside from the economic fallout that resulted from the October 1987 crash.

There are four groups of investors comprising the stock market. These are the speculators, foreign investors, the general public and institutions. Foreign investors have been selectively bullish in 1988. This may explain the rise of commercial-industrial issues and the wider price discrepancy between "B" shares (the only shares foreign investors may purchase) and "A" shares (which are limited to Filipino citizens). Foreign investors are, in general, not prohibited from participating in equity securities of Philippine companies.

Institutional investors have been in and out of the market, as foreign exchange and interest rates fluctuated. There are signs that the number of institutions interested in the market have grown but the cumulative value of the equity holdings of institutions remains low. Nevertheless, the sustained stock purchases of the SSS and the GSIS have propped up the prices of blue chip stocks recently. Market speculators are those who hold stocks for short-term gains.

The supply of high grade securities in the stock market is limited. In contrast, highly speculative mining and oil stocks are readily available. Mining and oil shares represent the larger share of trading value and volume compared to commercial-industrial issues. The trend in 1989, however, focused on the commercial industrial issues.

The demand for securities was low in the early 1980s but it has increased since 1987. Before, individual investors viewed the market as offering unattractive returns and high risk. Well audited financial statements are not readily available to the investing public. Trading activity is dependent on informal sources, pointing to deficiencies in the dissemination of information to the market, especially to small investors. High interest rates on short-term money market instruments compared to long-term securities biased the preferences of investors toward short-term investments and constrained the demand for securities in the past. Nevertheless, the situation in the securities market improved since 1987 as the demand for securities increased and attractive issues such as the commercial-industrials were introduced in the market.

IV. CAPACITY OF THE PHILIPPINE FINANCIAL MARKET

The bank and non-bank financial institutions have both been active in the capital market in recent years. Both forms of financial institutions have been involved in the major capital market activities such as the initial public offerings (IPOs). Non-bank financial institutions and foreign financial institutions have taken the lead in the activities in the capital market. Foreign financial institutions are handling the prime accounts such as Meralco, San Miguel Corporation and Philippine Telegraph and Telephone Corporation (PT&T). The active local banks in the capital market are the Philippine National Bank (PNB), Interbank and Union Bank. These banks have the resources and capability to generate and circulate capital. All the other banks are still in the traditional banking operations which mainly involve lending.

The capacity of the capital market seems large as any IPO is oversubscribed in the market, and there is a growing interest for local issues in the international market. The Philippine capital market provided P 8.75 billion in terms of actual underwriting, syndications and debt-equity swaps in 1988. This amount is expected to increase to P 10.0 billion and P 12.00 billion in 1989 and 1990 respectively. The capital market is expected to provide P 4.90 billion in underwriting (primarily bonds), P1.10 billion in syndications and P 4.00 billion in debt-equity and debt-debt swaps in 1989.

The debt market is dominated by issues of short maturities of the National Government, primarily treasury bills. No long term government bonds are outstanding and the corporate bond market is virtually moribund. There are 18 accredited government securities dealers whose principal business is distributing government or government guaranteed paper. Much of the government issues are bought by banks and insurance companies to meet legal investment requirements. The pension funds also are buyers of government securities.

A long term bond market cannot evolve unless there is a significant change in government policy toward credit allocation and government financing policy. Therefore, credit, fiscal, and tax policies must be adopted which give rise to a long term government bond market and encouragement given to the private sector to provide the mechanisms for underwriting, trading and distribution. Longer maturities require liquidity to match risk, in order that investors will adjust to longer commitments.

The government has recently revived the auction system in marketing of Treasury bills, thus enabling market participants to find the proper market rate. This step will also contribute to smooth functioning of the open market operations by the Central Bank in its pursuit of the monetary policy via market mechanism

rather than administrative credit controls. The gradual phaseout of low-yielding, reserve-eligible government securities is also expected to contribute to a healthy development of the government securities market as the central place of market signals on the true interest rates in the country. Thus, long-term government bonds will be marketed not just to commercial bank or other captive investors but to other genuine institutional investors who desire to hold quality long-term debt instruments.

In order to attract pension funds, insurance companies and other potential long-term government bond investors, the government should not artificially try to distort the yield curve by depressing the long term rates. Yield curves should be left alone to take their own shapes depending upon investor expectations, as in other developed countries.

Straight Loans

a. Banks

The biggest straight loan in 1988 amounts to P 1.1 billion granted to Caltex Philippines, Inc. by PNB as a part of the corporation's credit line to refinance oil importation. The second biggest straight loan in 1988 was worth P 500 million, granted to Benguet Corporation by the PNB and Interbank. San Miguel Corporation (SMC) acquired a seven year fixed rate loan amounting to P 300 million in 1988 from Philippine American Life Insurance Company (PhilAm) to finance its expansion and modernization programs in 1988 and 1989. SMC acquired another loan worth P 320 million from the DBP to finance its expansion and human resource development programs in 1988.

Pepsi-Cola Products Philippines, Inc. (Pepsi) got the biggest straight loan amounting to P 500 million from PNB in 1989. The loan was intended to boost Pepsi's production capacity through the acquisition of 13 bottling plants and augment working capital. The financial institutions which actively participated in providing straight loans in 1989 include among others, All Asia Capital and Leasing Corporation, SSS, Technology and Livelihood Resource Center, BPI Family Bank and Far East Bank and Trust Co. (FEBTC). Agribusiness corporations such as Vitarich Corporation, Atlas Fertilizer Corporation, Central Azucarera de Carlota, Fertiphil Corporation and Dole Philippines, Inc. headed the list of straight loan clients in 1989. These agribusiness corporations acquired straight loans ranging from P 10 million to P 200 million each. Unibanks such as FEBTC, Metrobank, BPI and PCIB can provide debt financing from P 50 million to P 150 million each without trust participation and from P 100 million to P 300 million each with trust participation. The United Coconut Planters Bank (UCPB) can provide debt financing up to P 400 million.

Other banks such as Citytrust, Rizal Commercial Banking Corp. (RCBC), Equitable Banking Corp. (EBC), Boston Bank, Interbank, Solidbank and Union Bank can provide debt financing from P 30 million to P 100 million each. Citibank on the other hand can provide debt financing from P 50 million to P 150 million. The DBP can provide debt financing up to P 800.0 million while PNB can provide up to P 700 million.

b. Insurance Companies/Pension Funds

The SSS and GSIS each can provide from P 20 million to P 200 million. The SSS can provide up to P1.0 billion if the client is the government. AFP-RSBS can provide from P 30 million to P 80 million. PhilAm Life can provide from P 40 million to P 500 million. Other insurance companies can provide debt financing from P 5.0 million to P 100 million each.

c. Multilateral Financial Institutions

Multilateral financial institutions such as the International Finance Corporation (IFC) and the ADB require a minimum project size of U.S. \$4.0 to U.S. \$10.0 million and minimum loan and equity investments of U.S. \$1.0 to U.S. \$2.0 million. ADB can provide debt financing from U.S. \$2.0 million to U.S. \$10 million. IFC can provide debt financing from U.S. \$1.0 million to U.S. \$10.0 million.

Syndication of Loans

Citibank was able to syndicate P 500 million for Coca Cola Bottlers Phils. Inc. in 1988. Interbank was able to syndicate a seven year term loan facility amounting to P 860 million for Philippine Associated Smelting and Refining Corporation (PASAR). The Philippine Long Distance Telephone Corporation (PLDT) generated P 5 billion in the international market for its expansion projects through Citicorp International Limited in 1988. Syndication transactions in 1989 included PNB and Citibank's raising P1.0 billion in loans for First Asia Realty Development Corporation to construct the Shoe Mart Mega Mall. Investment and capital Corporation of the Philippines was able to syndicate P 500.0 million in loans for Republic-Asahi Glass Corporation.

Non-prime clients can raise P 15.0 million to P 200.0 million through bank syndication. PCI Leasing Finance, Inc. was able to raise P 15.0 million through PDCP in 1988. General Milling Corporation raised P 200 million through loan syndication in 1989. At least P 6,926.8 million and P3,240.0 million in loans were raised through syndications in 1988 and 1989 respectively. Plans for loan syndications in 1990 amount to about P 2,960.0 million as

Capital, Inc., a registered investment adviser in the United States.

The FPF will invest in securities of Philippine corporations through a trust agreement with the PNB. The FPF will invest in long term equity in the Philippines and thus, it can not be resold within a year after it is launched. The FPF can invest in securities but it can not make investments for the purpose of exercising control or management of the corporation.

Another closed-end Philippine fund is the U.S. \$50 million Manila Fund launched on October 9, 1989 in London International Stock Exchange by Indosuez Asia Investment Limited, an affiliate of Banque Indosuez of France. The Manila Fund is expected to invest in local corporations engaged in exports and manufacturing, particularly in the textile industry.

The 25 million pounds sterling First Philippine Investment Trust of the Tyndell Investment Trust was launched in London on December 12, 1989. The other Philippine funds are the Hong Kong based open-ended Philippine Fund of Jardine Fleming and the Thornton Philippine Redevelopment Fund.

(d) Local Mutual Funds

The SEC has formally signed on November 2, 1989, the mutual fund rules called the "Implementing Rules to Republic Act 2689" or the Investment Company Act, signalling the revival of the local mutual fund industry which collapsed in the 1960s due to lack of appropriate guidelines. The presence of mutual funds is expected to increase the available supply of investors in the local capital market.

The highlights of the newly approved mutual fund rules is a minimum subscription and paid-up capital of P 50 million. The mutual fund to be incorporated should be closed-end and thus, the investment stays for a specific period of time and the investor is not allowed to withdraw investments anytime. Mutual fund corporations are not allowed to invest in more than ten per cent of any enterprise to ensure the fund's viability and at the same time disperse investment to as many listed companies as possible. The investment areas for mutual funds do not include the high risk investments like the commodity futures market. Mutual fund corporations are also barred from investing in unlimited liability investments. There are over 20 foreign and local corporations who want to register as mutual funds as of the signing of the mutual fund guidelines. The SEC will approve only three to four corporations, one of which will be an entirely Filipino corporation.

Debt to Equity Swaps

The Central Bank's debt to equity conversion program has been in operation since August 1986. The program aims to enhance external debt management through the simultaneous reduction in the level of outstanding external debt and the stimulation of long-term equity investments in priority areas of the economy. Applications for conversions to investment of Philippine debt paper purchased at a discount in the secondary market abroad were submitted to the CB by potential resident and non-resident investors. Successful applicants were with the CB for their full value in pesos to fund long-term investments in prescribed areas of economic activity in the country.

Closed or consummated transactions amounted to U.S. \$280.9 million representing 92 applications from the start of the program to the end of 1987. Closed debt to equity transactions as of September 30, 1989 amounts to U.S. \$741.6 million representing 240 applications from the start of the program in August 1986. The Central Bank has put a limit of U.S. \$15.0 million per month or U.S. \$180.0 million per year since July 1988 on the amount of debt to equity swaps which will be approved. However, the CB Window, using debt to equity paper, is suspended temporarily as of mid 1990. There are no debt to equity swap guidelines currently available from the Central Bank.

Underwriting of Equity Issues

A public offering can generate equity of up to about P 2.0 billion. The public offering made for the PNB generated P1.8 billion in the middle of 1989. New issues of stocks remain oversubscribed even after the aborted December 1989 coup d'etat. The PT&T, which was oversubscribed, publicly listed about 52.5 million of its A shares and 47.5 million B shares at P1.37 each on January 10, 1990 for a total value of P 137.0 million. At least P 276.8 million and P3,941.5 million were raised in equity underwriting in 1988 and 1989 respectively through underwriting.

The major equity underwriting in 1988 and 1989 include A. Soriano Corporation which was able to raise P 250.5 million through lead underwriter, Anscor Capital and Investment Corporation in 1988. Cebu Shipyard was able to raise P 66.5 million through its lead underwriter, Multinational Investment Bancorporation, in 1989. The smallest equity underwriting in 1988 and 1989 are P 26.3 million and P 66.5 million respectively. The biggest equity underwriting transactions were A. Soriano Corporation amounting to P 250.5 million in 1988 and PNB amounting to P1.8 billion in 1989.

Transactions in the capital market amounted to at least P 6.9 billion for debt and P 7.5 billion for equity swaps in 1988.

Transactions for debt amounted to at least P 4.0 billion for debt and P 6.6 billion for equity in 1989. Debt to equity swaps accounted for less than 40 per cent of equity transactions with the temporary suspension of the facility. The shift in emphasis was from debt financing to equity financing in 1989 due to massive corporate projects, expansion plans and capital requirements, as well as high interest cost of borrowing. There are plans by over 30 firms to raise equity by public offering for 1990 onwards. The corporations may, however, be taking a "wait and see" attitude because of the threat of another coup.

Problems of the Financial Market

The financial market has been overlooked as an ingredient of economic growth. The financial market facilitates the process of financial intermediation, the gathering of savings and the channeling of these savings to investors. The problems faced by financial institutions differ from one sector to another.

(a) For example, insurance companies as a source of funds are restricted to investments in corporations which are well established financially and operationally. Insurance companies are very strict in investing equity and their clients must be prime corporations with good track records for profits and dividends. Commercial banks on the other hand, have the attitudinal problem of being limited to the traditional method of providing capital, that is, debt financing which is tied to collateral and fixed income of the corporation in need of capital.

(b) Another problem of corporations in need of capital is the lack of long-term debt capital at fixed rates.

(c) The underwriting sector is confronted with the problem of the government's inability to effect and enforce rules and regulations in the stock market as unscrupulous brokers trade stocks of corporations where they are also directors and officers. The SEC is not able to monitor effectively the operations of the stock brokers.

(d) Likewise, most stock brokers operate in a small and limited way without being aware that the industry has grown because they are not attuned to what is going on in the market in terms of data and information. Such stock brokers are unable to provide sound advice to clients.

(e) The trading systems in the stock exchanges can not meet high volumes of stock trading. Delays are involved in clearing a domestic stock from the exchanges. Repatriation of foreign currency also takes about 90 days during high trading volumes. The delays are caused by scarcity of foreign exchange at the CB and the inefficient manual systems and the insufficient number of personnel

at the Securities Transaction Division of the CB.

(f) The SEC is more of a regulatory body than an agency concerned with the development of the local capital market.

Prospects of the Financial Market

The government has taken several steps to improve the capital market, including: (i) increasing the availability of long-term funds and the yields of financial instruments; (ii) fostering a government securities dealership network; (iii) effectively controlling inflation and the foreign exchange rate; and (iv) rehabilitating the PNB and the DBP. The following are manifestations of the improving situation and present good prospects in the local capital market:

(a) The privatization program is the major economic policy directive of the government that can stimulate enthusiasm for the stock market and commercial-industrial group. About 20 million shares of Manila Electric Company (Meralco) are to be offered to the public. Likewise, Philippine Airlines (PAL), National Steel Corporation (NSC), as well as other sequestered companies under the Asset Privatization Trust (APT) are next in the line for privatization in the early 1990s.

(b) There is also the prospect of an increased flow of new listings of corporations from the private sector. One of the compelling reasons is that most of the top 500 corporations are already approaching the debt to equity ratio ceilings as well as SBLs with banks. The corporations will be forced to look for alternative means of raising long-term capital to finance the expansion of their operations.

(c) There are two bills pending in Congress that are positive for the development of the stock market. One is House Bill (HB) 19782, entitled "An Act to Develop the Philippine Securities Market, Create a Capital Market Development Commission, Define Its Powers and Duties, Amend Pertinent Provisions of Relevant Laws and for other Purposes." HB 19782 features a multi-pronged attempt to develop the securities market. It aims to provide incentives to investors through exemption from the documentary stamp taxes in stock and security paper trading, and from income taxes on dividends earned and tax cuts for listed corporations. The bill aims to increase the number of listed issues and encourage the entry of more stock market investors through tax incentives. Supporting legislation which is also under deliberation provides for, among others, the removal of the ten per cent value added tax on transactions of stock brokers.

(d) The Asian Development Bank (ADB) is one of the institutions supporting the development of the local financial sector. The ADB

programmed a United States (U.S.) \$200.0 million loan to the Philippines for the development of the country's capital market. The proposed program will review the reforms instituted to improve the efficiency of the financial sector. The program will study the institutions in the capital market, particularly those specializing in long-term and equity financing. It will focus on the stock market, investment banks, securities firms, leasing and venture capital companies, insurance and pensions funds, thrift banks, housing finance institutions and the mutual funds industry.

The ADB has set four prerequisites which should be complied with in order to achieve the development of the local capital market and for the release of the U.S. \$200 million loan. These are:

- Unification of the Makati and Manila stock exchanges;
- Inclusion of foreign exchange risk in term lending operations;
- Agreement to consider the findings under the technical assistance for a finance study; and
- Establishment of a mutual fund management company in the private sector.

(e) A major development in the local capital market is the establishment of a venture capital fund for the Philippines by Hambrecht and Quist, a U.S. based corporation. The venture capital fund is worth around U.S. \$10 million. Hambrecht and Quist also manages the U.S. \$50 million investment of a large American bank. Hambrecht and Quist will focus on local investments in companies that will go public within four to six years such as contract manufacturing and offshore production for high technology U.S. corporations, agribusiness, labor intensive and export oriented operations. Venture capital corporations exist in the country, but the corporations were not able to provide equity where equity is needed. The corporations are attached to commercial banks which are oriented towards loan financing.

(f) The members of the private and government financial organizations are proposing the creation of a commission to review the policies, infrastructure, laws and regulations affecting the local capital market. The commission is envisioned to perform a "developmental" role in the local capital markets in addition to its regulatory functions. The commission is expected to encourage more local corporations to enlist in the stock exchanges, promote the idea of long-term finance through equity issues, and promote the efficiency of the local bourses.

(g) The Congress and the Department of Finance is also studying tax measures like the abolition of gross revenue tax (GRT) aimed at supporting the development of the capital markets; deduction of dividend payments from the taxable income of corporations listed in the stock exchanges; and reduction in corporate income tax from 35 per cent to 30 per cent.

(h) The country's capital market is expected to develop further as mutual funds begin to actively participate to pool and manage the funds of small-sized investors.

(i) The Congress is also studying the relevance of removing all regulations fixing interest rates as it started sessions in January 1990.

V. LEGAL AND REGULATORY STRUCTURE

The Philippine legal and regulatory system has not been helpful to the healthy development of financial markets in the country. A number of laws and regulations have been adopted in a reactive manner to fill loopholes rather than based upon a thorough understanding of financial market requirements. Court and other legal proceedings are cumbersome and slow, making it almost impossible for the parties to rely upon the legal system to arbitrate financial disputes in a reasonably speedy manner. For example, loan recovery is painfully slow through the court system, which has been clogged badly. In the four years since the new government took power, there has been no coherent legislative programme. One of the noticeable features of the political life in the country is the wide gap that separates the executive and legislative branches.

The administration is blamed for the lack of legislative leadership, while the congress is blamed for delaying the critical legislative reforms measures in place. Congress has faced a monumental legislative congestion. As of June 1990, there were 31,130 bills filed in the House, of which only 1,339 had been acted upon. However, some improvements have been made in recent years in the presentation and formulation of regulations governing investment activities in the Philippines.

Foreign Investment Regulations

The government adopted in 1987 a new Omnibus Investment Code, a compilation of the foreign investment laws and various incentives available to domestic and foreign investors. As a rule, foreigners may invest in most business activities to the extent of 40 percent of the capital of an enterprise without seeking the approval of the Board of Investments (BOI); they are only required to file a report on the foreign investment with the BOI for record purposes.

The government allows up to 100 percent ownership by foreign investors in the following cases:

- a. Investments belonging to the "pioneer enterprise" status, such as manufacture and process of new products and services not being offered in the country;
- b. Investments in the export processing zones, such as Bataan, Cebu, Baguio and Cavite; and
- c. Investments in which at least 70 percent of production is exported.

Energy-related projects such as new power plants are considered to belong to the pioneer enterprise category, thus eligible for up to 100 percent foreign ownership. On the other hand, the public utilities engaged in not just power production but in power distribution as well are limited to only 40 percent foreign ownership. Since most BOT-related private power projects are interested in power production for sale to local Philippine utilities, they are eligible for 100 percent foreign ownership.

Foreign investments include cash as well as other assets actually transferred to the Philippines. These non-cash assets may be in the form of capital goods, patents, formulae, or other technological rights or processes.

Guarantees for the Safety of Foreign Investments

In addition to the basic rights and guarantees provided in the Philippine Constitution, foreign investors are provided certain extra guarantees for the safety of their investments. They include the right to repatriate the entire proceeds of the liquidation of the investment, the right to remit earnings from the investments, the guarantee for no expropriation or requisition by the Philippine government.

Incentives for Foreign Investments

The Omnibus Investments Code of 1987 gives a number of incentives to BOI-registered firms. For an initial period of four years for new non-pioneer firms and six years for new pioneer ventures, registered firms are fully exempt from income taxes, whose exemption can be extended extra one year under certain conditions. Foreign investments can also enjoy tax and duty free importation of capital equipment as well as tax credit on domestic capital equipment. They can also enjoy unrestricted use of consigned equipment. They are also given special treatment in customs procedures, employment of foreign nationals and other areas in order to promote foreign investments in the country.

Regulation of the Securities Market

The Securities and Exchange Commission was established in the Philippines under the Securities Act of 1936. It was designed after the U.S. Securities Exchange Act of 1934, which also established the U.S. Securities and Exchange Commission. The SEC has a number of functions, including protecting investor interest and promoting an active capital market. The SEC is also charged with administering the Investment Company Act of 1960, the Corporations code of 1980, and other related laws. Besides acting as a securities market regulatory body, the Commission also acts

as the registrar of companies to enforce the companies law and keep public records of all company filings. At least half of the SEC's substantial number of employees are engaged in companies work, while the other half does securities regulatory work.

The corporation is the most common form of business organization in the country. Another form of organization available is the general partnership, which is usually adopted by professionals. Both, corporations and partnerships are required by law to be registered with the SEC as required by law. A corporation acquires a legal personality separate from its stockholders upon issuance of the SEC certificate of registration

Provisions relating to securities are contained in several places, including the Revised Securities Act 1982, the Investment Companies Act 1960, the Corporation Code and the General Banking Act 1948 (as it relates to Common Trust Funds offered for sale to the public). There is a need to create a single unified code covering all aspects of the public sale or offer for sale of securities. Without an improved and unified Code, there will be a very real risk that different regulatory standards will create confusion in the minds of investors.

In its regulatory role the SEC monitors the operation of the stock exchanges, the over-the-counter market and all firms and individuals engaged in the securities industry to insure compliance with the securities laws. SEC representatives are present on the trading floor of the stock exchanges during trading hours; brokers are required to file weekly activity reports with the SEC. Financial statements of all brokers are examined at six month intervals.

Brokers and dealers active in the securities industries must be licensed by the SEC which also supervises and regulates their activities. It has been reported, however, that, in the past, the granting of such licenses has been focused on personal characteristics and that professional training and testing is not extensive.

Securities to be offered to the public must be registered with the SEC. Basic filing information include complete current financial information, financial statements, balance sheet, income statements and all relevant data to enable the potential investor to make a valid judgement on the merits of the investment. The SEC acts to insure the adequacy and accuracy of the information.

During the past administration the SEC was given quasi judicial powers, enabling it to mediate corporate disputes. As to its efficiency, proficiency, initiative, and promotional activities, the SEC is viewed differently in various quarters of the financial community; however, most recognize that there is a need to strengthen the SEC staff. In particular, it is desirable

to separate its regulatory functions from those of a registrar of companies and promotional activities, so as to allow the market players to develop their expertise and develop the market.

The SEC has the primary responsibility to prevent the exploitation of the unwary public in the sale of unsound, fraudulent, and worthless securities and at the same time to promote an active capital market. It likewise prohibits the misrepresentation, manipulations, and other fraudulent practices in the sale of securities. To meet these objectives, the SEC is furnished with the daily transaction reports of the brokers and dealers, particularly the records of accounts and other pertinent papers. It likewise prohibits the sale of any security in the Philippines unless such a security has been registered with the SEC. The SEC also deploys securities agents on the trading floor of the exchanges.

A set of implementing rules from the SEC formulates the groundwork for all the monitoring and police work it carries out. The SEC requires that all brokers and dealers be registered and licensed by them to place their activities under their supervision. It also prescribes that trading in securities must be based on fair principles and outlaws manipulation, deceptive trading and other corrupt practices. The SEC is empowered to enlist the aid of any enforcement agencies of the government, both civil and military as well as any private institution. As such, the SEC can use its powers not only to police the stock market, but more importantly, to allow the market to develop and to grow in an orderly manner.

As has been variously pointed out, the SEC has to fulfill functions that are in many ways contradictory and/or unrelated, having to fulfill duties as a securities market regulator, to administer the Securities Act, and at the same time act as a companies registrar, to administer the Corporations Code. This latter function involves important but superfluous functions entailing time consuming details which may be best carried out by other agency; whereas the securities regulatory function is broader, and based on economics and dynamic markets.

There is a lack of specialist expertise on the part of those involved in monitoring and regulating the market, something that has had adverse effects on the latter's development. The SEC has been deprived of adequate resources over many years and there is insufficient staff within the institution to cope with the demands imposed upon it. There is a significant lack of depth of specialist knowledge in various fields of securities market; and the shortage of staff, particularly in data collection, statistics compilation, information distribution and storage, and in understanding and producing detailed financial and market analysis reports, is of major concern. Expertise is lacking also in the area of establishing detailed regulations for registration and approval of those within the industry, monitoring due compliance on an on-going

basis and in reviewing local and foreign regulations and policies as they affect the changing requirements of the securities industry.

Stock Exchanges

The Philippines has two operating stock exchanges, Manila and Makati Stock Exchanges. They are independent of each other but trade and list the same securities. The number of listed companies as of April 1990 were 151 with 247 issues, compared to 144 listed companies at the end of 1989. The Philippine government has stipulated that all companies listed on one stock exchange be listed on the other automatically. The total market capitalization was P 260 billion (U.S.\$12 billion) as of the end of 1989, which saw a big jump in the total market capitalization from P 88.9 billion in 1988. The combined trading volume on the two exchanges in 1989 reached P 50.7 billion (U.S.\$2.4 billion), compared to P 10 billion in the previous year. The exchanges are self-regulating bodies which are closely monitored by the SEC. The Manila Exchange is the larger and more active of the two. Efforts to merge the two exchanges have been going on for some time, but there are certain political difficulties in reaching that goal.

As of May 1990, there were 67 operating members on the Makati Stock Exchange and 60 operating members on the Manila Stock Exchange. Each stock exchange has membership seats which are owned and held by members, with each member, whether individual or corporate, entitled to one seat. This may be acquired directly from the exchange or existing members. Corporate membership was also allowed about ten years ago. Trading should commence within six months from the approval of membership. Recently, three new foreign securities firms acquired seats on the Philippine stock exchanges, exhibiting the growing confidence in the Philippine capital market. They were Nikko Securities from Japan, Baring Brothers from the United Kingdom, and the Overseas Chinese Banking Corporation from Singapore.

Even with the existence of two stock exchanges, the Philippines has not been able to fully tap the potential of its equities market. Even though the Manila Stock Exchange is the oldest in the Southeast Asia, its market capitalization is among the lowest in the region. Of the 151 listed companies, only about 30 companies involving 55 issues are actively traded and of the top 1,000 Philippine corporations, only a little over 50 are listed.

During the recent years, therefore, the stock market has not played an important role in the capital market and has not been able to contribute significantly in raising new capital and mobilizing savings for investment purposes. However, the situation has improved significantly in 1989, as there appeared the prospect of greater flow of new listings coming from the private sector. One

reason for optimism is that most of the top 500 Philippine companies are already nearing their debt ceiling limits and will be forced to look for alternative means of raising long term capital to finance their expansion; securities market is an option which they can not ignore.

Recently, some of the leading conglomerates have already actively tapped the stock market for fresh funds. Ayala Corporation, for example, has spun off its real estate and property development operation and listed the new company on the stock exchange, with the aim of offering most of its capital to the public to augment funds for various real estate projects. The market's response was overwhelming, with most of the shares underwritten easily. Also, Keppel Phil. Shipyard Inc. raised its share capital by 147 percent, with the subsequent increase in the supply of new shares on the market.

Listing Requirements

The applicant company is required to meet certain requirements and submit certain documents before its issue is listed. These requirements include:

a minimum of authorized capital of P 100 million; with a subscribed capital stock of P 25 million and paid up capital of P 12.5 million;

25 percent of the authorized capital must be underwritten and distributed through the member brokers of the exchanges; provided that at least 50 per cent of such offering shall be allocated to the two stock exchanges on a 50-50 basis to be distributed to the public through their operating members;

A minimum of 300 shareholders; and,

The security must be registered/licensed in accordance with the Revised Securities Act and authorized by the SEC to sell the security to the public.

Another important listing requirement is the issuance of a prospectus, to be distributed when offering to sell the shares. The contents of the prospectus should include:

- . Information on the company and its subsidiaries concerning the particulars of all loans outstanding and other borrowings, including bank overdrafts and liabilities, guarantees or other material contingent liabilities;
- . Nature and family relationship of all directors and executive officers and a brief account of the business experience during

the past five years of each of these persons;

A statement as to the financial and business prospects of the Company or Group, together with any material information which may be relevant thereto, including all factors or risks (if any) which are not mentioned elsewhere in the prospectus and which are not likely to be known or anticipated by the general public and which could affect the company's profitability;

An analysis of the financial condition and operations of the Company or Group, particularly known events or trends likely to result in material decreases or increases in liquidity, commitments for capital expenditures, or the amount of reported income;

A report by the auditors of the Company with respect to the profits or losses of the Company in respect of each of the five completed fiscal years immediately preceding the publication of the prospectus, the balance sheet of the Company, and any other matters which appear to the auditors to be relevant having regard to the purposes of the report.

The two exchanges each charge a listing fee of P 20,000 and non-refundable processing fee of P 2,000. For subsequent listing of additional shares, there is a charge of P 5,000 each. In addition, each exchange bills the company an annual fee of P 20,000 if the issue belongs to the Commercial/Industrial sector, or is a Big Board issue, and P 10,000 if it is a Small Board issue.

Any and all securities approved by the SEC for listing on any stock exchange is deemed automatically listed for trading on both stock exchanges in Manila. The Manila and Makati exchanges have agreed that a company applying for listing with one exchange must also apply with the other exchange. The two exchanges have a joint listing committee, which reviews all applications.

Listed issues are classified as either Big Board or Small Board issues. The Big Board issues are the larger, more well established companies with a good earnings record and dividend history. Small board issues are generally speculative mining, or oil issues of firms which are not consistently profitable and do not issue dividends. These type of listings derive from the government's policy of encouraging the development of natural resources. A Small Board issue may apply to the Big Board once it has been in continuous production and has paid dividends for at least two consecutive years.

There are very few preferred issues listed in the market. The majority of the listed issues are common shares. Companies issue two classes of stock. Class A common shares may be purchased only by Philippine nationals, while Class B common shares may be owned by both Philippine and foreign investors. As provided for

VI. ECONOMIC AND FINANCIAL ISSUES FOR THE ENERGY SECTOR

Policy formulation and coordination of the energy sector are the responsibilities of the Office of Energy Affairs (OEA), a new agency established under the Aquino government to take over the now abolished Ministry of Energy. The other key energy sector Government institutions include: National Power Corporation (NPC) - responsible for power generation and transmission; Philippine National Oil Company (PNOC) - responsible for maintaining adequate oil supplies and developing indigenous energy resources; Manila Electric Company (MERALCO) - a private company supplying electricity to the Metro Manila area; and National Electrification Administration (NEA) - responsible for rural electrification. The OEA lacks authority to carry out its coordination and decision-making functions for the sector. As a result, sectoral policies and investment programs lack cohesion and reflect inadequate long-range planning. The lack of strong central agency in the sector has resulted to disagreements between the other key institutions that Energy Coordination Council (ECC) was created in the Office of the President to develop formal linkages between the energy sector participants.

The thrust of energy sector policy is to ensure availability and efficient use of energy. Measures to improve efficiency and self-reliance continue to be implemented. Fuel diversification and development of indigenous resources, particularly geothermal resources are given high priority. The provision of low cost power is an essential element to an efficient industrial sector, and a continuation of the economic recovery. The Government is committed to undertake the necessary policy reforms to ensure an efficient and productive power sector, and to embark on a least-cost investment program emphasizing indigenous resources wherever feasible.

The Philippines has modest amounts of indigenous energy sources. Hydropower resources are quite substantial with a theoretical power potential of over 10,000 MW. However, development of these resources is relatively costly due to the distance of the better sites for the main transmission grid. The country's main potential domestic energy resource is geothermal steam. Despite the economic advantages of geothermal resources over other source of energy, there are some factors impeding the development and utilization of geothermal steam:

1. The exploratory drilling costs in Philippines range from US\$1.2 to 1.8 million per well, significantly higher than the industry norm of US\$0.8 - 1.0 million. This higher cost is due to lack of planning and supervision, inexperienced contractor's crew without the technology know-how thereby increasing drilling time.

2. PNOC is required to pay 60 percent of its net revenues as royalty to the government while its recovery costs are limited to

90 percent of total revenue. This requirement has made steam exploration and exploitation appear economically unattractive. The government need to alter the royalty legislation to encourage local and foreign parties to undertake geothermal exploration and production.

3. A pricing scheme is needed to ensure that the government captures an appropriate portion of the economic rent on geothermal resources. The price of steam has long been in contention since it has no observable international price or independently determined value. The principle of "avoided cost" is used to determine the price of steam in the Philippines. In this case, the avoided cost is the break even price of electricity generated from imported coal.

Philippines coal resources are considerably more expensive than the resources available in the coal exporting countries, even allowing for the freight cost differential. There are two conflicting considerations in devising the future strategy for the coal sector. First, domestic coal is more expensive than imported coal. Thus, the mandated use of domestic coal imposes a significant burden to coal consumers which in turn, may hurt the international competitiveness of the industrial sector. Second, strategically, it is not unreasonable for Philippines to have a domestic coal industry in view of the fluctuating price of imported coal, lead time required for mine development and other social considerations. Therefore, the government strategy should allow for the financial survival of the existing coal industry at its current stage of operation aiming to reduce the burden on coal users by narrowing the gap between international and local prices and prevent misallocation of resources by limiting the expansion of coal industry until international coal prices increase significantly.

It is important to note that the main thrust of the least-cost plan is the composition of the program based on the viability of the candidates included in the program (Luzon geothermal, Tongonan geothermal and imported coal) and the non-viability of candidates excluded from the program (further domestic coal and hydro power plants). The decision not to operate the Bataan Nuclear Power Plant and the rapid rate of economic recovery since 1986 have put tremendous strains on power generation capacity. A number of gas turbine power plants are being commissioned to meet this demand. One of these plants will be operated by the private sector on a build-operate-transfer (BOT) basis, and the BOT scheme is being considered for construction of the next coal power plant in Calaca to be commissioned by 1995.

The major power development program of the National Power Corporation (NPC) for the period 1988-1992 will cost approximately 40 billion pesos, of which over 50 percent will entail foreign exchange cost. This power development program emphasizes the

development of low-cost geothermal power sources, supplemented by thermal units that can use either imported or domestic coal, depending on relative costs. Joint venture operations between the Philippine National Oil Company and the private sector are being sought for geothermal development.

Some of the key issues that need to be addressed and resolved for efficient development and operations of the power sector are as follows:

Electricity Tariffs

The electricity prices in the Philippines are not excessively high compared with average rates in other ASEAN countries. However, the structure of tariffs is not economically efficient and leads to inefficient use of power and cross-subsidy among various users. Industrial customers are paying tariffs higher than cost of service in order to subsidize smaller users and household consumers. The current tariff structure should be revised to reflect the real cost of supplying energy and capacity to different consumers at different times of day. The government is committed to moving to an electricity pricing structure that reflects long-run-marginal-cost (LRMC). The LRMC pricing can be provided first to the industrial and other large electricity consumers in and around Manila. Over time this may lead to better dispersion of energy intensive industry to other areas and islands. In the meanwhile, it will provide a fair basis for charging and a benchmark against which to measure the need for future tariff changes.

The authorities are fully aware of the need to lower the power rates and have implemented this program to reduce the cross-subsidy to residential consumers. The long-run-marginal-cost tariff structure will be adopted in a phased manner, with due consideration for social and regional equity.

MERALCO Transmission/Distribution Losses

MERALCO had system losses equivalent to about 21 percent of net generation. In order to reduce technical losses, Meralco should identify the problem areas through improving the Transformer Load Monitoring System, surveying serviced areas to establish priorities for system rehabilitation and updating computerized distribution records to include new local conditions.

Non-technical losses are primarily due to meter tampering by some of the large industrial and commercial consumers of electricity. To curb nontechnical losses, Meralco has been implementing an action program which includes investigation and billing recourse, analysis of billing data, monitoring of

consumers' monthly consumption and demands, enclosure of meters in steel boxes to prevent recurrence of tampering, advertisement and elimination of interventions by Meralco employees and others in the settlement of pilfered electricity of relatives and friends.

Financial Issues

Power represents the most capital intensive sector. Therefore, a failure to optimize investments and the inefficient utilization of assets can be extremely costly to the economy. Some of the structural problems that have created financial constraints are as follows:

a. Local Currency Investment Funding Constraints

Even though NPC is devising its tariff to yield the maximum rates of return permitted under its charter, it has only limited capacity to increase local currency generated from operations. For the period 1988-1995, the overall local currency investment requirements exceed substantially its capacity to generate funds from operations and government capacity to finance through budget allocations. NPC should consider entering into arrangements with financial institutions and institutional investors to raise more permanent capital from domestic sources of long-term funds. The government should consider providing institutional investors with incentives to invest in specially designed long-term securities.

b. Equity Capital Constraints

Meralco's long-term financial health depends on the government proscribing future transaction of the company's stock that are financed entirely with loans which depend on the company's dividends for debt service and the shares themselves for collateral. The government should require that all purchases of shares should conform to margin requirements similar to those of the Makati Stock Exchange.

c. Retailing Constraints

Neither NPC nor Meralco has been realizing their full capacity to generate cash from operations. The Meralco system has been plagued with extremely high levels of non-technical losses as a result of company's inability to prosecute successfully identified pilferers of energy. The government need to pass a legislation to prosecute convicted pilferers by imposing heavy penalties comparable to those levied by Singapore or Japan, where utilities can exercise tight control over distribution losses.

Relative to the energy sector as a whole, the electricity distribution system poses important problems. The rural electrification sector has major problems since 1983. With funding for further expansion becoming increasingly constrained, repayment of earlier loans coming due and the physical deterioration of core systems steadily increasing, the financial distress of the sector's institutions has become acute.

The Rural Electric Cooperatives (REC) provided distribution for smaller urban centers and rural areas. There are 117 RECs and NEA is responsible for coordinating the activities of the RECs. A large proportion of RECs face serious operational and financial problems. Theft of electricity is common and maintenance is inadequate throughout the REC system. Generally, the RECs lack the skilled staff and equipment needed to improve their operational performance and the burdens of past mistakes have weakened their prospects for improving their financial health. Also, REC's financial problems are directly related to managerial weaknesses that have resulted from the interference in their internal affairs by highly politicized Boards or individual Directors.

NEA has performed poorly as both a lender and a provider of technical support to the RECs. Although they collect monthly document of REC's performance, it has been unable to implement programs for operational and financial improvement and it has its own weaknesses. The biggest problem of this energy sector is the participating institutions' chronic lack of technical accountability.

To address the pervasive problems, major reforms in this sector are urgently needed. An integrated program should be developed that will introduce proper operational practices, appropriate investment strategies and strengthening of the sector's weak institutions. Because neither the RECs nor NEA can concentrate effectively on their future responsibilities as long as they are burdened with heavy obligations accruing from past uneconomic policies, the institutional strengthening components of the program should include measures for financial restructuring of these organizations. To ensure that the benefits of restructuring remain effective in the long-term, NEA will need to develop and implement financial strategy that encourages the RECs to invest in high return projects and adopt proper operational practices and pricing principles, and discourages them from failing to meet obligations to their creditors and consumers.

With the energy demand expected to grow by an estimate of 4.5 percent for the next five years, the government should take the initiative to draw up a phased program to improve the energy sector operations. Demand for energy projects is very high due to the country's economic boom and investment upsurge. However, a power supply shortage represents a real constraint on future economic growth. The Board of Investment has disapproved some investments,

especially those in power intensive industries, that promised to be lucrative foreign exchange earners, simply because certain area's power grid was unable to provide enough electricity. This results in a real opportunity loss for the country's economic development.

It is in this context that the country needs new innovative ways to increase its power supply both economically and speedily. In view of the financial constraints faced by both NPC and the government, the private sector can play an important role in power production, given the proper financial incentives. The BOT/BOO scheme can supplement the nation's power supply relatively quickly without the expenditure of large up-front capital costs by the public sector.

VII. POTENTIAL ROLE OF MULTILATERAL AND BILATERAL CREDIT AGENCIES

As LDC governments are constrained in making massive investments required in the energy sector due their own budget constraints, it has become increasingly critical consider the issue of additionality in power supply, including the private sector's investment in new power plants. According to a World Bank estimate, about \$1 trillion of new power sector investments may be needed in developing countries during 1990-2000. Half of the amount is required for China and India alone. When we combine the power sector investment needs in developed countries and the Soviet Union, the total amount of required investment during the final decade of this century could be truly monumental.

In order to encourage active participation in the power sector by the private industry, innovative financing schemes and financial engineering have to be considered seriously. In this connection, both BOT (Build, Operate and Transfer) and BOO (Build, Operate and Own) are important elements. Some experts and potential private project sponsors prefer BOO to BOT, since there should be not only an encouragement of new entry by the private sector into power production but also no mandatory exit as envisioned BOT. The exit decision by the private sponsors should be left on the business merits and other strategic and financial consideration rather than being preordained as in BOT.

Potential Role of the World Bank

The World Bank, by its charter, is limited in its lending activities to making loans to sovereign governments or loans that are covered by a sovereign guarantee. Thus, it has not been able to lend directly to BOT/BOO projects, non of which so far carried a sovereign guarantee. The World Bank has found indirect and creative ways, however, to assist its member countries in implementing BOT/BOO projects.

In Pakistan, for instance, the World Bank played a key role in establishing a \$520 million Private Sector Energy Development Fund, which is intended to make long-term loans to finance up to 30 percent of the cost of qualifying projects, including BOT/BOO projects, in the energy sector. In the Philippines, an energy sector loan form the World Bank is intended to used by the Philippine government and its government agencies in part to fund investments or standby facilities for BOT/BOO projects.

Another way in which the World Bank helps its member countries carry out BOT/BOO projects is by conducting sector studies. These studies have been done for the power sector in Turkey, Pakistan and the Philippines. They have helped to identify the need for and to determine the feasibility of BOT/BOO power plant projects in these

power sector. The Pakistani government has outlined the guidelines for evaluating and negotiating BOT/BOO projects. In that connection, a group of external lenders led by the World Bank is providing a \$520 million loan to the government. The \$520 million loan is assembled from various sources by the World Bank: \$150 million from the World Bank, \$146 million untied loan from Japan in yen, \$120 million tied loan from U.S. AID, \$50 million tied loan from the United Kingdom in pound sterling, \$30 million tied loan from Italy in lira, etc. The average cost of these loans, except for the World Bank loan, is at the concessionary rate of about 5 percent, and the Pakistani government will onlend to the private power project entity in rupees at 15 percent.

Pakistan's first major BOT project involves a 1,292 MW oil fired power plant to be sited near the mouth of the Hab River, in Baluchistan, Pakistan, about 40 kilometers from Karachi. The total Hab River project is currently estimated to cost some \$1.1 to \$1.3 billion. The main project sponsors are Saudi and British companies which are interested in the projects as investors and not related to the public utility business of their own. Out of the total equity of \$220 to \$240 million, \$140 million is to come from the sponsors, and \$100 million, in the form of convertible bonds, is to be raised locally in Pakistan. Of the debt, roughly \$650 million is expected to come from export credit agencies (or from foreign commercial lenders backed by export credit guarantee agencies) and multilateral institutions and \$410 million from the \$520 million loan facility on a subordinated basis.

Foreign sponsors will also include the prime contractor, Mitsui of Japan, and other subcontractors. While the 25 percent equity portion and the public bilateral and multilateral financing have been agreed to, still there is a gap of \$300 million to be financed from the private international banking community, which insists on additional comfort in the area of political risk and convertibility. In this connection, the World Bank is working on an enhanced cofinancing operation as a new experiment to provide for the political risk and convertibility guarantee.

A long-term power purchase agreement has been signed with the Pakistan Water and Power Development Authority (WAPDA), and the tariffs, to be paid in rupees under the convertibility guarantee of the Pakistani government, will be adjusted according to the rupee exchange rate. Also, the implementation agreement has been signed covering the price formula, supply contracts, etc. But the project is being delayed due to the fact that several subcontractors such as Toshiba bailed out of the project, necessitating for Mitsui to reopen the bids by other potential subcontractors.

In addition to the Hab River project, Pakistan has issued letters of intent to the Fauji Foundation for a 300 MW oil fired steam driven power plant and to a Habibullah-Siemens consortium for

a 130 MW fluidized bed, coal combustion plant. It is also considering a number of proposals for smaller oil fired and coal fired power plants on the BOT basis.

Financing Sources for Private Sector Power Plants

In addition to the equity provided by the project sponsors, private power projects require additional funding from various sources. Since most developing countries suffer from poor credit ratings, there has to be heavy involvement by official financing agencies, both multilateral and bilateral. Most major export credit agencies such as Japan Export and Import Bank and the U.S. ExIm Bank are willing to provide loans or otherwise insure credit for private power projects within the framework of supplier/buyer credit. However, export credit agencies are not willing to take the project risk directly.

Unlike the World Bank which can only lend to official borrowers, both the Asian Development Bank (ADB) and the International Finance Corporation (IFC) can make direct loans and equity investments to the private power projects. In addition to the ADB and IFC direct loans, it is also possible to arrange complementary financing, which provides an umbrella to commercial banks who may wish to be protected from sovereign risk of the host country. This is possible because of an agreement between member countries with IFC/ADB that the loan from commercial banks under the complementary financing scheme will not be rescheduled. Furthermore, the loan will be protected by the cross-default clause between the IFC/ADB loans and the complementary financing loan.

Hopewell Philippines Case

The way multilateral credit agencies can contribute to a BOT/BOO scheme may be illustrated by the Hopewell Philippines case. In early 1988, Hopewell Group in Hong Kong was invited to bid along with more traditional suppliers for construction of a 200 MW gas turbine plant for the National Power Corporation. Most conventional suppliers submitted bids involving new equipment with a cost of around U.S.\$85 million and not involving BOT or BOO schemes. However, Hopewell proposed a BOT structure with a 12-year life and offered a fixed price of only \$41 million, with used gas turbines in a refurbished state.

NPC wanted to use the new plant as a peak lopping facility, with NPC paying a "capacity fee" for the available capacity. However, if the plant is called upon to run and electricity is produced, all electricity will be purchased by NPC. NPC will provide the site and all fuel for generation of electricity at no cost to Hopewell, which will build, own and operate for 12 years and then transfer free of charge to NPC. Since the Hopewell

proposal was the lowest among the bidders and since Hopewell already had a successful experience of a similar power project under the BOT scheme in China, NPC selected Hopewell as the winner. The \$41 million cost to Hopewell was financed with a loan of \$10 million from IFC, another \$10 million loan from ADB, and a ADB-linked complementary financing of \$10 million with 7-year maturity. The complementary financing was provided by four commercial banks with ADB as lender of record (thus no Philippine country risk for the four commercial banks) but with the commercial banks taking full project risk.

The equity of \$11 million was provided by four sponsors: Hopewell for \$6.611 million, Citicorp (also financial advisor) for \$2.189 million, ADB and IFC for \$1.1 million each. The capacity fee is expected to cover the debt service and operating costs. There will be an "energy fee" based upon electricity actually generated, which will be used as returns on the equity investments. Both the capacity and energy fees will be paid in U.S. dollars to an offshore bank account to be maintained by Hopewell. All performance obligations of NPC, including the payments of fees, were guaranteed by the Philippine government. Since the project was awarded a "pioneer" status by the Board of Investments, a five-year tax holiday and waiver of import duties on equipment was assured.

The Hopewell Philippines case illustrates that the BOT/BOO scheme can be utilized successfully for a new private power project in a developing country. Of course, the project required the cooperation of the host country government, international agencies such as ADB and IFC, and the participation of international banks such as Citicorp and four commercial bank lenders.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The Philippines is facing an infrastructure crisis in its drive to accelerate economic development. In recent years, there has been persistent power shortage in the country, demonstrated by frequent brownouts and power outages. A power shortage of about 500 MW generation capacity is projected during 1989-1990 alone. The government lacks sufficient resources finance the necessary infrastructure, such as energy, transportation, water resources, social infrastructure, communications and others. To provide the necessary financial resources, the government is encouraging the private sector to shoulder more and more responsibility for building, operating, and maintaining infrastructural facilities under private ownership and financing. At the same time, the government has decided to conserve its limited resources for social infrastructure needs such as health, education, flood control and drainage.

Advantages of the BOT/BOO Scheme

A mechanism for private enterprises to participate effectively in the formulation, construction, operation and maintenance of infrastructure facilities under private ownership and financing is the BOT/BOO concept. While there are several variations in the basic model, all involve the establishment of a private sector company as a vehicle for ownership, financing, construction and operation of the project for a certain period. Thereafter, ownership may be transferred to the public sector (BOT) or still retained by the project entity (BOO) at its own discretion. These new schemes involve limited privatization of the public utility to the extent that the power project is privately owned and operated, with the project completion and operational risk shifted to the private sponsors of the project.

The project sponsors, who are usually from the private sector, make equity investments of 10 to 30 percent of the total project cost in a private project company which will build and operate the project for a period of time. The balance of the project cost is raised by the project company in the form of debt from commercial sources, usually backed by export credit guarantee agencies, and from bilateral and multilateral lenders. Senior lenders to the project company typically are not covered by direct "full faith and credit" sovereign guarantees, but substantial support from host governments is required, including guarantees of the performance of government entities involved in the project and guarantees of foreign exchange risks. In some cases, government support has included a government standby credit facility to provide subordinated loans to the project company when necessary to cover senior debt service.

Since no borrowing on the part of the government or government agency is involved, it shifts the debt burden from the government to the private sector, since the loans are made without government guarantee to the private party. By attracting domestic and foreign private entrepreneurial energy and capital (both debt and equity), the scheme contributes to the expansion and improvement of much needed infrastructural facilities which otherwise would not have come onstream and whose absence would constrain economic development of the country. Furthermore, as part of the privatization the private sector is likely to provide sound management, speedy implementation and operational efficiency including the adoption of innovative design features.

The BOT/BOO concept has been introduced recently in a number of countries to establish infrastructure projects, especially for power plants, toll roads, port terminals, bridges and airports. As a result, the concept is now understood more widely by governments which are increasingly considering its adoption. However, the application of the concept is complex partly because such projects have traditionally been handled by the governments or their public entities. Thus, no credible framework or government policies for developing BOT/BOO projects and private participation in public infrastructure projects exist in most countries. Legislation to adopt a suitable policy framework is often lacking and its enactment is time-consuming. Therefore, a host government which wishes to promote BOT/BOO projects must understand and be willing to accept the complexity and time consuming nature of the process.

Potential of the Philippine Financial Markets

If a private power project is to be undertaken on a BOT/BOO basis, how feasible is the Philippine financial market to raise the required local currency financing for the project, estimated to range from 25 to 30 percent of the total project cost? The financial market of the Philippines is underdeveloped. There are generally two basic reasons why this is the case. On the supply side, there is an insufficient number of high-grade securities, due to the fact that many companies have been reluctant to list on the exchanges. On the demand side, there is a limited number of investor participants actually involved in the stock market.

The small number of listed companies makes the market prone to price manipulations because of the absence of the market depth, breadth and liquidity. A lot of companies do not want to go public for a variety of reasons in the Philippines. Families and businessmen have the tradition of wanting to retain control of their companies. There is a prevailing belief that owners of family-controlled companies would lose management control once they go public. Aside from this fear, there is an attitude, particularly among family-owned corporations, of wanting to corner

all the profit they stand to make without necessarily sharing them with outsiders.

The Philippine capital market has developed unevenly. The short-term money market is active, the corporate bond market is moribund and there is no long-term government bond market. The stock market has been speculative, centering on resources-related stocks, and thus has not marshalled a significant amount of savings. In order for the Philippine economy to continue to grow, it must mobilize increasing amounts of savings through the equity markets and create a medium to long-term corporate and government bond market.

The securities industry has gone through considerable difficulty in the 1980's but appears to have regained strength as the equity market has made a substantial gain in 1988 and 1989. Even so, the securities market faces an inadequate supply of high investment grade securities as well as limited demand or interest in the market. The lack of supply of investment-grade securities is due to a combination of factors including fear of loss of management control, hesitancy to disclose business operations to the public and less expensive alternative sources of funds. The low investor demand for the securities market results from a lack of knowledge in the stock market, higher return on less risky alternative investments, and lack of confidence due to abuses in the stock market stemming from inadequate monitoring and control by regulatory authorities.

Domestic demand by large pension funds must be encouraged. Public and private pension funds should be assisted in developing a program for investment in equities and longer term debt instruments. Ultimately, these funds could become significant capital pools available for the Philippine corporate stock and bonds. Currently, the competition from guaranteed government investments over simplifies funds management and seriously diverts money from equity investment. Steps should be taken to remove any impediments to such an investment program.

Recommendations for A.I.D.

Even though the Philippine financial institutions and financial markets are limited in their capacity compared to other more developed financial markets, there appears to be the potential for raising the required local currency funds for a private power project for 200 MW combined cycle gas plant, with a total project cost of \$170 million. Assuming that the local currency portion is 30 percent of the total project cost, about \$51 million equivalent in pesos is needed. This funding can be raised in several ways, including some combinations of the various alternatives. First, one may use the syndication method. We have discussed the syndication practices in the Philippine financial market, where

there have been many precedents for such type of financing. Second, a private placement may be used with a group of institutional investors, such as insurance companies and pension funds.

Third, a bridge financing may be arranged with commercial banks for the initial period of several years, after which it can be refinanced by the equity issue. Both stock exchanges in the country require at least three years of profitable track record before a company can issue its shares publicly. Fourth, a long-term convertible bond issue may be floated, with the conversion to take place at least three years after the start of the operation. Finally, the project sponsors may be able to access to the energy sector development fund, financed by the World Bank and possibly other multilateral and bilateral credit agencies, a la Pakistan energy sector development fund.

The Philippines, through its Hopewell project, has already demonstrated that it can successfully attract foreign private investors who are able and willing to develop power plants on a BOT/BOO basis. The Hopewell project has acted as the trail blazer for similar ventures in the country, as both the government and the private sector in the Philippines have become familiarized with the BOT/BOO concept. All the necessary legal, regulatory and administrative procedures have been clarified through the Hopewell project. In this sense, the Philippines can be said to be one of those developing countries that are well prepared to encourage further private power plant projects on the BOT/BOO basis.

The U.S. AID can play an important role in promoting private power projects. First, it need to encourage the Philippine government to streamline various regulatory and administrative procedures involved in a BOT/BOO scheme. This scheme is extremely complex and time consuming even in the best of circumstances. Delay can increase the cost significantly and may often derail such a project. Second, AID can help identify potential private sponsors who might be interested in private power projects in a developing country such as the Philippines and acquaint them with the potential benefits of such a project. Third, the government has to be encouraged to undertake the needed reforms in the country's financial markets in order to enhance local capacity to provide funding for power projects in conjunction with external sources of funds. Finally, a training program may be instituted by AID for the policy makers of developing countries to familiarize them with the BOT/BOO concept and its applicability to the energy sector development.

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Annex 1.

TOTAL RESOURCES AND INVESTMENTS OF THE FINANCIAL SECTOR

	(P million)					
	1984	1985	1986	1987	1988 a/	1989 b/
Total Resources of the Financial System						
Banks						
Commercial Banks	291,875	279,318	237,055	247,236	342,312	382,233
Thrift Banks	14,922	14,959	17,547	19,522	24,932	28,041
Rural Banks	8,819	8,601	9,103	9,676	11,018	11,521
Specialized Government Banks	80,823	84,891	25,752	24,190	13,791	13,915
Sub-total	396,439	387,769	289,457	300,624	392,053	433,710
Non-Bank Financial Institutions	48,376	45,630	42,189	41,847	131,090	140,350
Total	444,815	433,399	331,646	342,471	523,143	576,060
Investments c/						
Banks						
Commercial Banks	30,834	27,648	31,096	27,616	41,755	n.a.
Thrift Banks	1,128	2,284	2,628	2,325	2,426	n.a.
Rural Banks	361	436	476	467	447	n.a.
Specialized Government Banks	13,371	12,771	6,582	9,191	8,267	n.a.
Sub-total	45,694	43,139	40,782	39,597	52,895	n.a.
Non-Bank Financial Institutions	3,921	3,345	3,407	1,760	14,192	n.a.
Total	49,615	46,484	44,189	41,357	67,087	n.a.
Per cent Share of Investments to Total Resources						
Banks						
Commercial Banks	10.6	9.9	13.1	11.2	12.2	n.a.
Thrift Banks	7.6	15.3	15.0	11.9	9.7	n.a.
Rural Banks	4.1	5.1	5.2	4.8	4.1	n.a.
Specialized Government Banks	16.5	15.0	23.6	38.0	59.9	n.a.
Non-Bank Financial Institutions	8.1	7.3	8.1	4.2	10.8	n.a.
Total	11.2	10.7	13.3	12.1	12.8	n.a.

n.a. Not available.

a/ Revised to reflect the expanded coverage of deposit money banks and other changes in the classification of accounts.

b/ January to June 1989.

c/ 1982 investments are from first quarter to third quarter only.

Sources: First Pacific Securities Philippines, Inc.
Central Bank of the Philippines

Annex 2.

LIST OF FOREIGN BANKS, OFFSHORE BANKING UNITS AND
REPRESENTATIVE OFFICES AND LOCAL COMMERCIAL BANKS

FOREIGN BANKS

1. Citibank, N.A.
2. Bank of America NT & SA
3. Hongkong and Shanghai Banking Corp.
4. Standard Chartered Bank

OFFSHORE BANKING UNITS AND REPRESENTATIVE OFFICES

1. American Express International Banking Corp.
2. Banco Espanol de Credito
3. Bank of California
4. Bank of Credit and Commerce International (Overseas) Ltd.
5. Bank of Hawaii
6. Bank of Nova Scotia
7. Bank of Tokyo Ltd.
8. Bankers Trust Company
9. Banque Indosuez
10. Banque Nationale de Paris
11. Banque Paribas
12. Barclays Bank
13. California Overseas Bank
14. Chase Manhattan Bank, N.A.
15. Chemical Bank
16. Continental Illinois
17. Copenhagen Handelsbank A/S
18. Credit Lyonnais
19. Deutsche Bank AG
20. Export-Import of Japan
21. First National Bank of Chicago
22. First Interstate Bank of California
23. First Interstate Bank of Washington
24. The First National Bank of Boston
25. Fuji Bank
26. International Bank of Singapore
27. International Commercial Bank of China
28. Irving Trust Company
29. Korea Exchange Bank
30. Manufacturers Hanover Trust Co.
31. Marine Midland Bank
32. Mellon Bank
33. Merrill Lynch Philippines, Inc.
34. Midland Bank PLC
35. Mitsubishi Bank
36. Mitsui Bank
37. Morgan Guaranty Trust Co. of New York
38. National Bank of Detroit
39. Philadelphia National Bank

Annex 2. (Contin.)

40. Rainier National Bank
41. Security Diners International Corporation
42. Security Pacific National Bank
43. Societa Generale
44. Taiyo-Kobe Bank
45. Tokai Bank
46. Wells Fargo Bank NA

LOCAL COMMERCIAL BANKS

<u>Bank</u>	<u>Foreign Ownership/ Association</u>
1. Philippine National Bank	Chemical Bank J.P. Morgan Overseas Capital Corp.
2. Far East Bank and Trust Company a/	
3. Bank of the Philippines Islands a/	
4. Metropolitan Bank and Trust Company a/	Continental Illinois National Bank; Sanwa Bank Ltd. Bank of Nova Scotia
5. United Coconut Planters Bank a/	
6. Philippine Commercial International Bank a/	
7. Rizal Commercial Banking Corp. a/	
8. Solidbank Corporation	
9. Allied Banking Corp.	
10. Equitable Banking Corp.	American Express
11. International Corporate Bank (The)	
12. China Banking Corp.	
13. Prudential Bank	Citibank
14. CityTrust Banking Corp.	
15. Philippine Bank of Communications.	
16. Security Bank and Trust Company	
17. Philippine Trust Company	For privati- zation
18. Republic Planters Bank	
19. Traders Royal Bank	Bank of Boston. Prudential Bank
20. Boston Bank of the Philippines	
21. Pilipinas Bank	
22. Union Bank of the Philippines	
23. Philippine Banking Corp. (The)	For privati- zation
24. Associated Bank	
25. Producers Bank of the Philippines	

a/ Universal banks..

156

FINANCIAL PERFORMANCE OF SELECTED BANKING INSTITUTIONS

(P million)

	Gross Revenues		Net Income After Tax		Total Assets		Total Liabilities		Stockholders' Equity	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
Commercial Banks										
Philippine National Bank	3,398	4,998	1,011	1,847	31,268	38,758	27,718	33,749	3,550	5,009
Far East Bank and Trust Co.	1,915	2,800	381	501	19,210	27,502	17,421	25,245	1,789	2,237
Bank of the Philippine Islands	1,978	2,623	303	393	20,662	26,276	19,054	24,375	1,607	1,901
Metropolitan Bank and Trust Co.	1,633	2,366	250	363	19,326	25,708	-	-	464	793
United Coconut Planters Bank	1,623	2,361	386	411	14,024	16,150	11,756	13,559	2,268	2,592
Philippine Commercial International Bank	1,705	2,132	278	415	17,268	19,659	15,647	-	1,620	-
Citibank, N.A. a/	1,100	1,409	75	464	7,462	8,112	7,462	8,112	-	-
Rizal Commercial Banking Corp.	754	1,323	107	184	8,186	10,631	7,479	9,773	707	858
Bank of America NT & SA a/	991	1,226	171	271	9,080	10,709	8,909	10,538	170	170
Solidbank Corp.	706	1,073	76	150	6,610	8,840	6,060	7,817	551	1,024
Allied Banking Corp.	728	952	116	136	7,537	9,313	6,479	8,115	1,058	1,198
Equitable Banking Corp.	636	922	61	119	6,823	8,181	6,158	7,379	645	802
International Corporate Bank (The)	535	833	140	162	5,160	7,176	4,159	6,068	1,002	1,103
China Banking Corp.	523	792	81	147	5,009	5,924	4,422	5,204	587	720
Prudential Bank	624	774	103	129	6,255	7,881	5,694	7,078	561	804
CityTrust Banking Corp.	655	758	155	173	6,068	7,441	5,166	6,514	902	926
Philippine Bank of Communications	380	567	50	71	3,540	15,003	3,036	4,434	504	569
Hongkong and Shanghai Banking Corp. a/	309	545	68	190	2,565	2,722	2,152	2,248	413	474
Security Bank and Trust Co.	440	457	31	34	466	4,512	4,301	4,125	354	387
Philtrust Bank (Philippine Trust Co.)	295	453	24	51	3,035	3,938	2,663	3,516	371	422
Republica Planters Bank	-	432	-	14	-	7,609	-	7,224	-	340
Traders Royal Bank	282	422	21	25	3,406	3,876	3,055	3,504	351	372
Standard Chartered Bank a/	208	259	5	27	1,865	1,350	837	832	442	411
Boston Bank of the Philippines	221	252	10	51	1,642	2,080	1,269	1,668	372	402
Pilipinas Bank	-	178	-	11	-	1,423	-	1,206	-	218
Union Bank of the Philippines	454	424	46	113	3,590	3,678	-	-	-	-
Philippine Banking Corporation (The)	357	-	1	-	3,443	-	3,150	-	293	-
Government Specialized Banks										
Development Bank of the Philippines	1,777	2,568	783	1,647	10,532	11,431	7,070	6,324	3,461	5,108
Land Bank of the Philippines	-	726	-	102	-	13,049	-	9,044	-	4,005

Annex 3. cont....

(\$ million)

	Gross Revenues		Net Income After Tax		Total Assets		Total Liabilities		Stockholders' Equity	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
Private Development Banks										
Planters Development Bank	150	207	12	22	1,239	1,628	-	-	-	-
Urban Development Bank	90	112	13	21	867	1,117	-	-	-	-
Asiatrust Development Bank	63	80	6	8	405	482	-	-	-	-
BPI Agricultural Development Bank, Inc.	39	72	0	15	531	551	-	-	-	-
Premiere Development Bank	45	60	10	11	232	401	-	-	-	-
Luzon Development Bank	37	45	1	4	233	293	-	-	-	-
Selected Offshore Banking Units										
Chase Manhattan Bank, N.A.	534	696	25	203	6,952	6,406	313	269	6,645	6,138
Credit Lyonnais, Inc.	492	589	87	118	6,389	7,509	6,305	7,373	296	118
Barclays Bank PLC	516	562	81	110	5,633	5,133	126	142	5,708	4,991
Banque Nationale de Paris	515	546	133	122	5,489	5,643	5,310	5,477	180	168
Societe Generale	398	509	35	36	5,190	4,821	5,190	4,821	-	-
Bankers Trust Co.	293	468	75	163	3,784	3,805	3,922	3,780	(138)	29
Bank of Tokyo Ltd.	443	443	3	-	5,865	6,687	104	634	5,761	5,653
Bank of Nova Scotia	378	323	64	-	4,095	3,029	69	56	4,026	2,973
Banque Indosuez	-	237	-	34	-	2,763	-	2,694	-	61
Bank of Credit and Commerce International (Overseas) Ltd.	209	225	28	14	2,328	3,365	933	596	1,375	2,766
First National Bank of Chicago	42	168	3	12	1,921	1,706	1,900	1,684	21	21
First Interstate Bank of California	154	139	8	18	2,391	1,787	2,369	1,765	21	21
Korea Exchange Bank	107	121	2	4	1,619	1,809	1,542	1,729	77	79
First National Bank of Boston	82	103	4	(7)	618	1,764	28	82	21	21
Bank of California	114	84	(2)	-	1,389	1,141	1,305	1,037	64	84
Security Diners International Corp.	61	81	-	5	171	216	163	196	6	17
Deutsche Bank AG	95	76	(71)	30	-	102	-	102	-	27
Chemical Bank	481	12	-	(7)	219	49	198	27	21	21
International Bank of Singapore	9	8	(5)	(6)	105	106	45	155	61	(49)

a/ Foreign commercial banks.

Sources: Philippine Business Perspectives, Inc.

Mahal Kung Pilipinas Foundation, Inc.

Annex 4.

FINANCIAL PERFORMANCE OF SELECTED NON-BANK FINANCIAL INSTITUTIONS

(P million)

	Gross Revenues		Net Income After Tax		Total Assets		Total Liabilities		Stockholders' Equity	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
Investment Companies										
SM Investment Corp.	95	154	84	95	741	1,221	327	605	414	616
Trans-Philippines Investment Corp.	87	123	11	87	717	665	368	236	409	429
Jaka Investments Corp.	118	104	95	118	408	485	72	80	337	405
FEB Investments, Inc.	13	76	9	13	127	567	18	260	109	307
Financing Companies										
BA Finance Corp.	282	365	60	64	1,668	1,486	1,511	1,309	157	176
PCI Leasing and Finance, Inc.	70	104	10	18	291	451	244	389	47	61
HB Finance Corp.	61	75	13	15	212	230	150	159	61	70
All Asia Capital and Leasing Corp.	41	61	8	14	354	385	319	320	36	65
Investment Houses										
Private Development Corp. of the Phils.	313	318	(65)	2	3,084	2,717	2,942	2,590	141	127
Pathfinder Holdings Philippines, Inc.	10	132	(5)	-	382	493	62	173	320	320
Anacor Capital and Investment Corp.	68	77	34	34	382	301	232	125	150	178
Philippine Commercial Capital, Inc.	82	74	24	24	224	196	123	75	101	120
State Investment House, Inc.	65	64	19	16	591	458	549	446	42	42
Securities Dealers/Brokers										
H.E. Holding Corp.	57	67	44	49	216	249	8	4	208	245
Philippine Exchange Co., Inc.	-	28	-	14	-	6,829	-	6,594	-	235
Suzanne Securities and Development Corp.	15	19	-	-	8	9	-	-	8	8
International Capital Corp.	-	18	-	7	-	118	-	94	-	23
Astrotrade, Inc.	7	12	-	-	4	4	4	3	-	-
First Pacific Securities Phils., Inc.	14	12	3	-	46	28	38	19	9	9

157

Annex 4. cont.....

Fund Manager

Case Development Mutual Fund	602	796	454	624	8,057	9,521	22	126	8,035	9,395
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Paunshope

A.J. Raymundo and Co. Inc.	23	21	2	2	30	34	21	21	9	13
Casa Agencia Espanos de Antonio L. Tambunting y Hijos, Inc.	16	16	-	-	29	37	23	30	6	6
Agencia de Espanos de Antonio L. Tambunting, Inc.	11	14	-	-	23	30	18	25	5	6
El Dorado Paunshop, Inc.	8	12	-	-1	-	33	-	30	-	3

Lending Investor

Interpacific Transit, Inc.	21	22	4	2	40	67	-	-	5	4
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Insurance Companies

Government Service Insurance System	5,116	6,169	2,470	3,096	22,537	24,513	2,571	1,561	19,966	22,952
Philippine American Life Insurance Co.	1,719	2,067	306	311	5,514	6,407	3,436	4,105	2,079	-2,303
Insular Life Assurance Co., Ltd.	946	1,152	107	129	2,920	3,581	1,915	2,189	1,006	1,394
Sun Life Assurance Co. of Canada	577	813	27	48	1,383	1,846	1,086	1,424	422	302

 Sources: Philippine Business Perspectives, Inc.
 Mahal Kung Pilipinas Foundation, Inc.

160

Annex 5.

MONEY MARKET TRANSACTIONS

<u>Year</u>	<u>Volume (P million)</u>	<u>Growth Rate Per cent</u>
1980	303,750	
1981	329,621	8.5
1982	462,822	40.4
1983	600,562	29.8
1984	505,809	(15.8)
1985	505,754	(0.0)
1986	523,417	3.5
1987	460,854	(12.0)
1988	780,051	69.3
1989 a/	433,915	5.6

a/ January to June 1989.
Source: Central Bank

161

Annex 7.

MANILA STOCK EXCHANGE OFFERING

(P million)

Year	Initial Offering		Offerings by Listed Companies		Total Equity Capital Raised
	Number	Value	Number	Value	Value
1980	5	220.0	16	1,588.1	1,808.1
1981	5	690.0	14	791.2	1,481.2
1982	12	1,281.7	5	295.0	1,556.7
1983	12	943.1	10	2,623.4	3,566.5
1984	4	315.0	3	35.0	350.0
1985	4	494.0	7	270.8	764.8
1986	8	20,467.0	7	248.1	20,714.0
1987	16	2,204.2	17	955.9	3,160.8
1988	7	1,150.0	31	4,202.0	5,352.0

Source: MSE

162

Annex 8.

SELECTED TRANSACTIONS IN THE LOCAL CAPITAL MARKET

(P million)

Year	Transaction	Debt	Equity	Total
1988				
	Syndication	6,926.8	-	6,926.8
	Underwriting	a/	276.8	276.8
	Debt to Equity Fund Investments	-	-	-
	Debt to Equity Swaps	-	7,203.0 c/	7,203.0
		<u>6,926.8</u>	<u>7,479.8</u>	<u>14,406.6</u>
1989				
	Syndication	3,240.0	-	3,240.0
	Underwriting	750.0	3,941.5	4,691.5
	Debt to Equity Fund Investments	-	115.5	115.5
	Debt to Equity Swaps	-	2,596.0 c/	2,596.0
		<u>3,990.0</u>	<u>6,653.0</u>	<u>10,643.0</u>
1990 Onwards (Plans)				
	Syndication	2,960.0	-	2,960.0
	Underwriting	3,622.8	700.0 b/	4,322.8
	Debt to Equity Fund Investments	-	-	-
	Debt to Equity Swaps	-	-	-
		<u>6,582.8</u>	<u>700.0</u>	<u>7,282.8</u>
Total		17,499.6	14,832.8	32,332.4

a/ No data available.

b/ Total amount available. Other companies which have announced going public have indicated only the percentage of shares which will be offered.

c/ Closed transactions in 1988 and the first nine months of 1989 are U.S. \$ 343.0 million and U.S. \$ 118.0 million converted at an exchange rate of U.S. \$ 1.00=P21.00 and P22.00 respectively.

Notes:

(i) Syndication based on Annex 4..

(ii) Underwriting-Bonds/Debt based on Annex 5..

(iii) Debt to Equity Fund Investments based on Annex 6..

(iv) Underwriting-Equity/Stocks based on Annex 7..

Sources: Newspaper articles
Tombstone advertisements

162

Annex 9.

TABLE OF NATIONALIZATION LAWS AND THEIR REQUIREMENTS

Subject Matter	Minimum Filipino Ownership Requirement	Legal Provisions
A. Banking Institutions:		
	70%	Republic Act 337 as amended Presidential Decree 71, Batas Pambansa 61
Private Development Banks	70% (60% with the President's approval)	Republic Act 403 as amended by Presidential Decree 119, Batas Pambansa 63
Rural Banks	100%	Republic Act 720 as amended by Presidential Decree 122, Presidential Decree 1794, and Batas Pambansa 65
Saving and loan associations	70%	Republic Act 3779 as amended by Republic Act 4378 Presidential Decree 113, Presidential Decree 1796 and Presidential Decree 62
Pawnshops	100% (single-proprietorship) 70% (partnership) 70% (corporation)	Presidential Decree 114
B. Public Utilities:		
Authorization for the operation of a public utility:	60%	Philippine Constitution (Article XII, Section II)
Permit to engage in domestic air, commerce and/or air transportation:	60%	Philippine Constitution (Art. XII, Section II)

166

Annex 9. (Contin.)

Subject Matter	Minimum Filipino Ownership Requirement	Legal Provisions
C. Finance Institutions		
Investment houses	majority of the voting stocks	Presidential Decree 129 as amended by Presidential Decree 690
Financing companies	60%	Republic Act 5980
D. Government Contracts		
Public Works construction	75%	Commonwealth Act
Supplier to government corporations	60%	Republic Act 5123
Supplier to government agencies	75%	Commonwealth Act 138 as amended by Republic Act 78
Reparation benefits	100% (70% with the President's approval)	Republic Act 1789 as amended
Public Works and construction for national defense	100%	Commonwealth Act 54
E. Lands and Other Natural Resources		
Private lands transfer and conveyance	60%	Philippine Constitu- tion Article XII, Sec- tion 7 in relation to Section 3.
Lease of alienable land of the public domain	60%	Philippine Constitu- tion Article XII Sec- tion 3.
State co-production joint- venture or production sharing agreements in the exploration, development and	60%	Philippine Constitu- tion Article XII Sec- tion 2.

Annex 9. (Contin.)

Subject Matter	Minimum Filipino Ownership Requirement	Legal Provisions
utilization of natural resources		
Small scale utilization of natural resources and cooperative fish farming	Filipino citizens	Philippine Constitution Article XII Section 2 paragraph 3
Lease of coalbearing lands	60%	Act 2719
Lands within military reservation	60%	Commonwealth Act 141
Lands bordering shores or banks of navigable rivers.	60%	Commonwealth Act 141
F. Fishing and Other Aquatic Rights.		
Use and enjoyment of marine wealth in archipelagic waters, territorial sea and exclusive economic zone.	Filipino citizens	Philippine Constitution Article XII Section 2
G. Shipping		
Register of vessels of domestic ownership for coastwise trade	60%	Presidential Decree 761 amending Section 808 of Tariff and Customs Code
Issuance of bay and river license	75%	Tariff and Customs Code (Section 911)
Operation of registered overseas shipping	60%	R.A. No. 1407 as amended by P.D. 664, 744 & 764
H. Construction		
Domestic construction	75%	Letter of Instruction 630
Overseas construction (Filipino contractor)	60%	Presidential Decree 1167
Recruitment and placement of workers, locally or overseas	75%	Presidential Decree 1412

Annex 9. (Contin.)

Subject Matter	Minimum Filipino Ownership Requirement	Legal Provisions
I. Retail Trade		
Retail Trade	100%	Republic Act 1180
J. Cooperatives		
Cooperative associations	61%	Commonwealth Act 585 Republic Act 2023
K. Geothermal Energy		
Lease for exploitation tapping and utilization of geothermal energy, natural gas and methane gas	60%	Republic Act 5092
L. Others		
Mass Media	100%	Philippine Constitution (Article XVI, Section 11 (1))
Advertising Industry	70%	Philippine Constitution Article XVI, Section 11 (2) and Article XVII, Section 23.
Educational Institutions	60%	Philippine Constitution Article XIV, Section 4.
Practice of Profession	Filipino citizens. (except as prescribed by law)	Philippine Constitution Article XII, Section 14.
Engaging in the rice and corn industry	100%	R.A. 3018.
Operation of Atomic energy facilities	60%	R.A. 5207 as amended by PDs 608, 1484.

REGULATED FRAMEWORK FOR FINANCIAL INSTITUTIONS

	Expanded Commercial Bank	Commercial Bank	Thrift Bank	Investment House	Finance Company a/
Minimum Paid-in Capitalization	P500 million at start	P100 million (old) P300 million at start (new)	Based in Metro Manila P10 million (old) P20 million (new) Based outside Metro Manila P5 million (old) P10 million (new)	P50 million at start (new) P20 million (old)- to December 1983	As investment house
Minimum Capital Accounts	P1 billion	P500 million			
Inherent Powers	Commercial banking b/ investment house functions investment in non-allied enterprises	Commercial banking	Full domestic banking c/ including personal and mortgage loans	Investment house functions (underwriting; securities; dealing; equities)	Financing (installment financing, receivables discounting, factoring) Leasing
Additional Powers	Trust Foreign Currency Deposit Unit (FCDU)	As expanded commercial bank	Trust Limited FCDU operations Foreign exchange dealership Quasi-banking	Trust Limited foreign exchange operations Quasi-banking	Quasi-banking
Liquidity Financing from Central Bank	Available	Available	Available	Available	Available
Equity Holdings Permitted	30 per cent of commercial banks 100 per cent of financial allied enterprises 35 per cent of non-allied enterprises	30 per cent of commercial banks 100 per cent of thrift banks 40 per cent of other financial allied enterprises 100 per cent of non-financial allied enterprises	As commercial banks	40 per cent in non-banks performing quasi-banking No limitation on other non-banks Minority in non-allied enterprises	As investment house
Ownership Restrictions	40 per cent or less total foreign ownership	As expanded commercial bank	As expanded commercial bank	At least majority Filipino or less 40 per cent or less per individual, family or corporate group	At least 60 per cent Filipino 40 per cent or less per individual or corporate group

a/ Quasi-bank financing.

b/ Commercial banking consists of creating and receiving demand deposits; receiving other types of deposits; lending money; accepting drafts; issuing letters of credit; discounting and negotiating promissory notes; drafts, bills of exchange and other evidence of debt; buying and selling foreign exchange, gold and silver bullion; acquiring bonds and other debt securities; and investing in equity of allied undertakings.

c/ Full domestic banking is defined as commercial banking without international banking operations.

**PRIVATE POWER PROJECTS AND CAPITAL MARKET DEVELOPMENT:
A CASE STUDY OF THAILAND**

**A REPORT TO THE UNITED STATES AGENCY FOR
INTERNATIONAL DEVELOPMENT**

**FMIRI, INC.
WASHINGTON, D.C.
NOVEMBER, 1990**

Table of Contents

	Page
1. Synopsis	1
2. Summary and Introduction	2
• Private Power Context.....	2
• Potential Financing Sources	3
• Capital Market Development Opportunities	7
3. Economic Structure Background	12
• The Economy	12
• Public Finance	13
• Foreign Trade	13
• External Payments & Debt	14
4. Financial Structure Background	16
5. Financial Institutions	17
• Central Bank	17
• Commercial Banks	17
• Development Banks/Government Banks	18
• Non-Bank Financial Institutions	20
6. Financial Markets	22
• Stock Exchange	22
• Debt and Money Market	22
• Interbank Loan Market	23
7. Regulatory Structure	24
• Inflation	24
• Foreign Banks	24
• Trade and Investment	24
• Privatization	25
8. Energy/Power Sector	26
9. Potential Role of Multilateral Financial Institutions and International AID Organizations.....	28
• Magnitude of LDC Power Financing Needs.....	28
• Possible Roles for International Financial and AID Institutions.....	28
• Private Sector Energy Development Fund in Pakistan ..	29

0.	Conclusions from Thailand Interviews	31
•	Private Power	31
•	Project Financing For Private Power Projects	32
•	Financial Market Regulatory Issues	34
•	Foreign Exchange Markets and Risk Management	38
•	Capital Market Conditions and Project Financing	39
•	Financing Plan For Skytrain	41
•	Debt Market Development Opportunities	42

List of Tables

Bibliography

1. Synopsis

In recent years Thailand has achieved economic growth rates over 10%, in the context of moderate inflation rates, stable exchange rates, and a recently balanced federal budget. This exceptional economic performance has created a pressing need for tens of billions of dollars of infrastructure investments in a number of areas including electricity generation facilities, transportation, telecommunications and water works.

A significant concern is whether due to financing constraints The Electricity Generating Authority of Thailand (EGAT) will be able to accomplish the needed capacity expansion. Recognizing this financing problem the Thai National Energy Policy Committee has recommended that the private sector should be invited to participate in the production of electricity. In the near term it appears likely that smaller scale private co-generation projects will be possible.

The principal obstacle to large-scale private electric generating plants in Thailand is the opposition of the politically powerful EGAT and its unions. Should this issue be resolved, and appropriate take or pay power purchase contracts negotiated, it would appear that such projects costing up to several hundred million dollars could be financed privately without Government of Thailand sovereign guarantees or foreign exchange risk bearing. This comes about due to the very favorable financial market attitudes toward Thailand at the present.

While Thai financial markets are of significant size and have the capacity to finance individual large projects they do not currently have the capacity to finance all needed investments through out the economy. Financial market development thus remains an important objective. In particular, debt market development through increasing both the supply of and demand for debt securities could help achieve a number of important monetary policy and capital mobilization objectives. Such efforts would ideally involve a number of coordinated activities in the areas of increasing investor confidence, investor education, corporate education, regulatory and tax reviews, security underwriting and secondary markets.

An extremely important issue is identifying the context in which a critical mass of such activities can be accomplished to achieve the overall objective of developing debt markets with significant financing capacity and liquidity. It is suggested that the financing of the above major infrastructure projects could provide such an opportunity where a large number of people would have a profit motive to undertake needed efforts. In particular, debt market development could be advanced significantly if the Government of Thailand would encourage, or require, the sponsors and financiers of major projects to make a good faith effort at selling medium and long-term debt in Thailand and internationally.

2. Summary and Introduction

2.1 Private Power Context

Led by a boom in manufacturing, Thailand has achieved annual real economic growth rates over 10% for the last three years. Impressively this has been accomplished in conjunction with relatively moderate inflation rates, stable exchange rates, and a recently balanced federal budget. This exceptional economic performance has created a pressing need for tens of billions of dollars of infrastructure investments in a number of areas including electric generating facilities, transportation, telecommunications and water works. It has also helped create very positive attitudes on the part of domestic and international investors toward Thailand and pushed common stock and real estate prices up at a rate over 100% per year.¹

Thailand's rapid development has been energy intensive and fueled in significant part by imported oil. This dependence has stimulated a major drive to develop indigenous sources of energy in the last decade, notably natural gas, lignite and hydroelectricity. Nevertheless for 1988 over one-third of the country's energy supply (12.7 out of 34.2 million tons of oil equivalent) was fueled by imported oil.

Electricity demand has also risen rapidly, increasing by 14.5% in 1989. The Electricity Generating Authority of Thailand (EGAT) forecasts a further increase of 12% in 1990 to a record 6,759 mw. To meet rising demand for electricity the Thai government is seeking to increase generating capacity to 9,249 mw by 1991, which it is estimated would give the country a 16% capacity cushion. Further, it is estimated that at least an additional 900 mw of capacity a year will be needed throughout the 1990s.

A significant concern is whether due to financing constraints EGAT will be able to accomplish this ambitious expansion program. EGAT and the Provincial Electricity Authority have previously accounted for about 37% of total borrowings under the government's \$1.2 billion foreign loan ceiling. Further, the forecasted level of investment in the seventh national plan could climb even higher and be approximately equal to the new foreign loan ceiling of \$1.5 billion per year. Recognizing this financing problem the National Energy Policy Committee has recommended

¹These conclusions are based on information and opinions collected by Professor Theodore Barnhill of The George Washington University during interviews in Thailand over the period July 23 to August 3, 1990. Subsequent to that time the Mid-East crises, escalating oil prices and other factors have resulted in about a forty percent drop in the Thai stock market. Similar sharp declines have also been registered in other stock markets around the world. The impact of these developments on the feasibility of financing private power projects in Thailand has not been determined.

that the private sector should be invited to participate in the production of electricity. Also, the Ministry of Finance has recently called for the partial privatization of EGAT plants and proposals have been made to list EGAT's common stocks on the stock exchange. In the near term it appears likely that smaller scale private co-generation projects will be possible.

The principal obstacle to large-scale private electric generating plants in Thailand is the opposition of the politically powerful EGAT and its unions. Should this issue be resolved, and appropriate take or pay power purchase contracts negotiated, it appears likely that such projects costing up to several hundred million dollars could be financed privately.

This comes about due to the very favorable financial market attitudes toward Thailand at the present.

2.2 Potential Financing Sources

Private sources of financing which might reasonably be available without Government of Thailand sovereign guarantees or foreign exchange risk bearing are identified in Chart 1 below and could include: (1) project sponsors and suppliers, (2) domestic commercial banks, (3) international banks and investors, (4) the Industrial Finance Corporation of Thailand, (5) local insurance companies, and (6) public issues of equity and debt securities. Other sources of financing which might also be available under certain circumstances would include various export/import banks and multilateral financial and aid institutions such as the World Bank, ADB, IFC and U.S.A.I.D.

Ideally, a significant portion of a private power projects costs would be funded with 20 year or longer fixed rate debt. This financing approach provides greater certainty as to interest expense, and allows for lower tariff charges since the projects large capital costs can be amortized over a long time period. In the case of Thailand an unresolved question is the amount and source of such truly long-term fixed rate financing which may be available.

Export/Import banks would very likely provide such financing if a sovereign guarantee were available. However, the Government of Thailand is not inclined in this direction. Absent such guarantees export/import bank financing is less certain, although there are indications that some ex-im banks may accept commercial bank guarantees for long-term financing related to the proposed "Skytrain" project. An additional potential source of private long-term fixed rate debt is the public issue of securities in the Thai or international financial markets. While there is merit in attempting such public issues from both a project financing and capital market development perspective it is uncertain whether they could be successfully completed absent changes in Thai tax laws and further debt market development. Any limitations on the availability of long-term fixed rate debt would likely impact on the structure of the project's tariff which might need to allow for variations in the cost of variable rate financings and other contingencies.

As much as 70 to 75 percent of the cost of large scale electric generating plants would need to be paid for in currencies other than baht. Several alternatives exist for acquiring this needed foreign exchange. One possibility, which seems to be favored by the Thai Government, would be to raise much of the financing locally in baht which would then be exchanged in the spot foreign exchange market for whatever currency is required. Given daily baht trading volume of around \$2 billion, there would seem to be little problem in acquiring the needed foreign exchange for a several hundred million dollar project. A particular advantage of this approach is that the project's debt service payments and revenues would both be denominated in baht thereby substantially reducing any foreign exchange risks.

Chart 1

Potential Financing Sources For Creditworthy Private Power Projects In Thailand

<u>Source</u>	<u>Possible Types of Financing</u>	<u>Maximum Potential Amount of Financing Available for a Individual Project</u>
Potential Project Sponsors: Construction Firms, Suppliers, Utility Companies, Investors	Equity and long-term debt	Negotiable depending on project.
Thai Commercial Bank	Variable rate loans with maturities to 12 years with rates currently in the range of 15 to 16%. Fixed rate loans with maturities out to 5 years. Equity Investments.	Approximately \$1.3 billion if all commercial banks made maximum permitted commitment. ^{a/} The largest Thai banks may individually committee \$300 to \$400 million.
Insurance Companies	Mortgage loans up to 70 percent of property value with maximum maturities of 10 years. Machinery loans up to 50 percent of market value with a maximum term of 3 years. Larger loans may require a commercial bank guarantee.	\$30 to \$40 million.
Industrial Finance Corporation of Thailand	Fixed rate loans with maturities of 8 to 13 years available. May have a 2 to 3 year grace period on principal repayment.	\$40 million.

^{a/} Thai commercial bank maximum loan limit calculated as 25 percent of paid up capital plus retained earnings.

176

Chart 1 (cont'd)

Finance and Security Firms	Public issues of common stock, convertible debt and short to medium term debt securities have been successfully undertaken in Thailand.	Investors currently favor equity or equity linked securities. Public stock issues of up to \$18 million, and public debt issues of up to \$12 million have been completed.
International Banks	Syndicated loans with a 10 year maturity and floating rate are possible. With a sovereign guarantee the interest rate is currently at LIBOR + 1/4%. Non-governmental guaranteed loans are available at LIBOR + 1% but may require some type credit enhancement from commercial bank.	Hundreds of millions dollars.
International Investors	Long-term (10 to 20 years) fixed rate investments appear possible if certain tax issues are resolved and secondary market liquidity becomes available.	Hundreds of millions of dollars.
Export/Import Banks	Long-term (15 + years) fixed loans available with sovereign guarantees. There is some evidence that sovereign guarantees may not be absolutely essential in Thailand, particularly if the project appears credit-worthy and if commercial bank guarantees are available.	Related to amount of exports used in project.
Multilateral Financial and Aid Institutions: World Bank, IFC, ADB, U.S.A.I.D.	Long term fixed rate loans, loan guarantees, and equity investments.	Negotiable

A second alternative for acquiring needed foreign exchange would be to finance directly in the needed currencies. Such an approach, however, creates significant foreign exchange risks. Potential ways of handling such risks include arranging currency swaps (which are available out for 5 to 7 years), borrowing additional baht converting them to the currency in question and buying zero coupon bonds which mature at appropriate future times, and having project sponsors bear the foreign exchange risk. In the latter case some international financial institutions already carry unhedged baht positions due to the fact that the baht has recently been effectively pegged to a basket of foreign currencies as well as their optimism that should the baht be floated it would appreciate in value.

2.3 Capital Market Development Opportunities

While the Thai Financial System is of significant size with total assets exceeding \$77 billion (See Chart 2) and has the capacity to finance individual large projects they do not currently have the capacity to finance all needed investments through out the economy. In order to finance these major public and private sector investment needs Thailand recognizes the importance of continued financial market development and continued access to international capital. In recent years the equity market has flourished with almost \$1 billion of new capital being mobilized in 1989 alone. This equity market activity has been stimulated at least in part by a continuing surge in foreign portfolio investment currently totaling about \$4 billion.

521

Chart 2
Distribution of Assets In The
Thai Financial System, 1975-88
(million baht)

	1975		1980		1985		1986		1987		1988	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1. Bank of Thailand	56,232.3	24.2	142,727.3	23.9	223,933.8	18.0	249,544.4	18.0	282,522.6	17.2	301,345.3	15.6
2. Banking System	160,271.8	68.9	404,071.7	67.5	916,293.2	73.7	1,016,496.8	73.5	1,220,640.6	74.4	1,470,608.9	76.0
Commercial Banks	121,823.3	52.4	307,200.2	51.3	716,279.1	57.6	778,208.8	56.3	945,317.5	57.6	1,146,730.3	59.3
Private	92,078.4	39.6	239,895.3	40.1	588,212.6	47.3	640,736.3	46.3	747,348.2	45.6	923,408.4	47.7
Government	18,200.8	7.8	46,826.7	7.8	93,633.8	7.5	105,857.1	7.7	153,404.5	9.4	167,722.0	8.7
Foreign	11,544.1	5.0	20,479.2	3.4	34,432.7	2.8	31,515.4	2.3	44,564.8	2.7	55,599.9	2.9
Finance & Sec. Co.	23,005.0	9.9	64,793.0	10.8	130,959.6	10.5	139,842.7	10.1	159,955.1	9.7	195,687.3	10.1
Credit Fincier Co.	1,291.7	0.6	4,103.5	0.7	4,165.3	0.3	4,296.6	0.3	3,834.9	0.2	3,918.0	0.2
Gov. Savings Bank	14,151.8	6.1	27,975.0	4.7	54,839.2	5.2	94,148.7	6.8	111,533.1	6.8	124,273.3	6.4
3. Nonbank Financial												
Intermediaries	16,194.4	7.0	51,631.2	8.6	103,250.6	8.3	116,759.2	8.4	137,370.9	8.4	162,504.3	8.4
Insurance Companies	2,218.0	1.0	6,454.6	1.1	17,640.6	1.4	20,518.6	1.5	24,053.4	1.5	30,109.6	1.6
Government	-	-	-	-	-	-	-	-	-	-	-	-
Private	2,218.0	1.0	6,454.6	1.1	17,640.6	1.4	20,518.6	1.5	24,053.4	1.5	30,109.6	1.6
Specialized Financial												
Institutions	13,976.4	7.0	45,176.6	7.5	85,610.0	6.9	96,240.6	7.0	113,317.5	6.9	132,394.9	6.8
SAAC	5,186.0	2.2	17,325.4	2.9	28,473.7	2.3	30,227.9	2.2	35,595.3	2.0	37,326.4	1.9
IFCT	1,478.2	0.6	4,154.6	0.7	14,960.6	1.2	17,916.5	1.3	22,552.6	1.4	24,104.6	1.2
SIFO	55.8	0.0	55.8	0.0	56.5	0.0	57.2	0.0	5,735.0	0.0	78.4	0.0
GHB	814.2	0.3	10,116.2	1.7	13,695.4	1.1	14,696.0	1.1	15,441.1	0.9	19,523.7	1.0
Savings Cooperatives	1,719.6	0.7	4,420.8	0.7	15,182.7	1.2	19,695.5	1.4	24,348.8	1.5	30,898.4	1.6
Agriculture Coops.	3,215.9	1.4	5,920.9	1.0	8,167.8	0.7	8,481.5	0.6	11,248.1	0.7	13,958.6	0.7
Pawn Shops	1,506.7	0.6	3,182.9	0.5	5,073.3	0.4	5,166.0	0.4	6,074.1	0.4	6,504.8	0.3
Total	232,598.5	100.0	598,430.2	100.0	1,243,477.6	100.0	1,382,800.4	100.0	1,640,600.1	100.0	1,934,458.7	100.0

Source: Bank of Thailand.

Note: The exchange rate for baht to dollars has recently been approximately 25 to 1. At that exchange rate the value to total financial system assets at the end of 1988 was approximately \$77.4 billion.

124

Unfortunately, debt markets have not been very active. Development of these markets could help achieve a number of important objectives including:

- Providing a vehicle for the Bank of Thailand to conduct open market operations and better implement monetary policy,
- Providing a less speculative investment vehicle to mobilize additional domestic savings and international investment,
- Providing a needed long-term source of financing for Thailand's many large long-term projects, and
- Providing a mechanism for spreading the risks of financing large projects more broadly across the Thai financial system.

Debt market development would involve increasing both the supply of and demand for debt securities. A number of coordinated efforts are needed in the areas of increasing investor confidence, investor education, corporate education, regulatory and tax reviews, security underwriting and secondary markets.

Investor confidence and thus demand for debt securities could be enhanced by:

- Provision of complete audited financial statements for projects/firms selling public debt issues.
- Development of a bond and short-term debt rating agency.
- Maintenance of a moderate inflation rate.
- Utilizing commercial bank guarantees on a few large initial issues to remove any questions regarding credit risks.

Investor education through a seminar series in the areas of investment and portfolio management could:

- Explain benefits of portfolio diversification to include debt securities.
- Explain that some portion of savings is truly long-term and can be invested as such.
- Point out that higher yields are typically earned on long-term debt.
- Note possible capital gains/losses on trading debt securities.

Corporate education through a separate seminar series on financial management could:

- Educate corporate managers regarding the appropriate utilization of various types of financing including equity, convertible debt, preferred stock, warrants, short-term debt and long-term debt.
- Emphasize the reduction of financing rollover risks resulting from the use of long-term debt to finance long-term projects as opposed to using short-term debt that must be refinanced.
- Emphasize the risk reduction benefit of financing long-term projects at a fixed interest rate.

An overall regulatory review would be useful to identify factors inhibiting debt market development, including:

- Review bank reserve requirements regarding the holding of government bonds which currently inhibit the trading of government bonds.
- Review the tax treatment taxation of equity and debt investments to determine if it is not possible to treat them more equally.
- Review legal restrictions on issuing debentures.
- Review restrictions on life insurance company investments.
- Review laws governing trustee relationships.

Expansion of security underwriting/marketing capacities to handle larger debt issues might include:

- An expansion of the marketing sales forces at finance and security firms.
- Utilizing commercial banks to sell big debt issues.
- Relating the marketing programs to the investor and corporate education programs.
- Provision of significant commissions on initial issues to motivate salesmen to undertake difficult job of selling a "new" type security.
- Offering closed-end bond mutual funds marketed to both local and international investors which would offer professional debt portfolio management services, diversification of risk and added liquidity. In order to provide needed liquidity, secondary market development will be important, including:

- Listing of debt issues on the Securities Exchange of Thailand.
- Development of an over-the-counter secondary market by the banks and finance and security firms initially distributing the securities.
- Initial public debt issues should be of a large size, say \$100 million or more, and be for well known highly regarded projects or companies in order to have an adequate amount of securities to trade.

It is not at all clear that undertaking a select few of the above activities will have a significant impact on debt market development. For example what use is a bond rating agency if there are no bonds to rate? Thus, an extremely important issue is identifying the context in which a critical mass of such activities can be accomplished to achieve the overall objective. The financing of the above major infrastructure projects could provide such an opportunity where a large number of people would have a profit motive to undertake needed efforts. In particular, debt market development could be advanced significantly if the Government of Thailand would encourage, or require, project sponsors and financiers to make a good faith effort at selling medium and long-term debt in Thailand and internationally. Both local and international banks seem eager to help in this process including making a secondary market for such debt securities. It would also be important to develop an overall plan to coordinate the other activities identified above.

The remainder of this report is organized as follows. Section 3 through Section 9 give further background information and analysis on Thailand's economic structure, financial sector, regulatory structure, energy sector, and the potential role of multilateral financial institutions. Section 10 gives conclusions drawn from the interviews conducted in Thailand.

3. ECONOMIC STRUCTURE BACKGROUND²

3.1 The Economy

Over the last four years Thailand has experienced a dramatic economic boom. In both 1988 and 1989 real growth in gross domestic product was between 10.5 and 11 percent (See Table 1) and was almost three times as large that for OECD countries (See Table 25). Further, this rapid growth has been achieved with relatively moderate inflation rates ranging from 1.9 percent in 1986 to 5.5 percent in 1989. This exceptionally strong economic performance has also allowed the baht to maintain a relatively stable rate of exchange versus most major international currencies over the last three years (See Tables 1 and 2).

During the last 25 years, Thailand's economy has undergone dramatic changes. From an agricultural economy based upon a narrow range of export commodities (rice, rubber, tin, teak, etc) to a newly industrializing country. Rapid real growth over the last decade has brought about a significant restructuring of the national economy. Agriculture's share in GDP has declined sharply from 20.4% in 1983 to 16.9% in 1988, while manufacturing has increased in importance from 21.3% of GDP in 1983 to 24.4% in 1988 (See Table 4). This is not to say that agriculture is no longer important, Thailand is still one of Asia's main agricultural exporters. It is rather that the growth of manufacturing as well as the services sector, particularly tourism, has gradually reduced agriculture's dominance.

The changes in economic structure since 1960 have been brought about in the context of an open economic system which has promoted maximum private sector investment. Growth continued throughout the early 1970's as Thailand was able to find significant export markets for such crops as cassava, sugar cane and pineapple as well as for new manufactured goods, notable textiles and garments.

In the early 1980's, however, several major threats emerged which conspired to endanger the momentum of Thai economic growth. The sharp oil price increases of 1979-80 pushed the country's import bill up dramatically and necessitated a major investment program in alternative sources of energy. Despite the crises provoked by oil price rises, Thailand weathered the world economic shock much better than its neighbors (See Table 25) and, after several years of relatively low growth, the economic growth rate bounced back to a record 11% in 1988. The discovery of natural gas in the Gulf of Thailand proved a major windfall in this respect.

²The content of this section follows in part the discussion in "Thailand & Burma: Country Profile 1989-90," The Economist Intelligence Unit, Nov 1989.

The Thai economic growth rate is expected to remain in the neighborhood of 10% in 1990. Despite a 57.5 million baht deficit in the current account, the 1989 balance of payments managed to net a surplus of 111.5 billion baht. Thailand's international reserve rose from 7.1 to 10.5 billion US\$. This was mainly due to the dramatic influx of foreign capital into the Thai economy in the forms of direct and portfolio investment and loans. Per capita income at current prices is about US\$ 1,215 in 1989.

3.2 Public Finance

The tax system in Thailand is considered to be an inefficient revenue collector. Despite several attempts to broaden the tax base in the past few years, the government has found it difficult to bring about the increases in revenue it is seeking. Nearly 75% of government revenues are still derived from indirect taxes which are sensitive to any slowdown in economic activity (See Table 7).

Faced with the disappointing results of the search for higher revenues, government policies have focused on reining in expenditures (Table 7). Given this relatively conservative spending program and booming economy the Thai government is now in the enviable position of running budget surpluses.

Due to the determined attempt to keep foreign borrowings to a minimum, government budget deficits in the late 1970's and early 1980's were financed mainly by domestic borrowings (Table 7). In recent years, the public sector borrowing requirement has been cut considerably, for example, in 1986 it represented just 3.1% of current GDP. In 1988 and 1989 the government ran a budget surplus. In the past the main source of government borrowing has been the Bank of Thailand, but in recent years commercial banks have come to play a larger role via the issue of promissory notes to the Government Savings Banks (GSB) and the sale of bonds mainly to commercial banks, and finance and insurance companies.

3.3 Foreign Trade

Until recently Thailand's trade profile was that of the typical developing country, with agricultural products dominating exports, while imports were mainly composed of finished manufactured, capital goods and semi-manufactured goods ready for assembly. However, the surge in manufactured exports over the last few years, particularly in textiles and integrated circuits, and low agricultural commodity prices have changed this pattern. In 1985 textiles became the most important single commodity export in terms of value and the gap between textiles and rice widened considerably in 1986 and 1987 (See Table 12). Undoubtedly, Thailand is on the verge of becoming one of Asia's new industrial countries.

Early in the last decade, Thailand's foreign trade position was adversely impacted by oil price increases, higher imports of both capital and consumer goods, depressed commodity prices and a limited exportable surplus of rice. This situation improved somewhat in the period of 1985-87 as Thailand reduced its dependence on oil imports (See Table 6), oil prices weakened and the baht devaluation stimulated a boom in the country's industrial exports.

Although export growth in 1986-88 far exceeded expectations by expanding at over 30% annually, imports have expanded even faster and the trade deficit widened again to a record deficit of Bt 109 billion in 1988 (See Table 11), as the country's economic boom pulled in 54% more imports than in 1987. While much of the import surge has fed the booming economy's appetite for capital goods (See Table 12), such a deficit can be supported only by the continuation of buoyant service sector earnings and massive capital inflows.

3.4 External Payments & Debt

In the early 1980's, the large trade deficit contributed to a marked deterioration of Thailand's current account position. Until the windfall of the decline in world oil prices, the deficit on the current account had exceeded US\$2 billion for five out of the previous six years, reaching a record of \$2.87 billion in 1983 (See Table 14). Since then the situation has improved markedly. The overall balance of payments has been in surplus since 1984 as capital inflows have offset the deficit on the current account. Since 1987 capital inflows have included a sizeable amount of direct and portfolio investment.

However, historically, Thailand runs a steady surplus on the service account, making up for the deficit on the balance of trade. In particular, the country's earnings from tourism have been growing steadily to become the main source of foreign exchange. More recently, the large amounts of remittance income from Thai workers abroad, mainly in the Middle East, has been a major element contributing to the service surplus. These two major items are partly offset by the negative flow of investment earnings.

As for the capital account, the inflow of foreign capital year after year has been the factor which has kept Thailand's payments in surplus. This capital inflow reached a huge \$2.8 billion in 1988. Traditionally composed mainly of loans and credits, capital flows were boosted in 1988 by a surge in direct investment and portfolio investment. Until the authorities imposed a much stricter policy towards these operations in the early 1980's, the government used to be the main recipient of the loans and credits. However, since 1986, the government sector has actually been making net repayments of capital.

Thailand's debt mounted steadily in the late 1970's as a result of the burgeoning budgetary and current account deficits. The government's domestic debt has more than doubled since 1980, the bulk of it covered by government bonds. Current domestic debt stood at Bt 213 billion at the end of 1988. Foreign debt equally has expanded rapidly with the total public sector debt standing at \$14 billion at the end of 1987, representing 29.9% of GNP (See Table 15). Of this total it is estimated that some 32% is owed to multi-lateral aid agencies, notably the World Bank, 38% to bilateral agencies (especially Japan) and 30% to private creditors, chiefly financial markets.

196

4. FINANCIAL STRUCTURE BACKGROUND

With the exception of 1988 and 1989, Thailand has followed a fiscal policy which has produced regular budget deficits for most of the past 20 years (See Table 7). At the same time it adopted a rather passive monetary policy. Deficits in the early 1970's ran at an average of 3.8% of GDP, the bulk of which were financed from domestic sources, with foreign borrowing averaging only 17.8%. Monetary policy was seen as a primary instrument for supporting growth, although the expansion of credit was occasionally held in check to maintain price stability and moderate the balance of payment deficit. Interest rates were in general allowed to adjust to the rate of credit expansion.

In the late 1970's the oil price rises and the need for increased military expenditure led to a rapid increase in government expenditure as a whole resulting in a substantial widening of the public sector deficit which rose to over 6% of GDP by 1979/80. An increasing proportion of this deficit was financed by foreign borrowing which led to a growing foreign debt service problem. This policy was less than prudent and in the years of recession between 1983 and 1985 the government sought to rein in its budget deficits through an austerity program. This policy adjustment has proven effective in that budget surpluses have been recorded in 1988, 1989 and so far in 1990.

In addition, credit growth has been rapid during the recent economic expansion with M2 increasing over 25% in 1989 (See Table 10) raising concerns over potentially higher future inflation rates. These concerns have caused the Bank of Thailand to look closely at its monetary management tools and conclude that a more liquid debt market would facilitate its carrying out open market operation.

One of the disappointing aspects of the Thai financial situation in recent years has been the shortfall in savings relative to investment (See Table 8). The failure to mobilize additional domestic savings has brought criticism of the Thai domestic banking system for not offering adequate incentives to savers. There has been a large spread between the interest rates offered on deposits and those charged for loans. For instance between 1986 and June 1989 savings deposits were receiving a maximum annual return of 8%, while loans were charged 15% (See Table 9). This interest rate spread is some two to three times as large as is found in more competitive financial markets and points to the need for interest rate deregulation and the lowering of entry barriers for new competitors in the financial system. Current policies have allowed some relaxation in interest rates on fixed deposits resulting in more competition among the banks for deposits.

5. FINANCIAL INSTITUTIONS

The financial system is comprised mainly of banks, nonbanks, insurance companies, a few sectorally specialized financial institutions and the Bank of Thailand. The total assets of the financial system have been growing at a compound annual rate of 19% since 1970. As of the end of 1988, system wide assets amounted to over \$77 billion.

5.1 Central Bank

At the apex of the financial system is the country's central bank, the Bank of Thailand, which plays an important role in overall financial management. Its main function is to act as the note-issuing authority; banker to the government and other banks, and fiscal agent of the government in its dealings with international monetary organizations.

The Bank is authorized by the Ministry of Finance to manage the public debt, to administer exchange controls, and to supervise all commercial banks, finance companies, securities companies, and credit foncier companies. The Bank of Thailand is also entrusted with the power to prescribe maximum interest rates on deposits and loans, the cash reserve ratio, the ratio of capital funds to risk assets, etc.

Although there has not yet been any deposit insurance scheme in Thailand, a support program was formed. In 1985, the Bank of Thailand Act was amended, resulting in the establishment of the Financial Institutions Development Fund within the Bank of Thailand to provide financial and managerial assistance to those financial institutions facing difficulties. Beneath the Bank of Thailand there are 15 Thai commercial banks with 2,061 branches.

5.2 Commercial Banks

The commercial banking sector dominates the financial system in Thailand. Its relative share has gradually but steadily increased from 59% of total financial system assets in 1970 to 76% in 1988. Over the same period, the share of the top three banks grew from 45% to 59% and that of the top five banks from 56% to 70% (See Table 18). Obviously, Thai banking is an industry with a high degree of concentration. Although the commercial banks gained in relative market share, the Bank of Thailand's share declined from 36% in 1970 to 16% in 1988, indicating a healthy structural development of the financial system. On the whole, the bigger institutions have a much better reputation. The Bangkok Bank is thought to be the biggest in the whole of South East Asia and is developing a worldwide reputation; it and others like the Thai Farmers' Bank, the Thai Military Bank and the Siam Commercial Bank have developed modern and efficient services, which offer important support to Thai industry and commerce.

In addition to the Thai commercial banks, 14 foreign banks are represented in Thailand. These have been carefully regulated in recent years and only one new branch has been allowed to open since 1965. As a result, the share of foreign banks in the overall banking sector has declined sharply, from about 17% of total banking assets in the early 1960's, to under 6% in 1980 and to about 4% by 1988 (See Table 17).

On the other hand, restriction on new bank operations for both domestic and foreign commercial banks, has led to the growth of a second tier financial sector over the last decade or so in the form of a plethora of finance companies, security companies and credit fonciers (mortgage companies). These rival the banks in offering loans, but are not allowed to accept public deposits. Finance and securities companies constitute the second largest segment of the financial system, accounting for 10% of total assets. This segment is characterized by a large number of companies, with a very wide range in size of individual institutions. Currently, there are a total of 93 F&S companies, some are larger than the small commercial banks. The F&S companies generally originated either (a) as affiliates of commercial banks, in some cases with the participation of foreign financial institutions, established to provide services that the parent bank could not legally provide directly; or (b) as formalized small institutions engaged in quasi-banking activities, generally high-risk, high-margin consumer finance.

Thailand also operates a series of special banking institutions in the public and semi-public sector, which serve to extend loan capital to various economic sectors. Thus the Industrial Finance Corporation of Thailand (part owned by three domestic commercial banks) and the Small Industries Finance Office serve industry; the Bank for Agriculture and Agriculture Cooperatives helps farmers and farm institutions; while the Government Housing Bank finances property purchases.

5.3 DEVELOPMENT BANKS/GOVERNMENT BANKS

5.3.1 Small Industries Finance Office (SIFO)

The SIFO was formed in 1964. Its main purpose is to provide concessional small, medium and long-term loans and technical advice to small industry. The SIFO receives most of its funds from the government. Since it is not a juristic entity, it can not raise funds by borrowing. SIFO's lending were categorized to the manufacturing, handicraft, cottage and home and service industries to finance the purchase of plant and machinery, equipment, erect new buildings or for working capital purposes.

5.3.2 The Government Savings Bank (GSB)

The GSB main function is basically to mobilize small savings. It has an extensive network of branches throughout the country and it also operates a number of mobile units on land as well as along waterways. The GSB mobilize savings mostly through the acceptance of savings and fixed deposits, as well as through the sale of premium savings certificates. Aside from performing the function of a typical savings institution, the GSB has a banking department which carries out normal banking operation.

5.3.3. Government Housing Bank (GHB)

The GHB was established in 1953. It is completely owned by the government and is under the supervision and control of the Ministry of Finance. Its basic function is to help persons of moderate income to obtain their own houses through its financing facilities.

5.3.4. The Industrial Finance Corporation of Thailand (IFCT)

The FTC was created in 1959. Its function is to promote industrial development and to assist in the development of the capital market in Thailand. Loans are made available for economic and technically viable development projects within certain industries. Although set up by a special legislation, the IFCT is mostly owned by private entities, principally the Thai commercial banks, while the rest is owned by the Ministry of Finance.

The IFCT operates along the line of a private development bank or a development finance company. It specializes in financing fixed assets through the extension of medium and long-term loans to different industries, particularly those in the private sector.

5.3.5 Bank for Agriculture and Agricultural Cooperatives (BAAC)

BAAC was set up in 1966. its main function is to provide credit to the agricultural sector at low interest rates - both directly and through agricultural cooperatives and farmers' associations. At end of 1987, the BAAC has an extensive network of 70 branches and 585 field offices throughout the country. Loan facilities for client farmers may be of a short, medium and long term nature. Presently, the Ministry of Finance owns about 99% of the BAAC's shares. The remaining shares belong to agricultural cooperatives, farmers groups and individuals.

5.4 NON-BANK FINANCIAL INSTITUTIONS

5.4.1 Finance & Investment Companies

The first full-fledged finance companies began operations in 1969 and many more since then. The finance and securities companies are second in importance only to the commercial banks. They may not accept any type of deposits from the public. In order to compete better with commercial banks for funds from the public, finance companies have offered appreciably higher interest rates on their promissory notes than those offered by commercial banks on their deposits. There are 112 finance and securities companies in Thailand. Of these, about 20% of them are finance companies, 10% dealing only in the securities business, and the rest of them dealing in both types of business.

Finance and securities companies obtain most of their funds through borrowings from commercial banks and the issuance of promissory notes. Most financial and securities companies funds are used as loans and receivables. Installment credit was the industry's initial area of lending specialization, but short-term commercial lending, often by purchasing customer promissory notes, has become more active. Most credits granted by finance companies are short-term in nature, mainly in the form of term loans with maturities of less than one year. The industry's other major use of funds is in cash or bank deposits and in securities investments. All finance and securities companies are authorized and regulated by the Bank of Thailand, with approval from the Ministry of Finance.

5.4.2 Insurance Companies

The non-life insurance companies in Thailand are regulated by the Insurance Commissioner and Minister of Commerce. To be licensed, a firm must first make certain minimum capital requirement depending on its type of business. The non life business are classified into fire, automobile, marine and transportation. Life Insurance and life companies in Thailand operate under the Life Assurance Act. It restricts the firm's interest primarily to Thai government and government guaranteed bonds and bonds of the World Bank.

There are presently 12 life insurance companies. Of these 12 companies, only one is registered abroad. Life insurance companies operate many branches throughout the country. All life insurance companies are regulated and supervise by the Ministry of Commerce.

5.4.3 Cooperatives

The cooperative movement in Thailand began in 1916. Over the years, the number of cooperatives has increased substantially. At the end of 1987, there were altogether 2634 cooperatives in

Thailand. Cooperative can be separated into 6 categories - the most important of which are the Agricultural cooperatives and the savings cooperatives.

5.4.1 Agricultural Cooperatives

Among the different types of cooperatives, agricultural cooperatives which spread throughout the country, are the largest in number and in influence. At end of 1987, there were altogether 1157 agricultural cooperatives. These cooperatives have been organized by farmers for the purpose of making credits available to members at low interest rates. Their principal sources of funds are borrowings from the Bank for Agriculture and Agricultural Cooperatives and capital accounts from members subscriptions plus retained earnings.

5.4.2 Savings Cooperatives

Savings Cooperatives, or credit unions, are formed mainly on an occupational basis. A great majority of savings cooperatives are those organized by teachers. Most of the members of savings cooperatives are salary earners. At end of 1987, there were 732 savings cooperatives in Thailand. The main source of funds has been their paid-up share capital from members. Each member is required to contribute a minimum monthly subscription which is obtained directly through a payroll-withholding system. Savings cooperatives utilize most of their fund as loans to members.

5.4.3 Other NBFIs

Other NBFIs include pawnshops, mutual funds, provident funds and discount houses.

5.4.4 Credit Foncier Companies

Credit Foncier Companies are those companies which finance the purchase of immovable property through either making loans secured by immovable property or buying immovable property with the seller's right of redemption. At end of 1987, there were 21 credit foncier companies operating. They are presently allowed to mobilize funds which are longer than one year. They may borrow from the public at a minimum amount of 100 Baht per account.

6. FINANCIAL MARKETS

6.1 Stock Exchange

In an effort to increase levels of public saving, Thailand established the Securities Exchange of Thailand (SET) in 1975. However, it has been only since 1986 that the SET has generated the anticipated interest in equity investment and in 1987 the market rose rapidly as a result of growing foreign interest until the October crash (See Table 27 & 28). Since then there has been rapid recovery and in mid-1990 the SET index passed through the 1000 mark, way above its pre-crash peak. The SET rose index 36% in 1988 and 127% in 1989 (See Table 26). From the end of 1985 to the end of 1989, the market capitalization of all stocks listed on the SET has increased by more than thirteen times to Bt 659 billion (See Table 28). The number of listed companies on the exchange is now growing steadily and the SET promises to become a significant source of capital for industry in the coming years (See Table 33, 34 & 37). For 1989 alone over 25 billion baht (approx \$1 billion) of capital was mobilized by SET listed companies (See Table 28).

A good deal of the upward movement of the SET has been due to a continued surge in foreign portfolio investment in Thailand which more than doubled in 1989 to over 97 billion baht (approximately \$4 billion). Foreign investment and borrowing are now being vigorously encouraged by the Thai authorities, which are concerned not to let shortages of capital in the domestic market become an obstacle to economic growth. There are no restrictions on foreign holdings of Thai stocks; foreign holdings amounted to 12% of all listed shares and 23% of total capitalization as of the end of 1988 (See Table 29).

Although the SET has begun to play a major role in the country's capital formation process (See Table 35 & 36), periodic problems still occur. During recent periods, violent fluctuations have taken place in the SET index as rumors of new taxes and government changes have prompted speculators to off load stocks rapidly (See Table 38 & 39). These fluctuations point to the continuing short-termism and susceptibility to rumors that prevail on the SET. For example, one particular company of sub-brokers, which has since been under police investigation, is reported to have been responsible for the rumors that set off the downturn in January 1989.

6.2 Debt and Money Market

In relation to the overall financial system, only the stock market component of the capital market has reached a respectable size; the money market at the short end and the debt securities market at the long end are both very small (See Table 30, 31 & 32). In the primary money and debt markets, the total amounts issued in

1988 were about Bt 20 billion (including Bt 16 billion in commercial paper and Bt 2 billion in treasury bills) and Bt 25 billion (including Bt 20 billion in government bonds and Bt 2 billion in state enterprise bonds) (See Table 22 & 24). By contrast, outstanding credit extended by banks and F&S companies as of December 31, 1988, amounted to Bt 1,116 billion.

In recent years, treasury bills have been held principally by the Bank of Thailand and the Exchange Equalization Fund, one of the entities empowered to hold foreign reserves (See Table 23). There is no active secondary market. The principal holder of government bonds are the commercial banks, to comply with primary and secondary reserve requirements. There is also no active secondary market in government bonds; they are normally held by the commercial banks to maturity. The lack of active secondary markets in both short-and long-term government papers is because their supply is so small. Given the government's surplus budgetary position in the last two years and the near future, the primary issues of treasury bills and bonds are not expected to increase in coming years.

6.3 Interbank Loan Market

The interbank loan market is fairly well developed. The larger domestic banks are the traditional lenders within the market and the foreign banks, financial companies and smaller local banks are generally the borrowers. Longer borrowings or more risky advances are normally made by way of repurchase agreements, rather than direct advances.

In May 1985, commercial banks introduced the Baht Interbank Offered Rates (BIBORs), which are average rates at which several large banks lend to one another. Presently, seven-day, one-month, and three-month BIBORs are quoted daily.

7. REGULATORY STRUCTURE

7.1 Inflation

The continuing Thai economic boom has created some stresses and there is mounting concern that inflation may be about to take off. According to official estimates, the year on year inflation rate rose to 5.5% in 1989. Nevertheless, there are fears that wage increases and raw material shortages will lead to an acceleration of inflation if measures are not taken to rein in demand. The government has taken a number of small steps to tackle inflation. For example, there has been an attempt to tighten controls on price rises through the scrutiny of the Anti-monopoly and Price Fixing committee. Moreover, the government has been attempting to reduce liquidity as part of its anti-inflationary package by issuing a new series of government bonds. This has begun to push up interest rates.

7.2 Foreign Banks

After many months of preparation, five new foreign banks have been chosen from among nearly 30 applicants to set up offices in Thailand although their activities will be restricted. The Long Term Credit Bank of Japan and the Industrial Bank of Japan, which agreed to do business in long term credit banking, are not allowed to accept baht deposits other than for loan repayments. Likewise Sumitomo Bank, Westpac Banking Corporation of Australia and the Societe Generale of France, will not be allowed to engage in retail banking activity. All banks are required to have an initial registered capital of \$50 million, to be increased to \$300 million over three years.

Ironically, some of the pressure on the domestic capital sector would be relieved if the government were to take the bold step of allowing new foreign banks to open business in Thailand.

7.3 Trade and Investment

In general Thailand has mainly used tariffs for import restriction. In the 1960's they were imposed at extremely high levels to support infant industries but lately there has been some pressure, particularly from the World Bank, to reduce tariff protection in order to force restructuring of the industrial sector. Tariff rates now range from 5% to 60% with some higher rates for particular luxury goods. Conversely, although the country is now in the middle of an export drive and in this context encourages export via cheap credit and investment incentives, it is only since the beginning of 1986 that the contradictory policy of export taxes, typically on rice, was abandoned.

Thailand is a staunchly open market economy and ever since 1961 has had a policy, supervised by the Board of Investment, to

encourage foreign investment. This involves major concessions to foreign industrial enterprises allowing them to own land and repatriate capital and in the form tax holidays and waivers of duties on imported capital goods. This policy has changed over time and at present there is greater stress on industries which are involved in export production, which use local raw materials and parts and which are willing to locate outside the Bangkok metropolitan area. These policies have been effective in attracting large numbers of foreign enterprises; although it is only in recent years that Thailand has received large scale investments in such fields as petroleum, other mining enterprises and heavy chemical industries.

7.4 Privatization

Faced with mounting foreign debts, the Thai government has since 1985 limited its annual foreign borrowings to between \$1 and \$1.5 billion. This policy has forced state enterprises to go to the capital markets for funds. In addition, Thai government planners have also long pushed for privatization as a solution to expanding the country's overburdened infrastructure. However, large scale privatization plans have been stalled by entrenched government bureaucracies and state labor unions which see privatization as a threat. Indeed, government planners now say they are favoring an incremental privatization of new programs and facilities rather than of existing agencies or facilities. That is, the new privatization philosophy will be on new projects or new investments.

Three issues have been spotlighted: partial privatization of Thailand's new deep-sea container port at Laem Chabang; private financing for expansion of government-owned Thai Airways International's fleet, and a proposal for eventual private installation of three million new telephone lines by the Telephone Authority of Thailand. On the energy side four forms of privatization has been discussed, i.e., private co-generation of power, build-own-operate-transfer, partial privatization of EGAT's shares, and privatizing EGAT's facilities. At the moment, EGAT however has only agreed to private participation at the co-generation level.

8. ENERGY/POWER SECTOR³

Thailand's rapid development over the last 20 years has been energy intensive and fueled in significant part by imported oil. The apparent absence of any significant supplies of petroleum left the country as one of the largest importers of oil among developing countries at the end of the 1970's accounting for over 80 percent of energy consumption. The foreign exchange bill for imported oil, reached Bt 65 billion fully 30 percent of all imports in 1981. This dependence stimulated a major drive to develop indigenous sources of energy in the last decade, notably natural gas, lignite and hydroelectricity, although small deposits of petroleum have also been discovered which offer some encouragement for the future. Nevertheless for 1988 over one-third of the country's energy supply (12.7 out of 34.2 million tons of oil equivalent) was fueled by imported oil (See Table 6).

Total proven reserves of natural gas are put at 8.5 trillion ft³ and it is these discoveries in the Gulf of Thailand and onshore which offer the greatest prospect of future energy diversification. Currently, the natural gas is being mainly used to supply power stations in the Bangkok area, although some is being supplied via an inland pipeline to cement works in the Central Plain. Due to the weakness of world oil prices, which has made imported oil competitive with natural gas, (at least until the recent Mid-East crises) domestic users have been reluctant to commit themselves to further substitutions of natural gas for oil.

Recently, there is some development in onshore hydrocarbons exploration in Thailand. Apart from the gas at Nam Phong and the long tapped tiny government operated oil field at Fang in the far north, the only real success so far has been the discovery by Shell of oil in the lower northern province of Kamphaenghet. There is, however, no reason to presume that Thailand contains any really substantial fields which would make it a significant producer on a world scale.

Alongside this activity in the oil and gas sector, Thailand has stepped up its exploration and development of lignite. Reserves are now placed at 180 million tons at least, mainly in the north of the country, and excavation for electricity generation is being increased.

Fuel consumption increased by 13% in 1989 to average 418,120 barrel/day in crude oil equivalent, with demand for refined products up by 15% to 339,340 b/d and that for indigenous natural gas up by only 3.7% to 78,780 b/d equivalent. With indigenous

³For more details, see The Economist Intelligence Unit, "Thailand & Burma: Country Profile 1989-90," Nov 1989, pp.18-19 and "Thailand & Burma: Country Report," No 1, 1990, pp.17-18.

petroleum production only 20,000 b/d and condensate production 18,000 b/d, the bulk of petroleum products had to be imported, at the rate of 312,000 b/d, 27.7% above 1988 levels.

Electricity demand is rising at much the same rate as overall fuel demand. It grew by 14.5% in 1989, exceeding the predictions of the Electricity Generating Authority of Thailand (EGAT). EGAT has forecast an increase of a further 12% in 1990 to a record 6,759 mw, but this is regarded as conservative by many commentators. It is expected that reserve capacity will fall once again to around 11%. To meet rising energy demand the Thai government is seeking to increase capacity to 9,249 mw by 1991, which it is estimated would give the country a 16% capacity cushion. It is estimated moreover that at least a further 900 mw a year will be needed throughout the 1990s.

There are increasing concerns that due to financing constraints EGAT will not be able to carry through on its own ambitious program to expand generating capacity. EGAT and the Provincial Electricity Authority have accounted for roughly 37% of total borrowings under the government's previous \$1.2 billion foreign loan ceiling. Further, the forecasted level of investment in the Seventh Plan could even climb higher and be approximately equal to the new foreign loan ceiling of \$1.5 billion per year. Recognizing that this will require substantial additional foreign borrowing which would be contrary to the government's broader financed objectives, the National Energy Policy Committee has recommended that the private sector should be invited to participate in production and distribution of electricity. Also, the MOF has recently called for the partial privatization of EGAT plants. In addition, there are still proposals to list EGAT on the stock exchange. However, as discussed previously given the opposition of the politically powerful EGAT and its unions it is unclear the extent to which the private sector will actually be allowed to participate in Thai electric power production.

9. Potential Role of Multilateral Financial Institutions and International AID Organization in LDC Private Power Projects

The following information and views were compiled through a series of interviews with professionals working for the World Bank, IFC, ADB, Inter-American Development Bank, and USAID. Everyone interviewed would not necessarily agree with all opinions expressed below. Topics covered include the projected magnitude of LDC power financing needs, possible roles for multilateral financial institutions and international aid organizations.

9.1 Magnitude of LDC Power Financing Needs

9.1.1 As LDC governments are constrained in making massive investments required in the energy sector, it has become increasingly critical to consider the issue of how to finance increments in power supply, including the private sector's investment in new power plants. The World Bank estimates that about \$1 trillion of new power sector investments may be needed in LDCs during 1990-2000.⁴ Half of the amount is required for China and India. Hopefully this amount can be reduced by more efficient power sector operations as well as energy conservation. However, there is no possibility for multilateral financial institutions to finance this magnitude of power sector investments requirements.

9.1.2 In order to encourage active participation of private industry in the power sector, innovative financing schemes and financial engineering have to be considered seriously. Several professionals prefer BOO to BOT, since there should be not only an encouragement of new entry by the private sector into power production but also no mandatory exit as envisioned in BOT. The exit decision by the private sponsors should be left on the business merits and other strategic/financial consideration rather than being preordained as in BOT.

9.2 Possible Roles for International Financial and AID Institutions

The executive board of the World Bank may have to come up with a set of clear policy guidelines on the Bank's role in BOO/BOT schemes. Four possible roles can be envisioned for the Bank and other multilateral financial institutions to play. First, the Bank can be instrumental in the promotion of the suitable BOO/BOT environment in LDCs by encouraging and assisting LDC governments to pursue the right mix of market liberalization and regulatory reforms. Licensing, property rights, and similar issues are critical. Second, the Bank can, either individually or in co-financing with other multilateral and bilateral financial

⁴Interview comments of Mr. John Besant-Jones, Principal Energy Economist, Industry and Energy Department, World Bank.

institutions, provide a credit line to an LDC government to assist in financing the BCO/BOT scheme. Such financial assistance will enhance the confidence of the private project sponsors as well as the credibility of the project itself in various ways. This role is the one played by the World Bank in the Pakistani BOO scheme currently under active discussions. A similar role may be possible in the Philippines. Third, the Bank may become involved in the foreign exchange convertibility guarantee along with MIGA. Lastly, even though the Bank cannot lend directly to the private power project entity being established in the host country, the Bank may assist in certain ancillary projects such as power transmission and port facilities. Of course, these project loans from the Bank have to be processed through the normal official channels.

9.3 Private Sector Energy Development Fund in Pakistan

A group of multi-and bi-lateral donors led by the World Bank have created a Private Sector Energy Development Fund (PSEDF) for Pakistan to be used for qualifying power projects. This fund will be lent by the World Bank to the Government of Pakistan who in turn will lend up to 30% of the total costs for an approved and viable private power project. The PSEDF will be managed by Pakistan's National Development Finance Corporation whose loans will be subordinated in cash flow to the commercial (senior) lenders. In addition, the World Bank has also approved an Expanded Co-financing Operation (ECO) to cover sovereign risk.

Projects will generally be operated on a Build-Own-Operate (BOO) format by private developers. Power is expected to be sold directly to the Water and Power development Authority's grid. Various operating bonuses and penalties (on availability, outages, generation, and etc.) will likely be established via the Power Purchase Agreement (PPA) to assure proper incentives and reliable supply. Various tax, regulatory, and default agreements will be covered in an Implementation Agreement (IA).

Currently, the 1292 MW (gross capacity) Hab River projects is nearing financial close. The financing arrangements of the Hab River projects are as following:

- | | |
|------------------------|-----------------------------|
| • Equity holders | 20% of total projects costs |
| • PSEDF loan | 30% of total projects costs |
| • Commercial financing | 50% of total projects costs |

Promoting companies, led by Xenel Industries Ltd., of Saudi Arabia will take about a third of the equity, while another third will be internationally offered shares, the remainder of the equity is expected to be raised locally. For legal reasons, the local equity will be issued in form of bonds convertible to shares after the four-year construction period. In addition to the local equity, it is also envisaged that about 10% of the commercial financing will be raised in the local capital market. This

project, no doubt, will have a big impact on the development of the capital market in Pakistan. In order to attract the sponsors to invest in Pakistan the Government of Pakistan (GOP) has agree to establish a tariff which would result in a real return of 18% to the investors. This together with the assurance of convertibility and repatriation of the dividends earned has kept the original sponsors interested in this project despite lengthy and cumbersome contract negotiations.

A consortium led by Mitsui & Co. Ltd. and Ishikawajima-Harima Heavy Industries Co. Ltd., both of Japan, with Ansaldo GIE of Italy and Campenon Bernard of France will build the plant under a lump-sum, fixed-price turnkey contract. British Electricity International (BEI) will be the plant operators for the Hab River Power Group.

10. Conclusions from Thailand Interviews

The following sections give the summary views of a number of private and public sector professionals interviewed in Thailand during the period July 23 to August 3, 1990 (See Table 40) for a list of people interviewed). Topics covered include the opportunities for Private Power Project, Financial Market Regulatory Issues, Foreign Exchange Markets and Risks Management, Project Financing in Thailand, Financing Plan for the Proposed Skytrain Project, and Debt Market Development Opportunities.

10.1 Private Power

Various plans have been put forward by the Government of Thailand to "privatize" several state owned enterprises including The Electrical Generating Authority of Thailand (EGAT), Thai Oil, and Thai Airways International, port functions, etc. These proposals, which have the backing of the Ministry of Finance and others, stem from both a desire to involve the private sector in financing these large capital intensive projects, as well as from some concerns regarding operational efficiency. A continued emphasis on private sector involvement is expected in the forthcoming 7th national plan. However, it is important to remember that Thailand is a land of consensus and the process of project approval goes slowly.

In this regard, current privatization efforts of Thai Airways, port functions and EGAT are all coming under political attacks from the managements and unions. These groups apparently fear, in part, a loss of job security and generous fringe benefits. In some cases it may prove necessary to consider adjusting salary levels to ease opposition. The most likely privatization effort in Thailand in the near future would be the public sale of common shares in Thai International Airways for which strong domestic and international demand is expected.

In the case of EGAT, people mostly (but not uniformly) believe that it is efficiently run. The principal issue is thus financing which is a real problem given that the Royal Thai Government's (RTG) self imposed overall annual foreign borrowing limit of \$1.5 billion is approximately the same magnitude as EGAT forecasted borrowing requirements.

As early as 1987 the Government of Thailand started to push for private power and by February 1989 came forth with proposals that 30 percent of new power plants be private. However, the current law establishing the Electrical Generating Authority of Thailand gives EGAT a monopoly. In order for private power projects to proceed either EGAT would have to agree to cooperate

or the EGAT act would have to be modified which it is believed would be difficult to accomplish politically.

To date, little progress has been made on large scale private power plants. For example, Australia proposed to build six 700MW plants for a total of 4,200MW and ship in Australian coal to fire them. The RTG initially supported this concept but after opposition from EGAT and some negative comments regarding potential environmental impacts from the king, this proposals is no longer moving forward.

In fact, at present the RTG no longer is talking much about Joint Public Private (JPP) power plants or Independent Power Producers (IPP). Again the problems appear to be mainly the opposition of EGAT and its unions which are politically powerful and fear reductions in what some people believe to be unnecessarily high employment levels. Previously the dock workers union blocked an unwanted privatization in their area.

In addition, proposals keep coming forward to list EGAT on the Securities Exchange of Thailand (SET). A limited sale of shares (less than 50 percent) may happen, although, some investors express concerns that EGAT would be constrained regarding price increases and thus its profits could suffer.

EGAT has apparently commissioned a study of alternatives for private participation in electric power generation. Preliminary indications are that EGAT might be more favorable to a build own and lease project where EGAT would end up with operational control of a plant built and owned by private sponsors.

On a smaller basis progress has been achieved on co-generation projects. Current proposals center on projects with up to 50 mega watts of power being sold to EGAT and the remainder used by the developer or sold directly to customers in the local area where the project is built. There remains an issue as to whether and how large a fee EGAT may collect on power sold to outside customers from co-generation projects.

While it is not clear what type if any, private power projects may ultimately be undertaken, the project structure under most active review at present is called a Joint Public Private company (JPP). Under this structure EGAT would join in with equipment suppliers, fuel suppliers, and the project's managing contractor to build own and operate the power plant. The power plant would have a long-term take or pay contract to sell electricity to EGAT.

10.2 Project Financing For Private Power Projects

As previously discussed in detail, this study developed a "Prototype Private Power Project" which was characterized as a 200 megawatt, combined cycle gas plant costing approximately \$170

million. This prototype project and associated financing plan was discussed with various professionals knowledgeable about Thai financial markets and project financing. A number of opinions were expressed regarding the financing of potential private electric generating projects including:

- Thai commercial banks, finance and security firms and other non-bank financial institutions clearly have the capacity to finance \$175 + million dollar projects, if they are creditworthy.
- It is widely believed that EGAT could borrow directly without a Thai government guarantee, if it were allowed to do so.
- Further, since EGAT is creditworthy a well structured private power project having a take or pay contract to sell power to EGAT could likely arrange private financing without Thai Government guarantees or World Bank and ADB assistance.
- With Board of Investment approval, the securities of major new projects can be listed on the SET immediately.
- Also at present, local investors favor equity or equity linked securities. New projects should consider using the maximum amount of equity and convertible debt financing.
- Bank guarantees of debt issues would likely make them more attractive for local investors. Certain tax incentives could significantly improve the demand for long-term debt. One approach suggested would be to waive the tax on interest income for certain high priority projects.
- Export credits and supplier credits would likely be available to a BOO/BOT project having a take or pay contract to sell electricity to EGAT. While Export/Import banks typically want sovereign guarantees, these are not absolutely necessary in all cases. For example, in the case of the proposed "Skytrain" project Export/Import banks have apparently been willing to accept commercial bank guarantees.
- The structure of the fuel purchase contract would have an important impact on the financing and foreign exchange risk exposure of the project. A fixed price contract would be favored but a buffer fund to cover fluctuations in fuel prices might also work.

- On the take or pay contract a fixed price would seem reasonable. However, if cost is less than projected, then the projects' sponsors might earn a larger profit and vice versa.
- Regarding foreign exchange risk, project sponsors would likely be required to bear or manage this risk. Financing locally in baht and then acquiring needed foreign exchange in the spot market would minimize foreign exchange risk. Alternatively longer-term (5 to 7 year) currency swaps are available for managing the risks of foreign currency denominated financings.
- Under current conditions a 15 to 16 percent interest rate would likely be available for debt financing in Thailand.
- Some type of international arbitration of contract disputes through the International Chamber of Commerce (ICC) might be possible.
- With appropriate take or pay contracts and other security arrangements the debt to equity ratio could be higher than 75/25.
- Various tax incentives could help facilitate the financing of private power projects including income tax holidays, waiving import taxes on equipment, etc.

It was also pointed out that the Industrial Finance Corporation of Thailand (IFCT) would be a logical partner to look to in a private power project. IFCT has substantial experience in arranging international financings without government guarantees. It also has developed experience in doing pilot studies, and is an established channel for receiving official aid if available.

10.3 Financial Market Regulatory Issues

The government of Thailand and Bank of Thailand recognize the importance and appear committed to continued financial market liberalization and development. However, there is significant concern about strong "speculative" pressures on land real estate and common stock prices.

At a strategic level it is hoped that Thailand will become a regional financial center. A recently proposed financial institution act would substantially liberalize the financial sector with a basic objective of preparing local financial institutions to operate and survive in a more competitive and risky environment. A series of financial reforms are envisioned, including:

- interest rate deregulation for deposits,

205

- liberalization of foreign exchange controls including freeing up completely transfers for current international transactions,
- liberalization of commercial banks portfolio and assets management,
- geographical liberalization on opening bank branches, and
- liberalization on the entry of new competitors into the financial system including development of investment banking capacity and the introduction of new mutual funds.

In a recent speech to the chamber of commerce Mr. Pakorn Malakul Na Ayudha, Director, Banking Department, Bank of Thailand (BOT), elaborated on the anticipated liberalization efforts as follows:

...in order to liberalize and increase efficiency of the financial system, the BOT envisage both short-term and long-term measures. The BOT short-term measures cover three areas: The first set of measures involve the relaxation of exchange control by giving commercial banks greater authority to approve the purchase of foreign exchange on behalf of the BOT, with the aim for eventual abolition of exchange control. On goods and services, commercial banks will be able to go ahead and process all cases automatically. For capital flows, repatriation of funds will be eased except for funds originated in Thailand in which case there will still be some controls, particularly for cases involving large amount of funds. For repatriation of loan principal and interest, or the sale of stocks or liquidation of enterprise, commercial banks will be able to process all cases automatically.

However, for Thai investments abroad, commercial banks will be able to authorize only cases involving small amount of funds.

The second measure involves greater flexibility in the management of exchange rate policy as an instrument for adjusting the level of capital flows. The third measure, which was immediately announced after the acceptance of Article VIII, was the issuance of guidelines for financial institutions to purchase bills of exchange issued by business and financial institutions. However, some problems still remain to be solved with regard to the tax burden and tax inequality between similar financial instruments.

Turning to the medium and long-term plans, they may be classified as: deregulation and liberalization, strengthening supervision of financial institutions,

206

development and promotion of financial instruments, and improvement in the efficiency of the payment system. Further interest rate deregulation involves the lifting of lending rate ceiling, in line with the liberal deposit interest rate structure. This will be announced when it is deemed an opportune moment. With regard to portfolio or assets management, the current requirement for commercial banks to hold government bonds (16%) as a proportion of total deposit, as branch opening requirement are subject to changes. The scope of activities of banks and finance and securities companies would also be widened. This is of course a highly controversial subject anywhere, and has to be considered carefully.

On the supervision side, the authorities sought to strengthen domestic financial institutions, to cope with future challenges and competition in the international financial scene. At present, changes are on the way for the intensification of prudential regulation, particularly the redefinition of capital fund in line with the recommendation of the Bank for International Settlement (BIS). Mergers of financial institutions are also encouraged to consolidate and strengthen domestic financial institutions.

Furthermore, the authorities have sought to encourage the development of financial instruments and financial services. As essential components of the financial market, financial instruments and services can serve as policy tools for the implementation of monetary policy, as well as means for businesses to adjust their liquidity position. Measures to promote the development of financial instruments include:

- Creating liquidity for securities and financial instruments, through the development of both the primary and the secondary markets
- Removing legal and tax barriers to the issuance of financial products
- Improving information and disclosure system for investors
- Improving the basic infrastructure, particularly the telecommunication system to facilitate wider dissemination of information to regional areas, in order to reduce transaction costs.

As a measure to reduce the cost of financial services, the authorities endeavour to improve the efficiency of

the payment system, which involves reducing the dependence on the cash system by improving the interbank clearing system, and by encouraging greater use of cheques and other financial instruments. The wider use of credit card facilities will also be encouraged within close supervision to ensure the highest benefit to the economic system.

Finally, to obtain a comprehensive picture of financial liberalization in Thailand, mention should also be made of the operation of financial institutions and their adaptation to change as it is inevitable that the recent financial reform will largely affect their operations. In addition, to the credit and interest risks assumed by financial institutions, there will be an additional type of risk, namely the exchange rate risk. Financial personnel, therefore, need to familiarize themselves with various hedging instruments such as forward, option, swap and future, as well as follow closely the changes and developments in the major world financial centers. I may also add that the Bank of Thailand's recent decision to establish its first representative office in New York is one example of how we are trying to learn more from the international world.

With regard to the restructuring of the domestic financial system there is a perceived need for an improvement in the financial infrastructure of the economy. This includes the need for the setting up of a credit rating agency and the creation of a trust institution to ensure the quality of financial issues, as well as to protect the interests of investors.

To conclude, the measures undertaken and planned for, have the sole aim of boosting the efficiency of the financial system, and allowing greater flexibility for adjustment to rapid changes in the world economy. Moreover, competition is encouraged to remove obstacles and barriers to the efficient allocation of financial resources. As can be seen, the Thai financial system is geared up for a more challenging environment of the future. The only way in which such challenge may be faced is by strengthening financial institutions' capacity and efficiency, by improving the quality of management and personal, information and telecommunication system, as well as financial instrument and services.

Plans are also underway to expand finance and security firm offices into the country side. Also, the Bank of Thailand is considering the possibility of allowing commercial banks to underwrite debt securities. These steps could help expand the

capacity of the local financial markets to distribute new debenture issues.

Life insurance companies provide one source of private placement financing and are regulated by the Ministry of Commerce. Some of the current investment regulations are viewed as being overly restrictive as a result of efforts to avoid a repeat of a prior problems several years ago when 5 or 6 insurance companies went bankrupt. Suggested changes in insurance company investment regulations include:

- Extending the maximum maturity on bank guaranteed loans to 7 years.
- Increasing the limit on equity investments to 15 percent of the number of shares outstanding.

10.4 Foreign Exchange Markets and Risk Management

Foreign exchange trading volume is currently 50 to 60 billion baht a day (approximately \$2 billion). With this level of liquidity there is no problem in converting large amounts of baht (\$100 million +) directly into dollars or other foreign currencies. Thus, should a project financing be undertaken in baht, needed foreign exchange could be obtained directly in the cash foreign exchange market. Such a financing strategy, which is favored by the government, could be used to reduce the foreign exchange risk exposure of projects generating revenues denominated in baht as would be the case with private power.

However, given the overall magnitude of financing required in Thailand, it is thought that local capital markets can not possibly finance all projects. This means that substantial amounts of international financing will be required for some projects. For example, The Bank of Thailand estimates that the net inflow of foreign capital for the manufacturing sector was over \$600 million in 1989. In these cases, foreign exchange risk management becomes an important issue.

One method of managing such risks is through currency swaps. Swaps out to three months are easily available, longer-term currency swaps (5-7 years) can be arranged with special effort. A second possible strategy for managing foreign exchange risk would be to borrow additional baht, convert these funds to the appropriate foreign currency in the spot market and buy an appropriate amount of zero coupon bonds in that currency maturing at the dates when required foreign currency payments would be due. A third possibility would be for the Thai government or the Bank of Thailand to provide foreign exchange risk insurance for a fee. At present the government does not appear inclined in this direction. A fourth possibility is that the project sponsors may choose to bear some amount of foreign exchange risk in return for

higher rates of return. At present certain international banks are said to follow this strategies by holding open positions in baht. This approach is based on the observations that the baht has in recent years been effectively pegged to a basket of foreign currencies, Thai interest rates are generally higher than those in other countries, and the belief that should the baht be allowed to float it would likely appreciate in value.

10.5 Capital Market Conditions and Project Financing

Thailand has a number of major infrastructure type projects which are needed including skytrain (\$1.5 to \$2.0 billion), Bangkok Toll road extension (\$300 to \$400 million), telecommunications (\$4 to \$6 billion over 5 years), electricity generation (\$1 to \$1.5 billion per year). Many of these projects are proposed to be built on a Build Own and Operate as (BOO) or Build Own and Transfer basis (BOT). Thus, the feasibility of raising project financing is an important topic.

On the financing of these major projects the government and Bank of Thailand have taken the following positions:

- No debt financing guarantee or foreign exchange risk insurance will be provided,
- Project sponsors are encouraged to engage in baht denominated financing as opposed to foreign currency financing. Foreign currency needs would then be met by going into the foreign exchange cash market and exchanging baht for whatever currency is needed.
- It would be hoped that the large new projects and privatization plans underway would significantly increase the supply of high grade securities in the local markets and encourage financial market development.
- Generally before common shares and securities can be listed on the SET firms must have 3 years of operating history. However, with Board of Investment approval, the securities of major new projects can be listed on the SET immediately.
- Private placements with up to 100 persons would be possible for new projects.

Fortunately, with Thailand's very strong economic performance in recent years, international financial institutions are said to be "lining up" to make syndicated loans into Thailand. Ten year floating rate notes are possible. Sovereign guaranteed loans are available at LIBOR + 1/4%. Non-governmental guaranteed loans are available at LIBOR + 1%. Non-governmental guaranteed loans may require some type credits enhancement from banks. In addition,

some U. S. banks have extended fixed rate loans with maturities as long as 5 years.

Also, Thai capital markets are currently very bullish with equity securities in high demand.⁵ The principal participants are local investors some of which invest for the long-term while others are short-term traders. There is, however, significant participation by investors from Taiwan, Hong Kong, U.S., Europe and Japan. Market observers suggested that new projects should consider using the maximum amount of equity and convertible debt financing consistent with maintaining an acceptable tariff rate.

Unfortunately interest in long-term debt is currently low because investors have come to expect 100 percent per year return in alternative investments. Some professionals believe that it will take a change in "investment climate" or substantial investor education and marketing efforts to generate significant demand for long-term debt. It is generally believed that bank guarantees for longer-term debt issues would likely make them more attractive for local investors.

To date the largest debenture issues have been 100 million baht (approx. \$4 million) to 300 million baht (approx. \$12 million). While the market for debentures could expand substantially, a change in market psychology away from equities may be necessary for this to happen.

The maximum amount which any bank can lend to a single project is 25 percent of paid up capital plus retained earnings. If the capital of the Thai banking system is about 200 billion baht then the theoretical maximum amount of Thai bank loans available for a particular projects would be $.25 \times 200 = 50$ billion B or about \$2 billion. This would of course be difficult to assemble.

Insurance companies and Provident savings funds in Thailand are small and do little direct lending except to very large well established companies. Frequently these institutions will either make term deposits with banks who then re-lend on a term basis, or enter into a "bill of exchange" where the bank guarantees a loan from the insurance company to the company and collects a fee.

⁵ Again it must be kept in mind that world stock markets have generally declined sharply from the point in time that the field work on this project was completed in early August, 1990. As is always the case, financing plans for specific projects must take account of the capital market conditions prevailing at the time the project is to be financed. Perhaps Thai debt investments may now look somewhat more attractive given recent equity losses.

Life Insurance Companies are regulated by the Ministry of Commerce and some of the investment and other regulations are viewed as being outdated. Insurance company investment regulations include:

- Bank guarantees are required on large loans to private firms,
- Maximum term on unsecured loans is 5 years with rollovers possible if agreeable to borrower, lender and guarantor,
- Maximum loan to one borrower is 5 percent of the insurance companies assets,
- Property mortgage loans up to 80% of value of real estate possible with maximum term of 10 years. Such loans have to be approved by the Insurance Commissioner on a case by case basis.
- Machinery mortgage loans are available for 50 percent of market value for a maximum term of 3 years.
- Equity and debenture investments are limited to 15 percent of the par value of a company's equity.

AIA is a Hong Kong based company and is the largest insurance company in Thailand with local assets of 14 billion baht. With a loan limit of 5% to any one company the maximum size loan AIA could make in Thailand would be 700 million baht (approx \$28 mill). They generally go out 3 to 7 years in maturity on loans with a fixed rate. Loans can be arranged up to 80 percent of the value of real estate and 50 percent of the value of machinery.

10.6. Financing Plan For Skytrain

One of the most obvious problems in Bangkok is the very congested highway transportation system. One proposal to relieve a portion of this congestion is the so called "skytrain project" which entails construction of an elevated rail system costing an estimated \$1.5 to \$2.0 billion. The background on this project and its proposed financing plan may be instructive regarding what may be expected on other large Thai infrastructure projects. Important characteristics of this project include:

- The project has been under consideration for 10 years including 2 1/2 years of recent negotiations. Such delays have imposed substantial costs on potential project sponsors.
- The project is proposed to be undertaken on a BOT basis with the developers owning the project for 30 years. Equity investors in the project would be the sponsoring Canadian firm (Lavalin) and a group of Thai commercial banks.

- The owners would be able to set fares at whatever level they choose which offers substantial profit potential given a projected 2 million trips per day. They would also have an opportunity to develop real property around the train stations which could also prove very profitable.
- The Thai Farmer's Bank is the principal financial advisor to the project.
- The proposed financial structure for the project would be 25 percent equity, 75 percent debt.
- On the debt financing the foreign currency versus local currency split will be approximately 70/30. The principal international lenders are the Japanese and Canadian Export-Import Banks. The Japanese loans would be fixed rate with a 16 year maturity. The Canadian loans would be fixed rate with a fifty-six (56) year maturity. The local currency loans would have a variable rate and a 12 year maturity.
- The Canadian Export-Import Bank requested a sovereign guarantee but the Thai Government refused. In principal, the Canadian Ex-Im Bank has agreed to accept guarantees by a group of local and international commercial banks.
- At present the method of dealing with foreign exchange risk has not been settled. Possibilities include: (1) choosing to bear the risk due to optimism regarding an increase in the value of the baht relative to other major currencies, (2) or borrowing additional baht, converting these funds to the appropriate foreign currency in the spot market and buying an appropriate amount of zero coupon bonds in that currency maturing at the dates when required foreign currency principal and interest payments would be due.

10.7 Debt Market Development Opportunities

In regards to Asian capital market development, stock markets have been generally preeminent.

This reflects several factors including: (1) High real economic growth rates, and high returns in smaller equity markets in 1980's which has led to strong local and foreign demand for equities, (2) Relatively lower correlations between the returns in emerging equity markets and developed country equity markets which gives international portfolio managers a strong incentive to invest in emerging markets to achieve risks diversification benefits, (3) Relative tax advantages of stock versus debt investments, and (4) Better investor information as a result of research on equity securities.

213

Bond markets and money markets have often been ignored and stifled because of:

- A traditional reliance on banks to provide debt financing,
- A general lack of institutional investors such as pension funds and insurance companies (however this is changing now),
- A substantial default risk on non-bank debt investments due to fraud,
- A low government priority placed on debt market development,
- Unequal tax treatment of debt and equity investments. On equities, taxes and fees are usually nominal and capital gains usually tax free, however, all other transactions are taxed disproportionately. For example, any capital gain on bonds is often taxed at 15-25% to individuals and at the corporate rate to institutions. In addition, any bond trade would likely also incur a transaction tax and any interest remittance to international investors incurs a 20% withholding tax.
- A fragmented regulatory environment in many Asian countries, which makes capital market reform difficult to achieve. The fragmented regulatory environment in Thailand prevents any coordinated capital market policy. For example, the Ministry of Commerce controls all ordinary companies and its law is quite antiquated. The S.E.T. controls all listed companies but all listed companies must adhere to Ministry of Commerce rules first. The Bank of Thailand regulates all banks and finance and securities companies who also must adhere to their respective regulators before responding to the S.E.T. The Ministry of Finance is the eventual arbiter between the Bank of Thailand and the S.E.T. disputes, but has no control over Ministry of Commerce policy. This creates the unusual anomaly of unlisted companies being able to do almost anything in the securities realm as long as it adheres to Ministry of Commerce guidelines. On the other hand, listed companies must respond to the often more onerous S.E.T. regulations.

At this time there is general agreement that debt market development is an important issue for Thailand. Export led growth policies have exhausted the financing capacity of the present system. Initially offshore guaranteed loans were utilized, then equity financing filled in, now offshore and onshore private debt issues are needed which calls for debt market development. It will also be important to focus on short-term debt market development to allow the Bank of Thailand to conduct open market operations and better implement monetary policy.

At present the local demand for longer term straight debt is very low as investors are looking for 100% per year returns in the stock market or real estate market. For shorter maturity corporate debt, such as commercial paper, four month maturities are about the limit for significant liquidity. A number of ideas were put forward regarding ways to stimulate debt market development. These included the following suggestions listed in no particular order of significance:

- In Japan, commercial banks guaranteed many of the initial longer-term debt issues which made them more appealing to local investors. Commercial bank guarantees for private debt issues are also possible in Thailand, for a fee, and would significantly help in marketing such securities.
- It will be very important to select the initial projects to be financed with long-term debt carefully so that investors have a positive experience. This will help develop local demand for long-term debt.
- Both international and local investors would want some type of secondary market to provide liquidity for debt investments. Unless the issue is of some substantial size (\$100 million ?) trading volume is likely to be too small. Also in terms of developing a secondary market for fixed rate debt it will be important that the primary dealers be obligated to make some kind of market.
- If dealers are to be involved in making markets they will want ways to hedge their risks. In order to accomplish such risk shifting dealers will need to be able to hold short positions in bonds. Such trading is common place in the U.S. which has the most liquid fixed income markets in the world. In other countries such as Germany and Japan short selling is not allowed and the markets are much less liquid. Due to low liquidity these markets are a much more dangerous place to trade because periodically prices drop by large amounts with little opportunity to get out.
- To develop adequate liquidity it would also be important for the regulators to allow debt securities to be both listed on S.E.T and be traded over the counter at banks.
- Officials should consider offering a money market fund and a medium term bond fund to the public. A mixed maturity debt fund with about 40% in money market securities and 60% in long-term debt could also prove interesting. Many such funds exist in Japan and offer both significant liquidity (even check writing) and somewhat higher yields.
- At present the local demand for longer term straight debt is very low as investors are looking for 100% per year returns

in the stock market or real estate market. For shorter maturity corporate debt, such as commercial paper, four month maturities are about the limit for significant liquidity. The Security Exchange of Thailand (SET) should continue to encourage investors to buy and companies to issue fixed income debt securities through organized seminars and other promotional activities.

- Plans are underway to expand finance and security firm offices into the country side. Also, the Bank of Thailand is considering the possibility of allowing commercial banks to underwrite debt securities. These steps could help expand the capacity of the local financial markets to distribute new debenture issues.
- Banks in Thailand prefer to lend short due to the short-term nature of their deposits which are very interest sensitive. A move is underway to get permission for banks to be able to issue negotiable CD's and to set up a secondary market in such CD's. If this is accomplished then it will be possible to sell longer term CD's and banks will be able to make longer term loans.
- All of the U.S. banks operating in Thailand have been working on debt market development and would be eager to participate further.
- It would be useful to have a rating agency which rated both long-term and short-term debt securities. The ADB is sponsoring a feasibility study on this topic.
- The tax structure needs to be adjusted so that debt and equity investments are treated equally. Currently there is no capital gains taxes on equity investments, however, international investors must pay a 20 percent withholding tax on any remittance to the United States be it interest income or capital gains on debt investments. Such differences discourage U.S. investors.
- Tax incentives could be provided to local small investors to purchase long-term debt securities for major projects. Such incentives should, however, be tied to the listing of the project's securities on the SET to improve liquidity.
- Development of a market for private debt is inhibited because there is no long-term government debt market. Reserve requirements dictate that 16 percent of bank's total deposits must be held in Government bonds. At present there is an inadequate supply of government bonds for banks to purchase and once acquired they certainly will not sell the bonds. To stimulate development of a secondary market in government

debt, it would be helpful to reduce or eliminate this reserve requirement.

Under current conditions the Government of Thailand can essentially set whatever price they wish for their bonds. A better approach would be to utilize an auction process for selling government debt such as that used in the U.S., this would help set benchmarks from which private debt could be issued and traded.

In terms of near term prospects for local debt market activity, a number of companies are said to be considering the possibility of issuing 3 to 5 year securities. While the local market for debentures could expand substantially, some believe that either an aggressive marketing campaign or a change in market psychology away from equities may be necessary for this to happen.

From an international perspective Thailand is seen by some professionals as an attractive place for fixed income investments. Currently Thai interest rates are higher than U.S. rates and there is reason for some investors to believe that the baht could appreciate relative to the U.S. dollar. Under such conditions baht denominated fixed income investments could be very attractive. One banker indicated that he knew of a minimum of \$500 million of U.S. funds available for long-term fixed rate investment provided that the above taxation problems and secondary market liquidity problems could be resolved. Should major international investment banking firms get involved additional large amounts of debt financing could likely be placed.

Private placement market development will likely have to wait for the insurance companies and pension funds to grow in size. In the future the growth prospects for both life insurance companies and pension funds is very high in Thailand. Currently only 4% of the people are covered by life insurance with annual growth rates of 30 to 40% for life insurance in place. Only recently did a pension fund bill pass the legislature. As these institutional investors grow private placement long-term financing should become more readily available.

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2/15

LIST OF TABLES

1. Table 1: Thailand Economic Structure, 1985-1989
2. Table 2: Weighted Average Free Market Exchange Rates in Bangkok, 1981-1989.
3. Table 3: Trend of Gross Domestic Product, 1983-1988
4. Table 4: Gross Domestic Product by Industrial Origin, 1983 & 1988
5. Table 5: Expenditure on Gross National Product, 1983 & 1988
6. Table 6: Energy Balance, 1988
7. Table 7: Government Revenue, Expenditure, & Finance, 1983-1988
8. Table 8: Gross Saving at Current Price, 1981-1986
9. Table 9: Structure of Interest Rates, 1984-1988
10. Table 10: Money Supply, 1983-1989
11. Table 11: Trend of Foreign Trade, 1983-1989
12. Table 12: Main Commodities Exported & Imported, 1983-1989
13. Table 13: Reserves, 1983-1988
14. Table 14: Balance of Payments, 1982-1987
15. Table 15: Gross External Debt, 1983-1987
16. Table 16: Ratio of M2 to GDP, 1960-1968
17. Table 17: Ranking of Thai Commercial Banks, Dec 1988
18. Table 18: Commercial Bank Concentration
19. Table 19: Market Capitalization of SET Listed Equities, 1980-1988
20. Table 20: Market Capitalization by Sectors, Jun 30, 1989
21. Table 21: Foreign Portfolio Investment, 1982-1989
22. Table 22: Primary Debt Securities Market, 1980-1988
23. Table 23: Holders of Treasury Bills, 1980-1988
24. Table 24: Primary Money Market Instruments, 1980-1988
25. Table 25: Comparative Economic Growth
26. Table 26: SET Market Performance
27. Table 27: Foreign Investor & Foreign Investment Fund
28. Table 28: Highlights Statistics on Quoted Securities
29. Table 29: Shareownership of Corporate Securities
30. Table 30: Turnover of Corporate & Government Securities
31. Table 31: Turnover of Corporate Securities, by types of Securities
32. Table 32: Turnover of Government Securities, by types of Securities
33. Table 33: Number of Quoted Companies & Securities by Sectors
34. Table 34: Quoted Corporate Securities, by Types of Securities
35. Table 35: Capital Mobilization by Share Allotment Methods in 1989
36. Table 36: Capital Increase Announcements & Capital Mobilization, 1975-89
37. Table 37: Listed Government Securities, by Types of Securities
38. Table 38: Weekly Movement of SET Index & Trade Volume of Corporate Securities
39. Table 39: Weekly Movement of Market Dividend Yield & P/E Ratio
40. Table 40: List of People Interviewed In Thailand

**Table 1:
Thailand Economic Structure**

Macro Economic Indicators	1985	1986	1987	1988	1989
GDP Bt bn	1,041.3	1,099.5	1,223.2	1,465.7	...
Real GDP growth %	3.5	4.7	7.1	11.0	10.5
Consumer price inflation %	2.4	1.9	2.5	3.8	5.5
Population mn	51.8	53.0	54.0	55.0	56.0
Exports \$ bn	7.1	8.8	11.6	15.9	20.0
Imports \$ bn	9.3	9.3	13.3	19.8	25.3
Current account \$ bn	-1.5	0.3	-0.7	-1.7	-2.3
Reserves excl gold \$ mn	2,190.0	2,804.0	4,007.0	6,097.0	9,515 ^b
Total long-term external debt \$bn	13.3	14.7	17.5	17.8	...
Debt service ratio %	14.7	16.2	13.6	12.9	...
Exchange rate (av) Bt per \$	27.20	26.63	25.72	25.29	25.67
March 5, 1990 Bt 25.50 per \$					

Origins of GDP 1988^a

Components of GDP 1988^a

	% of total		% of total
Manufacturing	24.4	Personal consumption	62.6
Agriculture, forestry, Fishing & Mining	19.9	Government consumption	11.0
Construction & utilities	7.7	Fixed investment	26.3
Transport & communications	7.3	Stockbuilding	1.8
Wholesale & retail trade	15.8	Exports	35.2
Finance & real estate	7.7	Imports	-36.9
Public administration etc	17.2	GDP at market prices	100.0
GDP at market prices	100.0		

Principal Exports 1988

Principal Imports 1988

	\$mn		\$mn
Textiles & garments	2,304	Non-electrical machinery	3,467
Rice	1,367	Electrical machinery	1,976
Rubber	1,025	Chemicals	1,786
Tapioca	856	Iron & Steel	1,586
Precious Stones	527	Fuel	1,429
Total Incl Others	15,897	Total Incl Others	19,800

Main Destinations of Exports 1988

Main Origins of Imports 1988

	% of total		% of total
USA	20	Japan	29
Japan	16	USA	14
Singapore	8	Singapore	7
Netherlands	5	West Germany	5
West Germany	5	Malaysia	4

^a Estimates. ^b Actual.

Source= The Economist Intelligence Unit "Thailand & Burma: Country Report," No.1,1990

270

Table 2:
Weighted Average Free Market Exchange Rates in Bangkok
(selling rate)

	1981	1982	1983	1984	1985	1986	1987	1988	1989
£ Sterling	44.38	40.57	35.09	31.68	35.03	38.74	42.07	45.15	42.42
\$	21.78	23.04	23.04	23.53	27.19	26.36	25.80	25.35	25.70
Yen	0.10	0.09	0.10	0.10	0.114	0.157	0.178	0.198	0.188
DM	9.79	9.59	9.11	8.38	9.26	12.12	14.29	14.57	13.75
S\$	10.31	10.84	10.87	11.09	12.39	12.18	12.29	12.65	13.26

Source: Bank of Thailand, Monthly Bulletin.

Table 3:
Trend of Gross Domestic Product

	1983	1984	1985	1986	1987	1988 ^a
Total (Bt bn)						
At current prices	910.1	973.4	1,041.4	1,099.5	1,223.2	1,465.7
At constant (1985) prices	914.8	980.0	1,041.4	1,062.0	1,101.0	...
Real change (%)	7.3	7.1	3.5	4.7	3.7	...
Per capita (Bt)						
At current prices	18,301	19,195	20,300	20,883	22,821	26,746
At constant (1985) prices	18,395	19,326	20,300	120,171	20,541	...
Real change (%)	5.1	5.1	5.0	-0.4	1.8	...

^a Estimates.

Source: IMF, International Financial Statistics.

221

Table 4:
Gross Domestic Product by Industrial Origin
(Bt mn; current prices)

	1983	% of Total	1988 ^a	% of Total
Agriculture	185,628	20.4	247,748	16.9
Mining & Quarrying	26,403	2.9	44,333	3.0
Manufacturing	194,344	21.3	357,851	24.4
Construction	47,985	5.3	74,524	5.1
Electricity & Water Supply	17,067	1.9	37,487	2.6
Transportation Communication	60,809	6.7	106,834	7.3
Wholesale & Retail Trade	147,443	16.2	232,231	15.8
Banking, Insurance & Real Estate	31,145	3.4	60,032	4.1
Ownership of Dwellings	33,851	3.7	52,702	3.6
Public Administration & Defence	44,582	4.9	56,242	3.8
Services	120,797	13.3	195,752	13.4
GDP	910,054	100.0	1,465,736	100.0

^a Estimates.

Source: Bank of Thailand, Quarterly Bulletin.

Table 5:
Expenditure on Gross National Product
(Bt bn; current prices)

	1983	% of Total	1988 ^a	% of Total
Private Consumption	618.6	68.8	898.8	62.4
Government Consumption	120.7	13.4	158.4	11.0
Gross Fixed Capital Formation	206.0	22.9	377.8	26.2
Change in Stocks	6.3	0.7	25.3	1.8
Exports of Goods & Services	207.0	23.0	505.3	35.1
Imports of Goods & Services	-254.1	-28.2	-530.8	-36.9
GDP ^b	924.9	102.8	1,465.7	101.8
Net Income from Abroad	-25.4	-2.8	-25.3	-1.8
GNP	899.5	100.0	1,440.4	100.0

^a Estimates. ^b Including Statistical Discrepancy.

Source: Bank of Thailand, Quarterly Bulletin.

122

Table 6
Energy Balance, 1988
 (mn tons oil equivalent)

	Oil	Gas	Coal	Electricity	Other	Total
Primary Supply						
Production	1.9	5.4	2.1	1.3 ^a	11.0	21.7
Imports	12.7	-	0.2	0.1 ^a	-	13.0
Exports	0.5	-	-	-	-	0.5
Stock Change	-	-	-	-	-	-
Total	14.1	5.4	2.3	1.4^a 0.5^b	11.0	34.2^a 33.3^b
Processing & Transformation						
Losses & Transfers	1.5	4.4	1.8	0.4	-	8.1
Transformation Output	-	-	-	2.2 ^b	-	2.2
Final Consumption						
Transport Fuels	9.0	-	-	-	-	9.0
Industrial Fuels	1.5	1.0	0.5	1.1 ^b	1.7	5.8
Residential, etc.	1.6	-	-	1.2 ^b	9.3	12.1
Non-energy Uses	0.5	-	-	-	-	0.5
Total	12.6	1.0	0.5	2.3^b	11.0	27.4

^a Input basis. ^b Output basis.

Source: Energy Data Associates.

223

**Table 7:
Government Revenues^a, Expenditures & Finances**

Government Revenues (% of Total)	1983	1984	1985	1986	1987	1988	1989
Direct Taxes							
Personal Income Tax	10.2	11.6	12.4	11.3	9.5	9.5	8.9
Corporate Income Tax	9.2	9.9	9.6	9.2	8.7	10.6	11.8
Indirect Taxes							
Import Duties	19.5	20.0	19.1	18.3	19.8	22.7	21.8
Export Duties	0.7	1.3	0.7	0.5	0.6	0.3	0.1
Business Taxes	17.9	20.4	18.3	16.6	17.2	20.1	20.6
Excise Taxes	22.2	23.1	23.4	27.3	28.3	23.6	22.3
Others	9.1	5.7	6.7	7.6	7.7	6.8	6.8
Non-tax Revenues	11.2	8.0	9.9	9.3	8.1	6.4	7.7
Total	100.0						
Total (Bt bn)	143.4	148.2	160.7	169.9	202.0	258.2	327.2

Government Expenditure^a (% of total)

	1983	1984	1985	1986	1987	1988	1989
Economic Classification:							
Current	82.5	84.8	83.5	85.0	85.3	87.1	85.7
Capital	17.5	15.2	16.5	15.0	14.7	12.9	14.3
Functional Classification:							
Economic Services	16.9	15.7	15.3	14.7	14.8	13.9	15.2
Social Services	29.1	30.4	29.5	29.4	29.9	29.4	30.2
Defence	18.9	19.8	21.6	20.1	19.6	19.8	18.1
General Administration	15.0	13.3	12.9	12.6	12.7	12.6	13.4
Unallocable	20.1	20.8	20.8	23.2	23.0	24.3	23.1
Total	100.0						
Total (Bt bn)	167.1	182.2	200.0	204.2	212.0	223.1	263.8

Government Finances^a (Bt mn)

	1983	1984	1985	1986	1987	1988	1989
Revenue	143	148	160	169	202	258	328
Expenditure	166	181	199	203	211	222	262
Balance	-22	-33	-38	-34	-8	36	65
Financed by:							
net domestic borrowings	25	35	31	50	10	28	11
net foreign borrowings	0.9	0.7	14	6	-32	4	6
net other liabilities of Treasury	-3	-2	-6	-7	-0.3	-0.4	4
use of Treasury cash balance	0.420	0.381	0.6	-1	1	3	43

^a Data are for calendar, not fiscal, years.

Source: Bank of Thailand, Quarterly Bulletin.

224

Table 8:

Gross Saving at Current Prices
(Bt mn)

	1981	1982	1983	1984	1985	1986 ^a
Gross Domestic Saving (GDS)	139,579	145,839	146,549	174,704	153,419	171,942
household	88,283	82,327	73,890	82,444	81,286	97,047
private business	66,822	70,904	81,030	89,124	96,437	102,823
public sector	6,907	-3,680	12,079	10,521	780	3,965
of which:						
government:	5,023	-7,062	4,807	189	-5,584	-4,335
state enterprises	1,884	3,382	7,272	10,332	7,364	8,300
statistical discrepancies	-22,433	-3,712	-20,450	-7,385	-25,084	-31,893
Gross domestic Investment (GDI)	194,479	177,772	212,271	236,645	244,411	235,705
private business	120,467	113,415	133,068	147,264	141,191	144,302
public sector	68,600	66,483	72,924	81,535	90,888	88,832
change in stocks	5,412	-2,126	6,279	7,846	12,332	2,571
GDP at current prices	786,166	846,136	924,913	988,863	1,041,354	1,098,362
GDS/GDP	17.8	18.4	15.8	17.7	14.7	15.7
GDI/GDP	24.7	21.0	23.0	23.9	23.5	21.5

^a Estimates.

Source: Bank of Thailand, Quarterly Bulletin.

Table 9:

Structure of Interest Rates
(%)

	1984	1985	1986	1987	1988	1989
Bank of Thailand:						
loan rates	12.0-13.5	11.0-12.0	8.00	8.00	8.00	8.00
Commercial banks:						
loan rate	17.5-19.0	17.5-19.0	15.00	15.00	15.00	15.00
discount rate	17.5-19.0	15.5-17.0	15.00	15.00	15.00	15.00
Rate on deposits:						
savings	9.0	8.5	5.50	5.50	6.25-7.25	7.25
time 1-2 years	12.5	11.0	7.25	7.25	7.75-9.50	9.5-10.25

Source: Bank of Thailand, Quarterly Bulletin; Bangkok Bank, Monthly Review.

225

Table 10:

Money Supply
(Bt bn; end period)

	1983	1984	1985	1986	1987	1988	1989
Money Supply(M1)	83.72	93.34	85.86	103.43	132.40	148.50	174.21
Money Supply(M2)	451.20	542.45	593.49	672.77	808.58	956.10	1206.61
Domestic Credit:	568.19	666.08	725.61	771.96	903.82	1050.80	1298.17
government	165.76	189.60	198.25	219.28	222.98	176.10	175.60
private	402.43	476.46	527.35	552.67	680.84	864.70	1122.60

Source: Bank of Thailand, Quarterly Bulletin.

Table 11:

Trend of Foreign Trade
(Bt mn)

	1983	1984	1985	1986	1987	1988	1989 ^a
Exports(fob)	146,472	175,237	193,366	233,383	299,853	403,570	515,74
Imports(cif)	236,609	245,155	251,169	241,358	334,209	513,114	656,42
Balance	-90,137	-69,918	-57,803	-7,975	-34,356	-109,544	-140,68
Index numbers (1985 = 100):							
terms of trade	108.47	105.91	100.00	110.73	109.57	107.58	102.99
volume of exports	84.45	99.83	100.00	119.05	137.33	195.38	326.81

^a Provisional

Source: Bank of Thailand, Annual Review.

226

Table 12:

Main Commodities Exported & Imported
(Bt Mn)

Main Commodities Exported	1983	1984	1985	1986	1987	1988	1989
Rice	20,157	25,932	22,524	20,315	22,703	34,676	45,462
Rubber	11,787	13,004	13,567	15,116	20,539	27,189	26,450
Tapioca products	15,387	16,660	14,969	19,086	20,661	21,844	24,005
Maize	8,486	10,147	7,700	9,261	3,928	3,828	4,094
Sugar	6,338	5,222	6,247	7,271	8,573	9,664	19,243
Tin	5,266	5,280	5,647	3,097	2,344	2,229	2,445
Textiles	14,351	19,155	23,578	31,268	48,555	58,627	74,021
Footwear	1,743	2,052	2,368	3,185	5,915	9,658	13,516
Integrated circuits	5,829	7,352	8,248	12,818	15,179	18,854	18,424
Precious stones	6,214	6,129	6,350	8,150	11,550	13,958	16,419
Jewellery	1,028	1,254	2,168	5,014	8,257	9,725	11,973
Prawns	3,164	2,799	3,439	4,391	5,749	9,698	16,057
Canned fish	2,116	3,696	5,204	8,495	9,516	15,041	15,886
Total Incl others	145,473	175,297	193,366	233,383	299,853	403,570	515,745

Source: Bank of Thailand, Quarterly Bulletin.

Main commodities Imported
(Bt mn)

	1983	1984	1985	1986	1987	1988	1989
Fuel & lubricants	57,065	57,353	56,719	32,354	44,177	38,829	58,413
Non-electric machinery	33,061	34,992	34,710	32,299	49,653	90,850	119,176
Base metals	22,352	21,374	23,347	22,176	33,855	59,166	78,009
Chemicals	20,790	20,730	23,061	26,106	36,140	48,598	55,159
Electrical machinery & parts	16,372	18,085	15,848	25,561	32,230	54,134	67,125
Food & beverages	6,057	6,051	6,364	6,103	8,022	10,844	13,474
Vehicles & parts	11,416	11,834	9,292	8,939	15,217	29,659	39,426
Electrical appliances	5,263	5,549	5,682	5,777	8,419	8,251	14,324
Textile fibres	4,516	5,388	5,673	5,638	8,389	10,025	13,162
Fish & preparations	984	2,020	3,754	7,462	6,881	14,326	18,572
Jewellery	3,141	2,591	2,541	4,149	7,073	12,305	20,353
Total Incl others	236,609	245,155	251,169	241,358	334,203	513,114	656,428

Source: Bank of Thailand, Quarterly Bulletin.

**Table 13:
Reserves**

International Liquidity
(\$ mn; end year)

	1983	1984	1985	1986	1987	1988
Total reserves excl gold	1,607	1,921	2,190	2,804	4,007	6,097
Foreign exchange	1,561	1,890	2,157	2,736	3,906	5,997
SDRs	16	2	1	33	60	61
Reserve position in IMF	30	28	32	35	41	39
Gold (mn troy oz)	2,487	2,487	2,487	2,487	2,476	2,476
Gold valuation ^a	723	623	605	754	882	772

^a End year holdings valued at 75 per cent of the average fourth quarter London price.

Source: IMF, International Financial Statistics.

Table 14:

Balance of payments
(\$ mn)

	1982	1983	1984	1985	1986	1987
Merchandise exports(fob)	6,835	6,308	7,338	7,059	8,803	11,595
Merchandise imports(fob)	-7,565	-9,169	-9,236	-8,391	-8,415	-12,019
Trade Balance	-731	-2,861	-1,898	-1,332	388	-424
Exports of services & IPD	2,580	2,919	3,077	3,163	3,333	4,168
Imports of services & IPD	-3,036	-3,209	-3,463	-3,533	-3,699	-4,334
Net private transfers	75	153	59	47	64	100
Net official transfers	108	124	115	118	161	125
Balance on current account	-1,003	-2,874	-2,109	-1,537	247	-365
Direct investment	189	348	400	162	261	182
Portfolio investment	68	108	155	895	-29	346
Other long term capital	978	844	1,231	558	-144	72
Short term capital	58	662	767	-99	-219	462
Balance on capital account	1,293	1,962	2,553	1,516	-131	1,062
Errors & omissions	-521	587	71	103	598	248
Counterpart items	-30	-20	-76	134	239	331
Exceptional Financing	150	164	-	-	-	-
Liabilities constituting foreign authorities' reserves -	-	-	-	-	-	-
Change in reserves (- indicates increase)	113	181	-439	-216	-952	-1,276

Source: IMF, International Financial Statistics.

Table 15;
Gross External Debt
(\$ mn)

	1983	1984	1985	1986	1987
Gross external debt ^a	13,867	14,981	15,528	18,549	20,710
which:					
Long term debt ^b	9,656	10,638	13,307	14,720	17,131
Private non-guaranteed	2,655	3,372	3,370	3,108	3,108
Short term debt ^b	3,305	3,551	3,200	2,840	2,664
Public disbursed ^c	7,000	7,266	9,937	11,613	14,023
which:					
Official creditors	4,280	4,504	5,844	7,163	8,631
Multilateral	2,419	2,507	3,198	3,861	4,482
Bilateral	1,861	1,997	2,646	3,303	4,150
Private creditors	2,720	2,762	4,093	4,449	5,391
Suppliers	223	337	488	588	691
Financial markets	2,497	2,425	3,605	3,861	4,700
Debt service	939	1,251	1,496	1,957	1,947
which:					
Principal	417	688	893	1,207	1,102
Interest	522	563	603	751	845
Debt service ratio (%) ^d	10.2	12.0	14.6	16.2	13.6
Gross external liabilities/GNP (%)	35.5	36.8	47.8	45.3	44.2
Concessional Loans' share of disbursed					
Public debt (%)	21.6	22.1	21.3	23.2	25.0
Variable interest rate loans' share of					
Disbursed public debt (%)	30.6	29.5	32.5	33.5	
Short term debt share of gross external					
Liabilities (%)	23.8	23.7	18.2	15.3	12.9
Private debt share of total long term debt (%)	27.5	31.7	25.3	21.1	18.1

^a Long term debt (original maturity over one year), use of IMF credit and short term debt.

^b Public and private. ^c Including publicly guaranteed private debt. ^d Long term public debt service as a percentage of exports goods and services.

Source: World Bank, World Debt Tables.

Table 16:

Ratio of M2 to GDP, 1960-1988

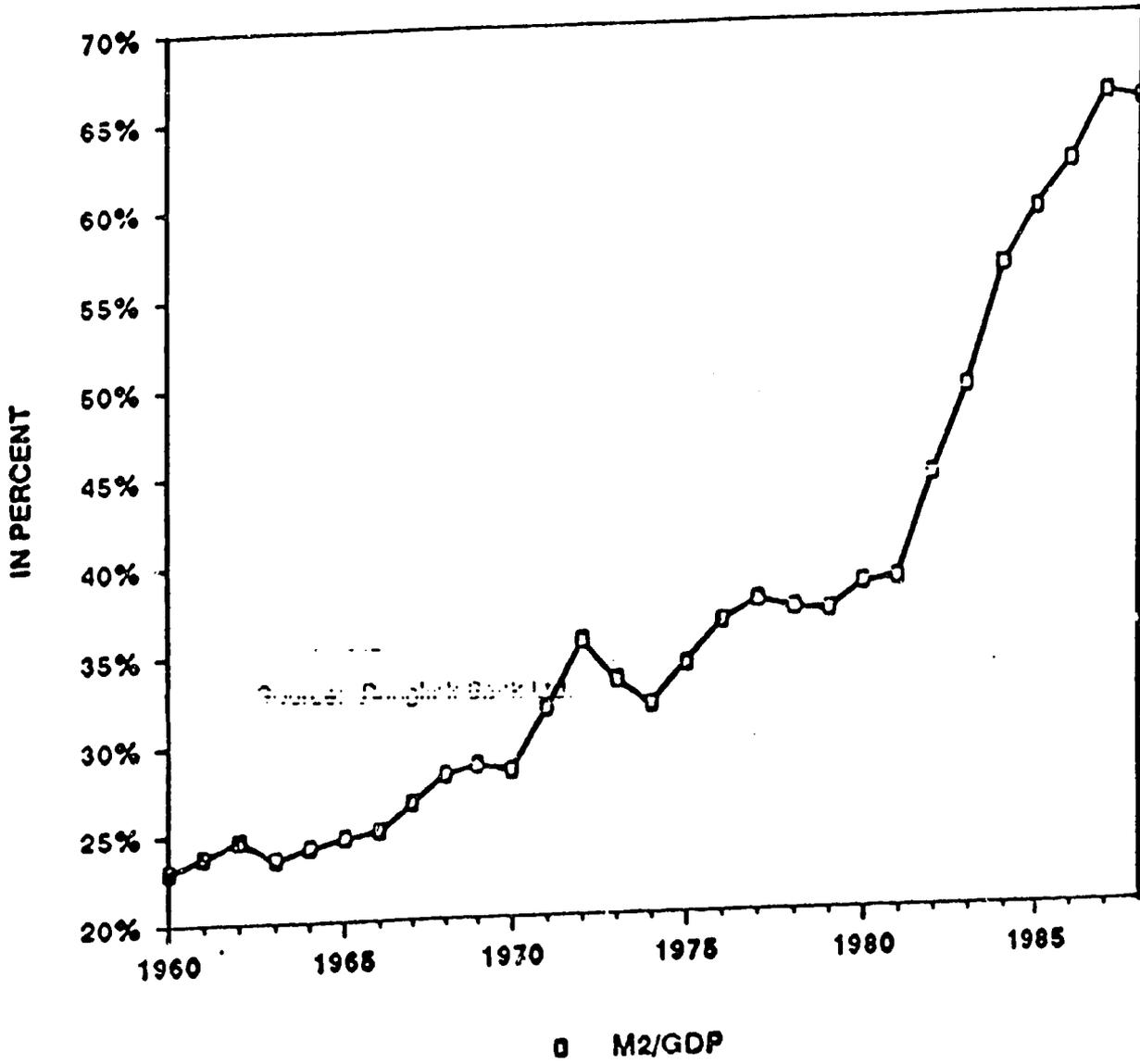


Table 17:
Ranking of Thai Commercial Banks, December 31, 1988
(Billion baht)

Domestic Banks	Total Assets	Foreign Banks	Total Assets
Bangkok Bank Ltd.	350.8	The Bank of Tokyo	10.8
Krung Thai Bank Ltd.	176.4	The Mitsui Bank Ltd.	10.5
Thai Farmers Bank Ltd.	156.4	Citibank NA	6.1
The Siam Commercial Bank Ltd.	103.3	Deutsche Bank (Asia)	5.0
Bank of Ayudhya Ltd.	70.2	The Chase Manhattan Bank NA	4.5
The Thai Military Bank Ltd.	69.6	Banque Indosuez	3.6
First Bangkok City Bank Ltd.	47.6	Hongkong & Shanghai Banking Corp.	3.2
The Siam City Bank Ltd.	46.6	Bank of America NT&SA	3.0
Bangkok Metropolitan Bank Ltd.	44.7	Standard Chartered Bank	2.8
The Bangkok Bank of Commerce Ltd.	38.2	United Malayan Banking Corp. Ltd.	1.7
The Bank of Asla Ltd.	32.4	Bharat Overseas Bank Ltd.	1.1
The Union Bank of Bangkok Ltd.	19.4	Security Pacific Asian Bank	0.9
The Thai Danu Bank Ltd.	14.2	Internat'l Commercial Bank of China	0.7
Nakornthon Bank Ltd.	11.0	Four Seas Communications Bank Ltd.	0.5
The Laem Thong Bank Ltd.	5.5		
Total assets	1,186.0		54.5

Source: Bangkok Bank Ltd.

Table 18:
Commercial Bank Concentration
(In percentage shares ³)

Bank Total Assets				Deposits 1988	Branches 1988
	1962	1972	1980	1988		
Bangkok Bank	21.5	29.5	34.5	28.3	28.7	16.4
Krung Thai Bank	18.7	14.6	13.4	14.2	15.5	13.8
Thai Farmers Bank	4.5	6.9	11.4	12.6	13.5	14.5
Siam Commercial Bank	5.6	4.9	5.5	8.3	8.9	9.8
Bank of Ayudhya	5.3	6.3	4.7	5.7	5.6	8.1
Thai Military Bank	2.5	3.3	2.8	5.6	6.0	7.3
First Bangkok City Bank	2.4	3.4	3.3	3.8	3.1	2.5
Siam City Bank	3.6	4.0	2.9	3.8	3.5	4.8
Bangkok Metropolitan Bank	3.5	4.9	4.5	3.6	3.4	5.4
Bangkok Bank of Commerce	4.3	3.6	3.7	3.1	3.4	6.8
Bank of Asia	3.1	2.4	1.8	2.6	2.3	2.3
Indon Bank of Bangkok	3.0	2.3	1.5	1.6	1.6	4.2
Thai Danu Bank	1.6	1.3	0.9	1.1	1.2	1.4
Jokorntion Bank			0.9	0.9	1.2	
Siam Thong Bank	2.3	0.8	0.6	0.4	0.4	0.5
Foreign banks	16.7	9.7	5.9	4.4	2.0	0.9
-bank concentration	44.7	51.0	59.3	55.1	57.7	44.8
-bank concentration	50.3	55.9	64.8	63.4	66.6	54.5
-bank concentration	55.6	62.2	69.5	69.1	72.2	62.6
Herfindahl Index	0.113	0.138	0.165	0.138	0.145	0.102

a Columns may not add to 100 because of rounding.

Table 19:
Market Capitalization of SET Listed Equities, 1980-88
(Billion baht)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Common shares	28.8	23.0	28.9	34.2	45.7	43.8	74.2	135.0	213.1
Preferred shares	0.06	0.05	0.05	0.15	0.18	0.17	0.21	0.37	0.55
Unit Trusts	0.43	0.33	0.40	0.40	0.54	0.51	0.70	2.04	3.34

Source: BOT.

Table 20:
Market Capitalization by Sectors, June 30, 1989

Sector	Companies	Market Capitalization (billion baht)	%
Banking	15	77.22	19.9
Finance & Securities	20	36.33	9.4
Insurance	10	11.89	3.1
Commerce	16	23.84	6.2
Services	3	3.26	0.8
Warehouse & Silo	3	1.68	0.4
Hotel	3	12.13	3.1
Packaging	6	9.18	2.4
Construction	8	102.56	26.4
Automotive	3	6.27	1.6
Textiles	20	26.38	6.8
Mining	4	14.21	3.7
Food & Beverage	11	10.91	2.8
Electrical	2	2.59	0.7
Others	<u>24</u>	<u>49.29</u>	<u>12.7</u>
	148	367.34	100.0

Source: Phatra Research Institute, Stock Market Mid Year Review, 1989.

Table 21:
Foreign Portfolio Investment, 1982-89
(Billion baht)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Inflow	1.1	0.3	0.6	0.4	2.4	4.1	3.0	17.1	27.8
Outflow	0.1	0.2	-	0.1	2.5	0.2	0.5	4.3	16.6

Source: BOT.

277

Table 22:
Primary Debt Securities Market, 1980-88
Amount Issued (Billion Baht)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Government bonds	14.0	23.2	24.5	18.7	35.0	26.3	40.8	29.2	20.5
State enterprise bonds	1.5	2.6	0.5	-	0.1	3.4	3.9	1.7	2.2
BOT bonds	-	-	-	-	-	-	-	-	0.1
Debentures (by private firms)	-	-	0.05	-	-	-	0.8	2.5	0.5
Floating rate notes	-	-	-	-	-	-	-	-	1.2

Source: BOT.

Table 23:
Holders of Treasury Bills, 1980-88
(million baht)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Bank of Thailand	6,258	3,385	5,755	8,154	4,850	9,709	4,485	9,460	-
Exchange Equalization Fund ^{/a}	1,409	1,240	1,568	1,000	1,800	2,067	2,000	2,000	1,960
Commercial Banks	330	3,335	2,197	935	5,250	35	1,850	-	-
Others	403	440	379	341	890	446	3,597	40	40

^{/a} This is a government-owned account which holds a portion of the country's foreign exchange reserves.

Source: BOT.

Table 24:
Primary Money Market Instruments, 1980-88
(million baht)

	1980	1981	1982	1983	1984	1985	1986	1987	1988
Treasury bills	8,400	8,400	9,900	11,000	12,000	12,000	12,000	11,500	2,000
Commercial paper	-	-	-	1,284	-	2,382	8,423	11,196	16,185
Transferable CDs	-	-	-	-	19,484	18,858	1,917	950	301
Notes:									
Citi Notes	-	-	-	-	-	-	325	650	650
Chase Notes	-	-	-	-	-	-	-	200	200
IFCT Notes	-	-	-	-	-	-	-	-	400

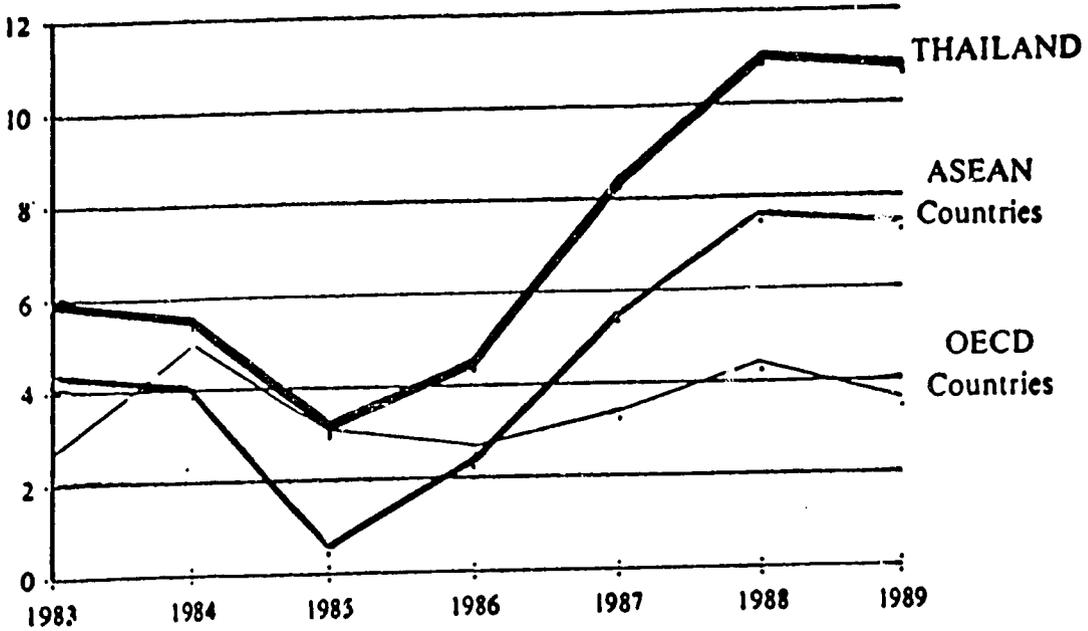
Source: BOT.

234

Table 25

COMPARATIVE ECONOMIC GROWTH

PERCENT



Source: Securities Market in Thailand 1990, SET (89/7)

235

Table 26
SET Market Performance
(As of December 1989)

Market Performance (Corporate Securities)

Year	Turnover Value Mil. B(,000,000)		SET Index		
	Total	Daily Ave.	High (Date)	Low (Date)	Close
1975	559.54	3.37	100.12 (23/7)	84.08 (30/12)	84.08
1976	993.54	4.01	83.96 (2/1)	76.44 (17/3)	82.70
1977	26,282.10	106.84	205.80 (7/11)	82.48 (1/8)	181.59
1978	57,065.75	231.97	266.20 (24/11)	180.79 (1/8)	257.73
1979	22,450.55	90.53	259.82 (2/1)	146.12 (12/11)	149.40
1980	6,543.22	26.41	148.23 (2/1)	113.33 (9/9)	124.67
1981	2,521.20	10.21	129.03 (12/2)	103.19 (8/9)	106.62
1982	5,877.97	23.89	138.77 (13/9)	102.03 (14/4)	123.50
1983	9,120.55	36.93	148.36 (29/7)	122.88 (13/1)	134.47
1984	10,595.19	42.72	144.83 (3/12)	128.69 (18/4)	142.29
1985	15,333.99	62.59	158.08 (31/7)	132.76 (24/12)	134.95
1986	24,993.46	101.19	207.98 (26/12)	127.26 (19/6)	207.20
1987	122,138.49	494.49	472.86 (16/10)	203.14 (16/2)	284.94
1988	156,457.23	633.43	471.45 (8/8)	287.71 (4/1)	386.73
1989	377,067.01	1,526.59	879.19 (29/12)	391.23 (3/1)	879.19

Source = Securities Market in Thailand 1990

- 236 -

Table 27:
Foreign Investors and Foreign Investment Funds

Years	Foreign Investment (Mil. baht)	% of Total Turnover
1982	238.35	2.05
1983	338.91	1.83
1984	1,185.27	5.51
1985	1,596.05	4.84
1986	4,617.20	7.76
1987	25,501.10	10.36
1988	40,276.07	12.86
1989	97,284.96	12.90

Source = Securities Market in Thailand 1990

237

Table 28:
Highlights Statistics on Quoted Securities

ITEM	1981	1982	1983	1984	1985	1986	1987	1988	1989
CORPORATE SECURITIES									
Annual Turnover - Volume (mil. shares)	30.00	60.76	71.20	83.27	99.34	153.67	923.59	1,579.65	3,253.64
- Value (bil. baht)	2.52	5.88	9.12	10.60	15.33	24.99	122.14	156.46	377.03
Average Turnover - Monthly (mil.baht)	210.10	489.83	760.05	882.93	1,277.83	2,082.79	10,178.21	13,038.10	31,419.02
- Daily (mil. baht)	10.21	23.89	36.93	42.72	62.59	101.19	494.49	633.44	1,526.43
Turnover by Types of Securities									
- Common and Preferred Shares (mil. baht)	2.36	5.48	8.76	10.26	14.99	24.49	112.72	133.43	338.54
- Unit Trusts	162.31	396.43	364.20	336.53	346.39	497.97	6,428.97	6,937.81	6,078.28
- Debentures (mil. baht)	0.72	+	+	+	+	2.67	25.72	30.88	658.08
- Convertible Debentures (mil. baht)	+	+	+	+	+	+	+	+	40.01
SET Index*	106.62	123.50	134.47	142.29	134.95	207.20	284.94	386.73	879.19
Market Dividend Yield [~] (%)	9.57	8.53	6.97	9.07	8.15	4.30	3.86	3.84	2.07
Market P/E Ratio*	9.52	11.83	6.54	7.19	9.59	12.34	9.31	12.03	26.39
Capital Mobilized by Quoted Companies (mil. baht)	1,084.36	2,163.88	1,459.15	6,459.15	4,143.32	2,167.98	14,515.17	10,880.64	25,311.82
Number of Quoted Companies									
- Listed	80	81	88	96	97	93	109	141	175
- Authorized	4	3	3	3	2	1	7	19	30
Number of Issues									
- Listed	86	85	92	99	100	98	125	165	218
- Authorized	81	81	88	95	97	96	117	145	186
- Authorized	5	4	4	4	3	2	8	20	32
Total Capitalization									
- Nominal Value (bil. baht)	14.83	16.55	18.08	22.59	24.58	24.35	38.48	53.50	77.44
- Market Value (bil. baht)	23.47	29.44	34.79	47.43	49.46	75.20	138.16	223.65	659.50
GOVERNMENT SECURITIES									
Annual Turnover - Volume (mil. units)	0.92	0.10	1.73	1.85	7.04	6.32	1.27	0.21	0.27
- Value (mil. baht)	376.48	87.75	203.35	276.01	1,148.87	4,854.76	1,282.31	192.01	38.83
Number of Listed Issues	85	103	124	130	134	142	129	144	144
Total Capitalization - Nominal Value (bil. baht)	89.67	110.38	135.92	152.74	180.46	202.34	206.86	203.81	198.70

* End of Year + No Listed Issue

Source = Securities Market in Thailand 1990

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Table 29:
Shareownership of Corporate Securities

Year	No. of Shares (Mil. Shares)	By Type (Mil. Shares)		By Nationality (Mil. Shares)		By Capitalization (Mil. Baht)		Total
		Individual	Institution	Domestic	Foreign	Domestic	Foreign	
1979	116.09	42.37 (36.50%)	73.72 (63.50%)	102.12 (87.97%)	13.97 (12.03%)			
1980	125.80	39.92 (31.73%)	85.88 (68.27%)	111.07 (88.29%)	14.73 (11.71%)			
1981	142.48	44.24 (31.05%)	98.24 (68.95%)	124.68 (87.51%)	17.80 (12.49%)			
1982	151.87	47.04 (30.97%)	104.83 (69.03%)	132.12 (87.00%)	19.75 (13.00%)			
1983	178.50	53.94 (30.22%)	124.56 (69.78%)	154.93 (86.79%)	23.57 (13.21%)			
1984	205.91	75.32 (36.58%)	130.59 (63.42%)	177.44 (86.71%)	28.83 (13.83%)			
1985	299.16	88.15 (29.47%)	211.00 (70.53%)	239.12 (79.93%)	60.63 (20.07%)			
1986	322.81	95.08 (29.45%)	277.73 (70.55%)	251.05 (77.77%)	71.76 (22.23%)	50,933.50 (79.33%)	15,797.06 (23.67%)	66,730.56 (100.00%)
1987	355.85	88.52 (24.88%)	267.33 (75.12%)	260.35 (73.16%)	95.51 (26.84%)	107,636.70 (76.85%)	32,416.14 (23.15%)	140,052.84 (100.00%)
1988	1,460.42	624.27 (42.75%)	836.15 (57.25%)	1,278.63 (87.55%)	181.79 (12.45%)	167,560.65 (76.51%)	51,449.43 (23.49%)	219,010.08 (100.00%)
1989	2,816.01	1,246.23 (44.25%)	1,569.79 (55.75%)	2,466.85 (87.60%)	349.17 (12.40%)	479,235.88 (73.12%)	176,173.87 (26.88%)	655,409.75 (100.00%)

Source = Securities Market in Thailand 1990

16/1

Table 30:
Turnover of Corporate and Government Securities

Year	Corporate Securities		Government Securities		Total		Daily Average Turnover (Mil. Baht)	Percent of Total Value	
	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht		Corporate Securities	Government Securities
1975	2,943,446	559.54	957,374	963.38	3,900,820	1,522.92	9.17	36.74	63.26
1976	5,174,573	993.54	994,737	687.61	6,169,310	1,681.15	6.78	59.10	40.90
1977	97,119,688	26,282.10	590,000	310.18	97,709,420	26,592.28	108.10	98.83	1.17
1978	178,928,420	57,065.75	288,562	206.65	179,217,250	57,272.40	232.81	99.64	0.36
1979	97,277,223	22,450.55	124,760	82.57	97,401,983	22,533.12	90.86	99.63	0.37
1980	58,244,782	6,549.22	10,000	10.00	58,254,782	6,559.22	26.45	99.85	0.15
1981	30,000,738	2,521.20	915,714	376.48	30,916,452	2,897.68	11.73	87.01	12.99
1982	60,758,778	5,877.97	97,650	87.75	60,856,428	5,965.72	24.25	98.53	1.47
1983	71,199,747	9,120.55	1,729,170	203.35	72,928,917	9,323.90	37.75	97.82	2.18
1984	83,267,804	10,595.19	1,805,477	276.01	85,118,281	10,871.20	43.84	97.46	2.54
1985	99,341,183	15,333.99	7,036,544	1,148.87	106,377,727	16,482.86	67.28	93.03	6.97
1986	153,665,795	24,993.46	6,323,799	4,854.76	159,988,994	29,848.22	120.84	83.74	16.26
1987	923,592,208	122,138.49	1,268,759	1,282.42	924,860,367	123,420.91	499.68	98.96	1.04
1988	1,579,646,570	156,457.23	210,574	192.13	1,579,857,144	156,649.36	634.21	99.88	0.12
1989	3,253,636,527	377,028.18	265,557	38.83	3,253,902,084	377,067.01	1,526.59	99.99	0.01

Source - SET Fact Book 1990

20

Table 31:
Turnover of Corporate and Government Securities, by Types of Securities

Year	Common Shares		Preferred Shares		Unit Trusts		Convertible Shares	Debenture Mil. Baht	Debentures		Total	
	Shares	Mil. Baht	Shares	Mil. Baht	Units	Mil. Baht			Shares	Mil. Baht	Units	Mil. Baht
1975	2,831,196	547.66	11,995	1.55	+	+	800	0.08	99,455	10.25	2,943,446	559.54
1976	5,004,468	972.01	67,150	9.09	+	+	-	-	102,955	12.44	5,174,573	993.54
1977	94,420,745	26,014.00	134,150	37.81	2,498,175	222.64	-	-	66,350	7.65	97,119,420	26,282.10
1978	141,238,221	53,456.95	161,100	45.52	36,796,160	3,489.90	-	-	733,207	73.38	178,928,688	57,065.75
1979	78,560,257	21,776.86	52,606	8.12	18,599,970	658.26	-	-	64,390	7.31	97,277,223	22,450.55
1980	44,266,903	6,301.15	6,080	1.27	13,971,639	246.78	-	-	160	0.02	58,244,782	6,549.22
1981	19,062,553	2,358.16	4	0.01	10,930,532	162.31	-	-	7,649	0.72	30,000,738	2,521.20
1982	38,280,617	5,479.34	10,820	2.20	22,467,341	396.43	-	-	-	-	60,758,778	5,877.97
1983	52,366,352	8,751.77	37,260	4.58	18,796,135	364.20	-	-	-	-	71,199,747	9,120.55
1984	63,696,126	10,223.66	64,890	35.00	19,306,788	336.53	-	-	+	+	83,267,804	10,595.19
1985	84,534,875	14,938.37	155,313	49.23	14,650,995	346.39	-	-	+	+	99,341,183	15,333.99
1986	133,794,176	24,488.39	29,230	4.43	19,815,789	497.97	-	-	26,000	2.67	153,665,195	24,993.46
1987	645,645,120	112,386.82	955,159	337.34	268,902,553	6,428.97	-	-	232,295	25.72	915,735,127	119,179.35
1988	1,124,445,537	133,097.67	901,145	330.95	414,879,445	6,937.81	-	-	215,330	30.89	1,540,441,457	140,397.32
1989	2,716,332,073	338,537.57	740,260	161.88	443,117,500	6,078.28	25,350	40.01	2,403,275	658.08	3,162,218,458	345,475.82

Source = SET Fact Book 1990

111

Table 32
Turnover of Government Securities, by Types of Securities

Year	Savings Bonds		Government Bonds				Total		EGAT		IFCT		Government Housing Bank Bonds		PTT Investment Bonds		TOT Loan Bonds	
	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht	Units	Mil. Baht
1975	4,000	0.40	58,354	57.64	895,020	905.34	957,734	963.38	+	+	-	-	+	+	+	+	+	+
1976	500	0.50	564,661	253.67	387,735	391.90	952,896	645.62	41,841	41.99	-	-	+	+	+	+	+	+
1977	-	-	530,965	251.01	57,623	57.16	587,988	308.17	2,012	2.01	-	-	+	+	+	+	+	+
1978	-	-	288,553	206.62	9	0.03	288,562	206.65	-	-	-	-	+	+	+	+	+	+
1979	-	-	113,520	62.71	11,240	19.86	124,760	82.57	-	-	+	+	+	+	+	+	+	+
1980	-	-	-	-	10,000	10.00	10,000	10.00	-	-	+	+	-	-	+	+	+	+
1981	-	-	631,936	77.60	275,778	290.88	907,714	368.48	+	+	+	+	8,000	8.00	+	+	+	+
1982	-	-	21,000	2.10	76,650	85.65	97,650	87.75	+	+	+	+	-	-	+	+	+	+
1983	-	-	5,570	0.61	9,400	9.85	14,970	10.46	1,714,200	192.89	+	+	-	-	+	+	+	+
1984	-	-	628,270	65.13	64,168	60.09	692,438	125.22	1,158,039	150.79	+	+	-	-	+	+	+	+
1985	+	+	1,453,315	148.19	188,000	193.19	1,641,315	341.38	5,395,229	807.49	+	+	-	-	-	-	+	+
1986	+	+	2,491,805	268.27	3,831,994	4,586.49	6,323,799	4,854.76	+	+	+	+	-	-	-	-	+	+
1987	+	+	283,000	29.50	933,159	1,165.89	1,216,159	1,195.39	+	+	+	+	-	-	50,000	63.44	2,000	23.59
1988	+	+	61,443	8.17	149,031	182.96	210,474	191.13	+	+	+	+	-	-	-	-	100	1.00
1989	+	+	256,347	28.06	9,210	10.77	265,557	38.83	+	+	+	+	-	-	-	-	+	+

25/2

Table 33:
Number of Quoted Companies and Securities by Sectors

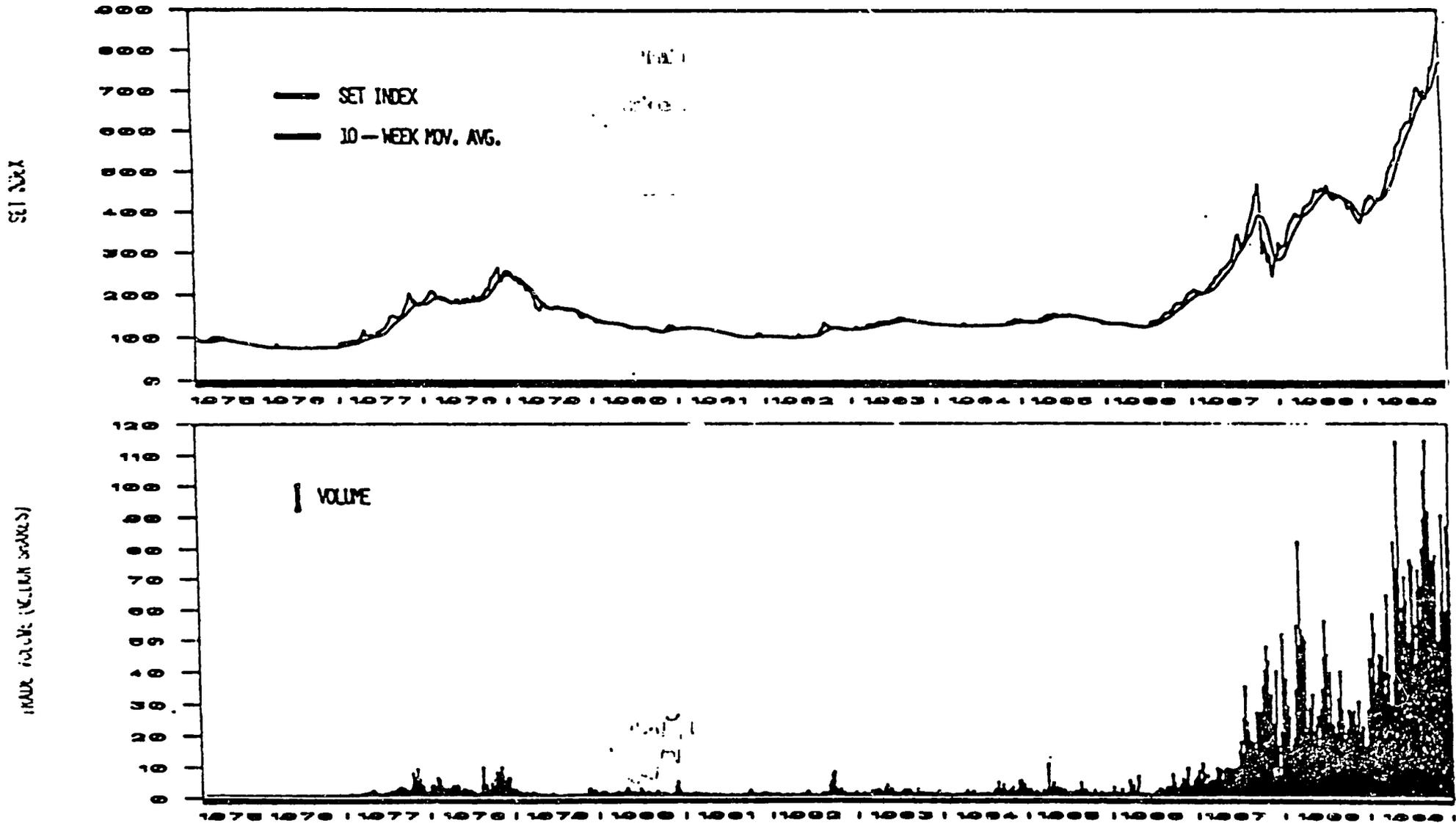
As of	Corporate Sector						Government Sector							Total	
	Listed	Number of Companies		Number of Securities		Government Bonds			SGAT	IFCT	Government	PTT	TOT		
		Authori- zed	Total	Liste d	Authori- zed	Total	Saving	Loan	Investment	Total Investment Bonds	Debentures	Housing Bank Bonds	Investment Bonds	Loan Bonds	
30/4/75	7	2	9	11	3	14	-	-	-	-	2	-	-	-	2
31/12/75	16	5	21	20	7	27	1	19	16	36	2	-	-	-	38
31/12/76	22	3	25	27	5	32	1	23	17	41	7	-	-	-	50
31/12/77	36	3	39	42	4	46	1	28	18	47	6	-	-	-	55
31/12/78	57	4	61	66	5	71	1	28	22	51	4	-	-	-	55
31/12/79	65	4	69	73	5	78	1	33	24	58	2	-	-	-	60
31/12/80	72	5	77	79	6	85	1	42	27	70	-	1	-	-	71
31/12/81	76	4	80	81	5	86	1	51	32	84	-	1	-	-	85
31/12/82	78	3	81	81	4	85	1	65	36	102	-	1	-	-	103
31/12/83	85	3	88	88	4	92	1	77	44	122	1	1	-	-	124
31/12/84	93	3	96	95	4	99	-	81	47	128	1	1	-	-	130
31/12/85	95	2	97	97	3	100	-	79	53	132	-	1	-	-	134
31/12/86	92	1	93	96	2	98	-	75	62	137	-	1	-	-	139
31/12/87	102	7	109	117	8	125	-	57	69	126	-	1	1	-	129
31/12/88	122	19	141	145	20	165	-	68	73	141	-	1	1	1	144
31/12/89	145	30	175	186	32	218	-	65	76	141	-	1	2	-	144

Source = SET Fact Book 1990

2/11

Table 38

Weekly Movement of SET Index & Trade Volume of Corporate Securities



Source: SET Pack Book 1990

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Table 34:
Quoted Corporate Securities by Types of Securities

As of	Common Shares			Preferred Shares			Unit Trusts			Convertible Debentures			Debentures			Total				
	Issue	Shares	Value (Mil. Bakt)	Issue	Shares	Value (Mil. Bakt)	Issue	Shares	Value (Mil. Bakt)	Issue	Shares	Value (Mil. Bakt)	Issue	Shares	Value (Mil. Bakt)	Units	Value (Mil. Bakt)			
30/4/75	9	25,447,342	2,012.73	1	140,000	14.00	-	-	-	1	93,680	9.37	3	1,800,900	225.00	14	27,481,922	2,261.10	5,8	
31/12/75	21	33,374,322	3,008.67	2	190,000	19.00	-	-	-	1	92,880	9.29	3	1,800,900	225.00	27	37,438,102	3,261.96	5,3	
31/12/76	25	39,824,793	3,424.72	2	190,000	19.00	-	-	-	1	90,915	9.09	4	1,950,900	375.00	32	42,854,608	3,827.81	7,2	
31/12/77	38	49,516,172	4,537.86	2	190,000	19.00	1	5,888,628	100.00	500.00	1	28,325	2.83	4	1,950,900	375.00	46	56,485,397	5,034.69	19,2
31/12/78	59	62,346,860	7,872.07	3	360,000	24.00	2	18,600,000	280.00	685.00	-	-	-	7	2,750,900	435.00	71	95,257,798	8,513.07	33,0
31/12/79	66	124,517,155	11,739.10	3	560,000	56.00	3	25,000,000	500.00	536.25	-	-	-	6	2,350,500	395.00	78	152,427,655	12,690.10	20,3
31/12/80	76	138,113,460	13,098.73	3	560,000	56.00	3	25,000,000	500.00	437.50	-	-	-	5	1,800,500	265.00	85	146,473,960	13,859.73	25,3
31/12/81	77	150,679,526	14,215.32	3	560,000	28.00	3	25,000,000	500.00	331.25	-	-	-	3	608,500	85.26	86	176,840,026	14,828.32	23,4
31/12/82	78	172,540,026	15,996.37	3	560,000	28.00	3	25,800,000	500.00	443.00	-	-	-	1	500	23.00	85	198,188,526	16,249.37	29,4
31/12/83	85	191,222,894	17,534.67	3	560,000	28.00	3	25,000,000	500.00	400.00	-	-	-	1	250	12.50	92	216,783,144	18,075.17	34,1
31/12/84	92	298,275,256	22,011.58	3	560,000	28.00	4	25,500,000	550.00	548.75	-	-	-	-	-	-	99	324,225,856	22,569.58	47,4
31/12/85	93	322,205,578	24,004.61	3	560,000	28.00	4	25,500,800	530.00	567.75	-	-	-	-	-	-	100	348,225,578	24,562.61	49,4
31/12/86	89	363,308,083	23,753.19	3	560,000	28.00	4	25,500,000	550.00	700.00	-	-	-	2	400,000	60.00	98	389,768,083	24,351.19	73,1
31/12/87	104	1,129,533,237	35,774.23	4	3,202,096	34.91	5	170,500,000	1,950.00	2,040.00	-	-	-	12	4,770,000	720.00	125	1,308,085,333	38,479.16	138,1
31/12/88	136	2,408,562,771	48,542.56	4	3,202,096	34.91	5	315,000,000	3,300.00	3,336.50	-	-	-	20	5,670,000	1,420.00	146	2,932,438,867	53,497.67	223,1
31/12/89	170	3,977,904,106	70,442.77	8	188,827,734	313.47	5	488,888,000	4,800.00	7,325.00	3	167,430	416.23	32	12,670,000	2,360.00	218	4,488,234,278	77,432.67	489,1

Source = SET Fact Book 1990

11/15/89

Table 35:
Capital Mobilizations by Share Allotment Methods in 1989

Industries	Total			Shareholders			Public			Others		
	Shares	Value (B. Mil.)		Shares	Value (B. Mil.)		Shares	Value (B. Mil.)		Shares	Value (B. Mil.)	
1. Financial Institutions	333,230,000	6,421.80	14,398.42	305,295,959	5,702.03	12,089.88	15,910,000	520.00	2,009.50	12,024,041	199.77	299.04
Banking	234,000,000	4,600.00	9,361.50	230,700,000	4,270.00	8,587.50	3,300,000	330.00	774.00	-	-	-
IFCT	6,000,000	600.00	870.00	4,530,000	453.00	656.85	-	-	-	1,470,000	147.00	213.15
Finance and Securities	60,410,000	893.80	1,811.42	42,505,959	713.53	1,165.78	7,350,000	127.50	559.75	10,554,041	52.77	85.89
Insurance	32,820,000	328.00	2,355.50	27,560,000	265.50	1,679.75	5,260,000	62.50	675.75	-	-	-
2. Commerce	48,450,000	1,425.00	3,527.50	46,450,000	1,405.00	3,290.00	2,000,000	20.00	237.50	-	-	-
3. Services	3,400,000	54.00	425.00	3,400,000	54.00	425.00	-	-	-	-	-	-
Warehouse and Silo	-	-	-	-	-	-	-	-	-	-	-	-
Hotel	-	-	-	-	-	-	-	-	-	-	-	-
4. Industrials	53,256,500	931.15	2,732.90	39,260,000	727.60	1,229.40	13,996,500	203.55	1,503.50	-	-	-
Package	2,500,000	25.00	25.00	2,500,000	25.00	25.00	-	-	-	-	-	-
Construction Materials												
and Interior Furnshings	3,000,000	120.00	675.50	1,500,000	60.00	185.00	1,500,000	60.00	490.50	-	-	-
Automotive	12,000,000	120.00	120.00	12,000,000	120.00	120.00	-	-	-	-	-	-
Textiles & Clothing	28,806,500	531.65	1,526.45	17,175,000	396.75	617.25	11,631,500	134.90	909.20	-	-	-
Mining	300,000	30.00	45.00	300,000	3.00	45.00	-	-	-	-	-	-
Food & Beverage	950,000	47.50	73.75	950,000	47.50	73.75	-	-	-	-	-	-
Electrical Equipment	5,700,000	57.00	267.20	4,835,000	48.35	163.40	865,000	8.65	103.80	-	-	-
5. Others	180,700,000	1,806.00	3,883.00	177,500,000	1,775.00	3,370.00	3,000,000	30.00	512.00	200,000	1.00	1.00
Total	619,036,500	10,637.95	24,966.82	571,905,959	9,663.63	20,404.28	34,906,500	773.55	4,262.50	12,224,041	200.77	300.04

246

Table 36:
Capital Increase Announcements and Capital Mobilizations 1975-1989

Year	Capital Increase Announcements			New Shares Issuance			
	Companies	Shares	Nominal Value (B. Mil.)	Companies	Shares	Nominal Value (B. Mil.)	Subscription Value (B. Mil.)
1975	5	1,310,000	131.00	4	1,010,000	101.00	107.75
1976	5	3,618,942	451.89	5	2,024,942	292.49	294.74
1977	14	9,755,000	975.50	10	4,518,000	451.80	935.28
1978	34	103,265,000	10,461.50	26	22,976,000	2,432.60	3,997.80
1979	7	20,090,000	2,009.00	27	22,713,619	2,271.36	2,890.09
1980	3	2,250,000	225.00	10	5,483,477	548.35	696.45
1981	5	9,910,000	991.00	10	7,986,555	798.65	1,084.35
1982	10	13,474,000	986.14	16	17,234,375	1,723.44	2,163.88
1983	8	57,300,000	5,562.00	16	10,882,868	1,051.80	1,459.15
1984	12	37,200,000	3,007.50	27	41,598,567	3,281.53	6,499.95
1985	14	54,060,000	5,006.00	23	32,809,044	2,880.90	4,143.32
1986	15	92,725,000	2,766.50	21	76,456,935	1,544.69	2,167.98
1987	22	836,605,000	11,716.25	36	211,636,475	7,304.61	14,515.17
1988	39	258,105,000	9,849.00	47	259,763,908	4,907.18	10,880.64
1989	43	974,858,340	12,090.92	70	619,036,500	10,637.95	24,966.82

Source = SET Fact Book 1990

1991

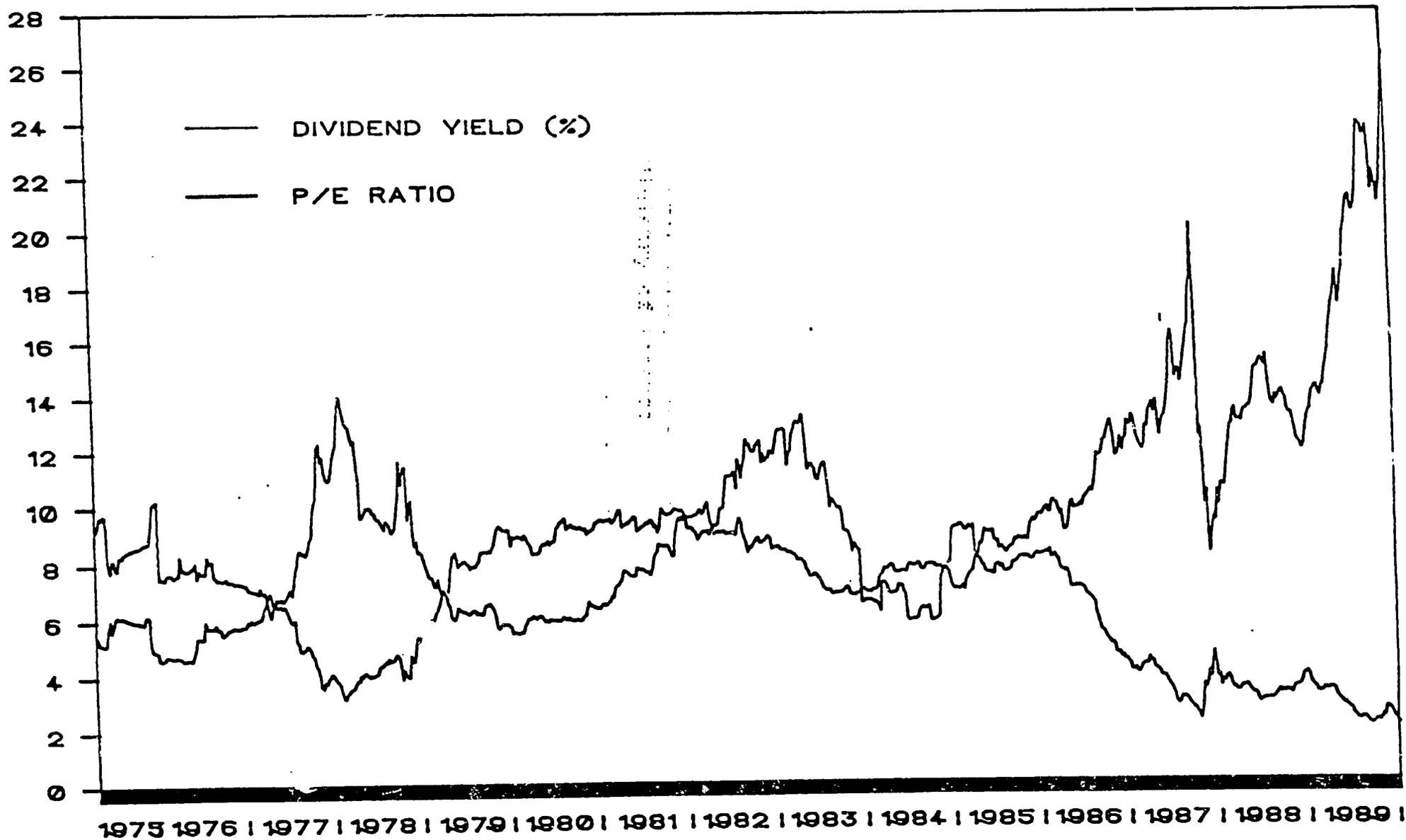
Table 37:
Listed Government Securities by Types of Securities

Government Securities (B. Mil.)	31/12/80	31/12/81	31/12/82	31/12/83	31/12/84	31/12/85	31/12/86	31/12/87	31/12/88	31/12/89
Government Bonds										
Savings										
Number of Issues	1	1	1	1	-	-	-	-	-	-
Amount Issued (B Mil.)	48.82	48.82	48.82	48.82	-	-	-	-	-	-
Debt Outstanding(B Mil.)	46.53	46.53	46.53	46.53	-	-	-	-	-	-
Loan										
Number of Issues	42	51	65	77	81	79	75	57	68	65
Amount Issued (B Mil.)	38,598.88	43,182.71	55,548.08	64,996.52	71,267.63	72,809.94	71,947.78	57,379.04	66,497.65	64,720.59
Debt Outstanding (B Mil.)	38,598.88	42,298.25	55,548.08	64,996.52	70,868.41	72,214.24	69,903.88	55,714.00	56,503.09	45,055.59
Investment										
Number of Issues	27	32	36	44	47	53	62	69	73	76
Amount Issued (B Mil.)	38,515.66	46,434.23	53,897.71	69,487.32	80,487.32	106,820.71	131,915.22	150,112.41	163,712.41	169,712.41
Debt Outstanding (B Mil.)	38,515.66	46,434.23	53,897.71	69,487.32	80,487.32	106,820.71	131,011.91	148,874.10	144,876.62	150,907.57
Total										
Number of Issues	70	84	102	122	128	132	137	126	141	141
Amount Issued (B Mil.)	77,163.36	89,665.76	109,494.61	134,532.66	151,754.95	179,630.65	203,863.00	207,491.45	230,379.71	234,433.00
Debt Outstanding (B Mil.)	77,161.07	88,779.01	109,492.32	134,530.37	151,355.73	179,034.95	200,915.79	204,588.10	201,379.71	195,963.16
EGAT Investment Bonds										
Number of Issues	-	-	-	1	1	-	-	-	-	-
Amount Listed (B Mil.)	-	-	-	500.00	500.00	-	-	-	-	-
IFCT Debentures										
Number of Issues	-	-	-	-	-	-	-	-	-	-
Amount Listed (B Mil.)	-	-	-	-	-	-	-	-	-	-
GHB Bonds										
Number of Issues	1	1	1	1	1	1	1	1	1	1
Amount Listed (B Mil.)	887.19	887.19	887.19	887.19	887.19	887.19	887.19	887.19	887.19	887.19
PTT Investment Bonds										
Number of Issues	-	-	-	-	-	2	2	1	1	1
Amount Listed (B Mil.)	-	-	-	-	-	542.00	542.00	542.00	1,542.00	1,542.00
TOT Loan Bonds										
Number of Issues	-	-	-	-	-	-	-	1	-	-
Amount Listed (B Mil.)	-	-	-	-	-	-	-	845.00	-	-
Grand Total										
Number of Issues	71	85	103	124	130	134	139	129	144	144
Amount Listed (B Mil.)	78,048.26	89,666.20	110,379.51	135,917.56	152,742.92	180,464.14	202,344.98	206,862.29	203,808.90	198,392.35

Source = SET Fact Book 1990

7/18

Weekly Movement of Market Dividend Yield & P/E Ratio



259

Source: SET Fact Book 1990

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Table 40
List of People Interviewed in Thailand

Mr. Shinji Asanuma
Director
Country Department 1, Asia Region
The World Bank

Mr. Pakorn Malakul Na Ayudhya
Director
Banking Department
Bank of Thailand

Mr. Franco Batzella
Chief
Energy Operations Division
World Bank

Ms. Patareeya Benjapolchai
Senior Manager Development and Planning
Department

Mr. John Besant-Jones
Principal Energy Economist
Industry and Energy Department
World Bank

Lt. Nophadol Bhandhugravi
Head
State Enterprise Loan Sector
Fiscal Policy Office
Ministry of Finance

Dr. Chakrabhand Chandanasiri
Fiscal Policy Office
Ministry of Finance

Ms. Yupadee Chanyakomol
Economist
Loan Policy and Management Division
Fiscal Policy Office
Ministry of Finance

Dr. Asavin Chintakananda
Executive Vice President
The Bank of Asia Ltd.

Ms. Nitt Chongdee, Vice President
Sinthon Building
Bangkok, Thailand

Table 40 (cont'd)

Mr. Edward A. Coppola
Guarantee Officer
Guarantees Division
Multilateral Investment Guarantee Agency
The World Bank

Ms. Chusri Daengprapai
Deputy Director
Financial Institution Supervision and Examination
Bank of Thailand

Mr. Gene Davis
Managing Director
Chase Bank, Thailand

Mr. Sawang Dhangwattanotai
Vice President
Foreign Exchange Trading Office
Bangkok Bank

Mr. Surasak Dudsdeemaytha
Merchant Banking Division
Business Development Department
Thai Farmers Bank

Richard Erskine
Vice President and General Manager

Mr. David Hendrix
Vice President
CitiBank, N.A.
Country Corporate Officer-Thailand

Ted Heyermann
Vice President & Country Manager
Bank of America
Bangkok Branch 6204

Mr. Pakhawat Kovithvathanaphong
President
Security One

Mr. Ayuth Krishnamara
Vice President
Funds and Liquidity Management Department

Mr. Ryuhei Matsuda
Chief Representative
The Nomura Securities Co., LTD

752

Table 40 (cont'd)

Dr. Maruey Phadongsidhi, President
Security Exchange of Thailand
Sinthon Building

Dr. Piyasiwati
National Energy Policy Office
78 Rachadamnoen Avenue

Mintora ("min") Silawatshananai
Chief Engineer
USAID Mission, Bangkok

Ms. Nongnart Sondysuvan
Assistant Director
Department of Economic Research
Bank of Thailand

Mr. Kiatchai Sophastienphong
Senior Vice President
The Bank of Asia, Ltd.

Mr. Pichit Suntornwarangkana
Manager
Merchant Banking Division
Business Development Department
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253'