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THE SCIENTEX CORPORATION

CENTER FOR PRIVATIZATION

PRIVATIZATION IN THAILAND

November 30, 1990

PRIVATIZATION IN THAILAND

A Report Presented to:

The Comptroller-General, Ministry of Finance

and

The United States Agency for International Development

The Center for Privatization

Scientex Corporation

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Acronyms

AAT	Airport Authority of Thailand
BOOT	Build, Own, Operate, and Transfer
BOT	Bank of Thailand
CAT	Communications Authority of Thailand
EGAT	Electricity Generating Authority of Thailand
EDL	Electricite de Laos
GDP	Gross Domestic Product
KWH	Kilo-Watt hour
MOF	Ministry of Finance
MWH	Mega-Watt hour
NIC	Newly Industrializing Country
PAT	Port Authority of Thailand
PER	Price-earnings ratio
PTT	Petroleum Authority of Thailand
PTTE&P	Petroleum Authority of Thailand--Exploration and Production
ROA	Return on Assets
ROE	Return on Equity
RPI	Retail Price Index
RTG	Royal Thai Government
SED	State Enterprise Division
SET	Securities Exchange of Thailand
SEWURG	State Enterprise Workers Union Relations Group
SOE	State-Owned Enterprise
TOT	Telecommunications Organization of Thailand
USAID	United States Agency for International Development

TABLE OF CONTENTS

APPENDICES

I. Opposing Arguments to Privatization in Thailand

II. Draft Privatization Law

III. Methodology of the Privatization Unit for Privatization Other than by Share Offer

IV. Methodology of the Privatization Unit for a Public Share Offer

V. Working Definition of Valuation Terms

VI. Illustrative Seminar Contents and Timetables

VII. Outline of Training Program for Technical Unit

VIII. A Management Information System for the Technical Unit

IX. Profile of Authors

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1

Chapter 1

PRIVATIZATION IN THAILAND

Executive Summary

The State of Privatization.

There are four basic objectives in increasing the involvement of the private sector in SOEs in Thailand:

- Expand financing opportunities for SOEs which will be needed for infrastructure to keep pace with growth.
- Improve the productivity and efficiency of SOEs and the economy.
- Develop and democratize the capital markets.
- Provide finance from privatization sales for underfunded government functions such as education.

The potential for involving the private sector in the SOEs in Thailand is excellent from a technical point of view. Most SOEs are financially attractive for private sector investment. The Thai stock market and securities industry is sophisticated, there is a strong domestic and foreign demand for shares, and the economy is dynamic. Several SOEs are world class companies, such as Thai International and EGAT.

However, the results to date have been disappointing. Since 1981 there have been approximately 13 enterprises "privatized": five by liquidation, five by joint venture, two by divestiture, and one partial privatization by share sale (Krung Thai Bank.) The two divestitures were of small, money losing SOEs. The sale of a minority interest of Krung Thai shares was undersubscribed. The assets of SOEs privatized since 1984 represent less than 1 percent of total SOE assets.

The SOEs have contracted out a number of services, such as security and maintenance. However, this form of privatization, though a useful tool, does not have the power to achieve the fundamental shift in the roles played by the public and private sector in the financing, ownership and management of SOEs, which is required for the economy to continue to grow.

Efforts to do more than this have been met with controversy and sometimes hostility. The very word "privatize" has become *verba non grata* in some government circles.

Why have the results been so disappointing? The main problems encountered in Thailand are similar to those found in other countries at an early stage in their privatization program:

- The absence of clear, well-defined objectives and a strategy.
- The importance of privatization to the growth of the economy and livelihood of the citizens has not been adequately communicated to the unions, SOE management, government officials and the private sector. In other countries, once the objectives and benefits have been explained, unions and others have been tended to support privatization.
- Privatization in this environment has been undermined by a lack of organization and an abundance of overlapping government agencies.
- Some legal and technical obstacles, outlined below, would have to be overcome before privatization by broad-based share sale could be undertaken.

These significant constraints notwithstanding, the involvement of the private sector in the SOEs, especially for EGAT and TOT, is simply too important to Thailand's development to allow the present inertia to continue. The measures to overcome these constraints are also similar to ones that have worked elsewhere.

Organizing the Program. The government must move the program forward. The team concluded that the proposed Privatization Law is required for a privatization program to be successful. The team has offered several comments and proposed modifications to the law to strengthen it.

The draft law calls for a Committee for Privatization of State Enterprises to be established. It will report to the Prime Minister. This committee will need a secretariat and a technical unit to develop recommendations. The technical unit should be established in the State Enterprise Division of the Comptroller General's office, where there is already a considerable body of knowledge about the SOEs, and where analytical skills can be further developed. The Ministry of Finance "owns" the shares of the SOEs and should therefore have the most significant voice in the process. The technical unit would be a core group which would be supplemented as required by outside specialists.

Public Awareness. The government should undertake a significant campaign to increase the public's awareness of the benefits of privatization and the techniques employed as well as the success it has achieved in other countries.

A series of seminars, such as "Why Privatize," "How to Privatize," "Financial Markets Development," "The Benefits of Share Ownership," and "Employee-Management Leveraged Buyouts," need to be developed in coordination with the technical unit. They would be targeted for the critical groups, such as government officials, union leaders and rank and file, SOE management, and the private sector.

These series of seminars would not only contribute to the public awareness campaign, but would also help define objectives, develop strategies, and reinforce the will to privatize.

Further, key private sector groups such as the Thai Chamber of Commerce and the Thai Federation of Industries need to become active and articulate supporters of privatization.

<u>Legal and Administrative Constraints</u>. It is well know that one legal obstacle to privatization of some SOEs such as EGAT and TOT is the need for reincorporation under the Civil and Commercial Codes in order to permit private investment. The draft privatization law calls for such reincorporation.

The team has identified some other legal and technical obstacles that would have to be overcome before a broad-based share sale could be undertaken:

- The need to upgrade the registration and transfer capability of the SET.
- The need for directors to sign every share.
- The need to stamp large volumes of share certificates for stamp duty purposes.
- The length of time between share sale and listing on the SET is far too long.

Resolving the first item is an action recommended for USAID to consider financing, and outlined below. Items two and three can be resolved by a change in the law, and the last by administrative streamlining.

<u>The Demonstration Effect</u>. The process and benefits of privatization need to be concretely demonstrated. The RTG should select an attractive candidate for privatization by broad-based share offer, which would include an employee share plan which was supported by the unions, and ensure that it was successfully transacted through meticulous preparation.

From the point of view of ease of transaction, and initiating the privatization program, Thai International would be the most attractive candidate. It is critical to Thailand's privatization program that it be structured in a populist mode to attract a large number of new investors to the market.

Success with a share sale of Thai International could help to attract private sector finance to the Electricity Generating Authority of Thailand (EGAT) and the Telephone Organization of Thailand (TOT). This would be the most significant benefit from privatization for these SOEs because they are the most strapped for the capital needed to keep pace with the infrastructural demands of Thailand's burgeoning economy.

Summary Findings on Six Case Studies.

Thai International. Thai International provides the most immediate opportunity for meaningful privatization. It appears that the Ministry of Finance, Ministry of Transport and Communications, and the Board of Thai International are in agreement that privatization should proceed in some way. This consensus led the team to determine that this could be the flagship transaction which could popularize privatization in Thailand.

The objective of privatization is to provide the airline with the means to expand its fleet to increase the frequency of flights between existing destinations. The mode of privatization contemplated at present is for an issue of new shares, first on the local market to citizens and then to others in different tranches up to an eventual amount of 25 percent of the then equity, together with a leasing arrangement with a private company (the Special Purpose Company or "SPC"), which would buy aircraft and then lease them to Thai International.

Because the SPC transaction may constitute a financing lease and therefore count as a debt obligation, it may be against the administrative policy of the Ministry of Finance has placed a ceiling on incurring debt. This puts the practicality of the SPC transaction as a means of raising capital in doubt.

There is no current plan to seek widespread distribution through involving as many Thai citizens as possible in the share sale (given the constraint of cost effectiveness.) The reason for this appears to be lack of familiarity with this share issue technique rather than consideration and rejection of it. In fact, team discussions with the Thai International Director of Corporate Finance indicated a possible interest in this approach to the share sale.

Krung Thai Bank. Krung Thai Bank is the second largest commercial bank in Thailand. The team believes that the primary reason for the bank's poor performance is the fact that it is state controlled. As a result of state ownership:

- The bank is forced into uneconomic policy support activities which impinge on profitability, regardless of contrary assurances

- The private sector deals with it to a much lesser extent than it could, and private sector customers are vital to growth and profitability

- Investors are concerned with issues stemming from government ownership

- There is insufficient imperative to improve performance because of the automatic deposits and consortium loan business

- Government ownership has facilitated a situation where the reported financial results do not always reveal the true state of affairs

- Service delivery is not competitive.

For reasons indicated in chapter four, the privatization of Krung Thai will necessarily have to be by means of a large scale, populist share offer. Before attempting the share sale, the following action plan will be required:

- The composition of the Board of Directors should reflect more private sector membership

- The financial statements for the last three years should be redone in accordance with generally accepted accounting principles and reported on by private sector auditors of international repute.

- If the financial statements cannot be simplified by transferring the rescue operations to the Central Bank, then any deficiencies in the capital fund as a result of restating the financial statements should be made good by converting some of the soft loans from the Central Bank to equity.

- The cost effectiveness of the branch expansion program should be investigated and a decision taken as to whether it should be pursued at this time

- The Bank should arrange its affairs in such a way that there can realistically resume paying dividends at an attractive rate.

EGAT. Over the next several years, EGAT's most pressing challenge will be to satisfy Thailand's accelerating demand for electricity. This will require large pools of capital.

EGAT has several options to finance the required investment. The options which tap private sector capital through one or more forms of privatization seem to be the most advantageous and responsible. The main options are:

- Rely on borrowings plus EGAT's internally generated funds. However, this approach would not strengthen EGAT's balance sheet, and suffers from an over-reliance on foreign debt.
- Increase internally generated funds. Given current policies, rate increases would be difficult. Efficiency could be improved. But higher oil prices will reduce cash flow.
- Issue shares in a broad-based stock flotation. This seems to be the best medium-run strategy for raising capital. Aspects of the populist share offering of Kepco in Korea in 1989 could serve as a model for EGAT.
- Build, Own, Operate, and Transfer (BOOT) schemes. At present, EGAT's union favors a more limited version of this, "Build, Own, Sell," where the private sector builds a facility and then turns it over to EGAT to operate in return for a royalty consisting of a certain percentage of revenue.
- Co-generation and combined cycle with private sector industries. EGAT plans to make this 3 to 5 percent of EGAT's total installed capacity.
- Purchase increasing amounts of electricity from low-cost, neighboring producers of hydro-electricity, primarily Lao.
- Sell existing generating facilities and buy production.

Option (3) seems on balance to be the most advantageous medium term strategy to finance EGAT's required expansion, though it would require the most fundamental changes in EGAT's present legal and regulatory structure. Issuing just 5 percent of the shares of the company in 1992 could raise between 6 and 8 billion baht.

<u>TOT</u>. The Telephone Organization of Thailand is a good medium term candidate for privatization by share flotation. Like EGAT, it must be restructured as a corporation before a share flotation can be pursued.

TOT has been unable to meet the substantial demands of the market. Privatization would allow TOT to make decisions more quickly, enable it to raise more capital for investment, and give it flexibility in attracting, retaining, and managing its technical staff.

Factors favoring privatization include: 1) a steady, predictable revenue stream, 2) a monopoly on most forms of local telephone transmissions, 3) high margins, 4) substantial pent-up demand for products, and 5) the growing importance of telephone lines for data transmission in the developing economy of Thailand.

The primary benefit of privatization would be an increase in the amount of capital invested in the telecommunications sector without burdening the government. It would also demonstrate the potential and popularity of share issues by the Government from its SOE portfolio.

In addition to taking the necessary step to go to market, TOT should also examine several organizational options and financial options, including a merger of TOT and CAT, an increase the number of companies providing local telephone services, and contracting out operations of regional or product related telephone services.

As monopoly utilities, both EGAT and TOT the RTG need to begin revising the rate structure to one which would provide some assurances to private sector investors. Modern formulas such the "RPI-x" method utilized in the U.K. and increasingly by regulators in the U.S., is one which provides certainty to investors and also forces efficiency. The "RPI-x" formula keeps annual price increases for a defined basket of utility services in line with the increase in the retail price index less a set percentage, providing a stimulus for real-terms cost cutting.

Thai Plywood. The team recommends that the RTG consider sell shares in Thai Plywood and raise equity to help it finance its expansion plans. The management and unions have indicated interest in the idea, and are now considering the proposal outlined by the team.

One of the medium-sized SOEs, Thai Plywood continually operates at full capacity making hardboard, regular and marine plywood and flush doors. It produces 1.5 million sheets of plywood, 60,000 tons of hardboard, and 120,000 flush doors per year.

Hardboard production is its fastest growing and most profitable line of business. It supplies 70 percent of Thailand's hardboard, and exports this product to the USA, Europe and other countries.

The company's plans are to expand its hardboard capacity by 50 percent. An internal feasibility study indicated that the cost of this expansion would be on the order of 900 million baht, or about $US 35 million. The expansion is expected to raise sales revenues by roughly 30 percent.

The management of Thai Plywood is looking at different financing alternatives to expand this line, including the possibility of a share issue to raise new capital. Team interviews with the unions indicated a possible interest in a share sale depending on the nature of the employee share scheme, and assurances of a continuation of good management and job security.

Because of its relatively small size, it would not be cost-effective to sell shares in Thai Plywood in a populist mode. Rather, selling shares to institutions and traditional investors would be more appropriate.

BMTA. The team believes that while various measures could be taken to improve BMTA's performance over the short term, the ultimate goal of the government should be to convert BMTA from a bus operating organization to a bus regulatory authority. If the experience of the United States is any guide, only through contracting out bus services does the government have any hope of breaking the cycle of cost outpacing revenues that BMTA has experienced since it was founded in 1975.

The problem is that with nearly 23,000 employees, BMTA is an extremely large organization and could obviously not be dismantled overnight. Its dilapidated assets and history of losing money make it unlikely that any investor would want to buy it.

A more practical approach is to divest BMTA routes over a period of no more than five to seven years, hopefully less. In order to avoid violent union opposition, the BMTA union must be brought into this process from the very beginning. One possible alternative would be to offer the management and the employees the option of buying the assets and routes.

A reasonable target would be to aim for shedding at least 15 to 20 percent of the routes each year.

Since the divestment schedule for BMTA is relatively long there are several shorter term measures that BMTA should undertake to improve its performance. In this regard, some of the teams other findings and recommendations are as follows.

- Since 1984, BMTA's operating loss has actually fallen. BMTA management achieved this mainly by wringing out much of the blatant inefficiency at the company over the last six or so years. However, because of interest costs, the company continues to lose money.

- Future savings would have to come through cutting staff, freezing raises, reducing bus maintenance costs or shedding unprofitable buses and routes. Given its cost structure and other constraints, it is extremely unlikely that BMTA will ever be able to offer bus service that is equal in both profitability and quality to that of the private sector.

- Some 80 percent of the BMTA fleet is over 10 years old. There is an opportunity today to begin retiring some 1,063 money-losing blue buses which are above and beyond those that will be replaced by the 1991 lease.

- Unless a substantial number of blue busses are retired, the 1991 bus lease will not allow BMTA to achieve profitability without a fare increase, contrary to management's recent projections.

- Revenue from advertising and concession income is extremely low and can probably be increased.

- Reintroduce automated fare collectors into buses. Possibly the use of tokens would make this practical but that should be investigated by a team of transportation experts Since 40 percent of BMTA's workforce is comprised of conductors, the potential cost savings of automating fare collection is theoretically quite large, on the order of 500 million baht per year.

- Raise fares by 1 baht, at least on the blue buses to help stem the flow of red ink temporarily. This is mainly for the sake of the private sector fleet which is currently not allowed to run red buses. As such, they run their whole fleets at 2 baht and are beginning to lose money.

- Tie the increase in fares to a substantial increase (at least 30 percent) in the concession fees the private companies pay to BMTA. Allow private sector companies to run red buses in order to promote competition.

Recommended Follow On Work to the Privatization Study.

The team has identified several areas needing action before there can be a real possibility of effective privatization. The areas where possible USAID assistance in the very near future would be useful include the following.

Providing a technical unit within the Comptroller General's Department.

A draft privatization law calls for a Committee for Privatization of State Enterprises. Members of this committee would be mainly from the private sector with the Minister of Finance as the chairman.

The Committee will need a technical group to support its work and it could get off to an early and productive start if the technical unit can have been in existence for a period before the Committee's formation.

The technical unit would prepare privatization strategies and action plans for SOE's for the committee's approval on an ongoing basis.

The logical place for a technical unit would be in the Comptroller-General's office, which ought to be in charge of the privatization process. If privatization expertise is permanently established in that department the likelihood of the Comptroller General being given this responsibility will be enhanced. The skills of the staff, who are already knowledgeable about the SOEs, can be further enhanced through a training program the team has recommended.

Some advice concerning the features of the draft privatization law is contained in our report, but we think that more assistance should be given as the draft law is further developed.

<u>Even before the establishment of the technical unit, there is an immediate need for privatization consultancy with respect to Thai International</u>.

The section in our report which deals with Thai International indicates that the arrangements being made will not include efforts for participation of large numbers of people in the share offer, nor is there any local expertise in the structuring and execution of this type of transaction.

Should Government, after considering our recommendation, wish to embark on a widescale share offer, there could be a need not only for consultancy but for financing some of the costs which the airline itself would probably be unwilling to bear.

USAID would certainly have a role to play in financing the consultancy, and could consider the financing of the other costs up to some limit. This consultancy is an urgent need since the transaction appears to be moving along rapidly.

<u>Upgrading the registration and transfer capability of the SET.</u>

The Securities Exchange of Thailand now acts as registrar for nearly 200 companies, most of which are listed on the SET. There are about 300,000 shareholders among these companies.

The duties of the registrar include maintaining the shareholders' register and recording transfers between shareholders, paying dividends and acting as issuing office for new issues. There are 60,000 transactions per day in normal times on the SET and there will be other transfers as a result of, for example, deaths of shareholders.

At present the SET's Securities Registration Department has independent data processing facilities from the rest of the SET. (The SET's other facilities cater to trading and settlement and the maintenance of a data base with information extracted from filings by listed companies.)

The Department's facility consists of a number of microcomputers linked in a local area network (LAN). This is presently stretched to the point where not all companies can be on the same LAN. Both the manager of the Securities Registration Department and the Data Processing Manager of the entire SET stated without reservation that the Securities Registration Department could not possibly cope with the new register where large numbers of shareholders were involved, as would be the case in a populist privatization of the type that the team has recommended.

The Mid-West Exchange in the United States is providing consultancy services to the SET in many areas, but not in registration. In the long-term it is hoped that a central depository system can be put into effect, but for this to be a possibility the Civil and Commercial Code would have to be amended. No initiative has been taken to have such an amendment tabled to date, therefore it is unlikely that the law will be changed, possibly for years.

USAID could finance the consultancy to design and implement an adequate registration system. It is our understanding from the Data Processing Manager at SET that he would wish the new hardware to be compatible with the existing DEC hardware. He is firmly of the opinion that additional hardware would be required since even though the existing Dec Computers which are used include a back-up system, the backup must be kept free in case of breakdown so that trading is not disrupted.

A populist share offer cannot be made until the bottleneck in the SET registration department is removed.

<u>Restructuring BMTA and Improving its Performance</u>.

The Government will probably raise bus fares by one baht in the near future but that will only provide temporary relief for what has clearly become a nagging headache for the Ministry of Finance.

When the Government is ready to restructure BMTA, they will need assistance with planning and executing the divestiture, particularly where it concerns negotiating with the union and designing employment or retirement alternatives for BMTA's many employees. Even before that point, assistance in improving BMTA's bottomline could be offered in the areas of automating fare collection and increasing advertising revenue.

<u>Next Steps</u>.

- As soon as possible arrangement should be made for the consultancy in respect of Thai International, which has indicated an interest in receiving advice on how to structure a share offer in a broad-based mode.

- A more detailed needs assessment for the SET registration department should be carried out.

- Work should begin on setting up a proposed technical unit in the Comptroller General's office. Work could begin on bringing Thai Plywood to market. Public awareness seminars should be organized. Training of staff in the State Enterprise Department should also begin.

Chapter 2

The Setting for Privatization in Thailand

Summary

Thailand's ability to maintain accelerated industrialization critically depends on its capacity to increase domestic savings. Much of the adjustment effort since 1980 has focused on reducing the fiscal deficit, curbing external borrowing, and making the baht more competitive.

By avoiding large national projects and relying on the private sector to make investment decisions, Thailand had developed a wide range of manufacturing industries that were consistent with its comparative advantage. Sound macroeconomic management and political stability in the 1980s have built up investor confidence in Thailand for the 1990s.

The SOEs, which have played a major role in Thailand's development, are now becoming a constraint. Concentrated in such key infrastructure areas as power, communications, and transportation, the SOEs are unable to mobilize the capital required to invest in key infrastructure to keep up with the economy's rapid growth. Further, the SOEs are facing shortages of skilled manpower and the restrictions inherent in a government enterprise slow down the ability of the SOEs to respond to the challenges ahead.

A. Macroeconomic Overview

High Growth

Thailand has experienced rapid growth under a program of financial discipline and austerity. This has enabled it to not only survive the economic difficulties which beset it in the early 1980's, but contributed to its dramatic turn-around.[1] Table 2.A.1., Economic Statistics, shows the performance of the economy from 1985 to 1989. This table includes the actual data as well as annual percentage changes and indices of change. It is easier to identify the trends by examining the indices.

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[1] This section borrows heavily from <u>Thailand: Country Economic Memorandum Building on the Recent Success--A Policy Framework</u>, World Bank, February 21, 1989. The reader is referred to this document for a more detailed overview of Thailand's Economy.

TABLE 2.A.1.

KEY ECONOMIC INDICATORS | ANNUAL PERCENTAGE CHANGES | INDICES OF CHANGE

(in billions of baht, unless otherwise noted) | 1985 equals 100

National Accounts	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Exports of Goods & Services	245.3	290.2	371.5	505.3		13.4%	18.3%	28.0%	36.0%		100.0	118.3	151.4	206.0	
Government Consumption	142.9	144.6	147.7	158.4		9.8%	1.2%	2.1%	7.2%		100.0	101.2	103.4	110.6	
Gross Fixed Capital Formation	240.3	237.5	290.5	377.8		0.7%	-1.2%	22.3%	30.1%		100.0	98.8	120.9	157.2	
Increase/Decrease in Stocks	3.7	3.8	28.0	25.3		-5.1%	2.7%	636.8%	-9.6%		100.0	102.7	756.8	683.8	
Private Consumption	662.7	713.1	789.4	898.8		4.2%	7.6%	10.7%	13.9%		100.0	107.6	119.1	135.6	
Imports of Goods & Services	(274.1)	(267.2)	(368.3)	(530.8)		6.0%	-2.5%	37.8%	44.1%		100.0	97.5	134.4	193.7	
Gross Domestic Product	1,014.4	1,094.7	1,234.0	1,465.7		4.2%	7.9%	12.7%	18.8%		100.0	107.9	121.6	144.5	
Net Factor Inc/Pmts (-) Abroad	(17.6)	(22.4)	(22.6)	(25.3)		53.0%	27.3%	0.9%	11.9%		100.0	127.3	128.4	143.8	
Gross National Expenditure = GNP	996.8	1,072.2	1,211.4	1,440.4		3.6%	7.6%	13.0%	18.9%		100.0	107.6	121.5	144.5	
Nat'l Income, Market Prices	915.4	978.9	1,108.5	1,322.8		3.0%	6.9%	13.2%	19.3%		100.0	106.9	121.1	144.5	
Gross Domestic Product (1985 Prices)	1,014.4	1,060.0	1,148.9	1,275.0		3.5%	4.5%	8.4%	11.0%		100.0	104.5	113.3	125.7	

GNP by Sector – Current Prices	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Agriculture	169.9	178.1	205.6	250.4	271.4	NA	4.9%	15.4%	21.8%	8.4%	100.0	104.9	121.0	147.4	159.8
Non agriculture:	844.5	917.2	1,047.6	1,256.6	1,519.4	NA	8.6%	14.2%	20.0%	20.9%	100.0	108.6	124.0	148.8	179.9
Mining and Quarrying	40.2	34.6	38.5	47.7	62.0	NA	-13.8%	11.2%	23.8%	30.2%	100.0	86.2	95.8	118.6	154.4
Manufacturing	224.5	258.6	299.3	373.3	455.2	NA	15.2%	15.7%	24.7%	21.9%	100.0	115.2	133.4	166.3	202.8
Construction	56.8	56.6	66.1	84.8	118.4	NA	-0.4%	16.8%	28.3%	39.6%	100.0	99.6	116.3	149.2	208.3
Electricity and Water Supply	23.6	27.3	31.3	34.3	41.7	NA	15.7%	14.5%	9.8%	21.5%	100.0	115.7	132.5	145.5	176.8
Transportation and Communication	78.1	85.4	92.9	106.7	123.3	NA	9.3%	8.9%	14.8%	15.6%	100.0	109.3	119.0	136.7	157.9
Wholesale and Retail Trade	153.1	171.0	195.7	240.1	277.2	NA	11.7%	14.4%	22.7%	15.5%	100.0	111.7	127.8	156.8	181.1
Banking Insurance and Real Estate	36.0	37.2	50.4	65.0	81.5	NA	3.4%	35.4%	29.0%	25.4%	100.0	103.4	140.0	180.6	226.5
Ownership of Dwellings	41.1	44.8	48.8	52.7	57.7	NA	9.1%	8.8%	8.0%	9.4%	100.0	109.1	118.8	128.2	140.3
Public Administration and Defence	48.5	50.6	52.7	56.7	65.3	NA	4.2%	4.2%	7.6%	15.1%	100.0	104.2	108.6	116.8	134.5
Services	142.6	72.0	171.9	195.7	237.1	NA	-49.5%	138.7%	13.8%	21.2%	100.0	50.5	120.5	137.2	166.2
Gross Domestic Product (GDP)	1,014.4	1,095.4	1,253.1	1,507.0	1,790.8	NA	8.0%	14.4%	20.3%	18.8%	100.0	108.0	123.5	148.6	176.5
Plus: Net Income from Abroad	(17.6)	(22.4)	(22.4)	(24.8)	(23.4)	NA	27.5%	-0.2%	10.6%	-5.5%	100.0	127.5	127.3	140.8	133.0
Gross National Product (GNP)	996.8	1,072.9	1,250.8	1,482.2	1,767.4	NA	7.6%	14.7%	20.4%	19.2%	100.0	107.6	123.5	148.7	177.3
Less: Indirect Taxes	113.9	127.0	149.7	203.0	237.5	NA	11.5%	17.8%	35.6%	17.0%	100.0	111.5	131.4	178.2	208.5
Capital Consumption Allowances	81.4	93.4	103.2	118.5	157.3	NA	14.7%	10.5%	14.8%	32.7%	100.0	114.7	126.7	145.5	193.1
National Income	801.4	852.5	977.9	1,160.7	1,372.6	NA	6.4%	14.7%	18.7%	18.3%	100.0	106.4	122.0	144.8	171.3
Per Capita GNP (Baht)	19,287	20,377	22,960	27,179	31,875	NA	5.7%	12.7%	18.4%	17.3%	100.0	105.7	119.0	140.9	165.3

GNP – 1972 Prices	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Agriculture	78.5	78.8	78.6	86.6	92.1	NA	0.3%	-0.2%	10.2%	6.3%	100.0	100.3	100.1	110.3	117.2
Non agriculture:	315.6	334.7	374.0	425.8	482.9	NA	6.1%	11.7%	13.9%	13.4%	100.0	106.1	118.5	134.9	153.0
Mining and Quarrying	9.9	9.8	10.5	12.8	15.4	NA	-0.9%	7.5%	21.3%	20.4%	100.0	99.1	106.5	129.2	155.6
Manufacturing	81.5	90.3	102.3	119.5	137.1	NA	10.8%	13.3%	16.8%	14.7%	100.0	110.8	125.6	146.6	168.2
Construction	16.6	16.2	18.3	22.2	28.2	NA	-2.9%	13.3%	21.3%	26.3%	100.0	97.1	110.1	133.5	169.3
Electricity and Water Supply	9.9	11.0	12.3	14.0	16.7	NA	10.7%	12.2%	13.5%	19.5%	100.0	110.7	124.2	141.0	168.4
Transportation and Communication	28.2	30.2	32.7	36.2	40.4	NA	7.2%	8.3%	10.7%	11.5%	100.0	107.2	116.1	128.5	143.3
Wholesale and Retail Trade	64.2	67.6	76.4	87.9	102.1	NA	5.4%	12.9%	15.1%	16.2%	100.0	105.4	119.0	136.9	159.1
Banking Insurance and Real Estate	11.8	12.0	15.8	19.6	23.3	NA	1.5%	32.1%	24.3%	19.0%	100.0	101.5	134.1	166.6	198.3
Ownership of Dwellings	17.4	18.0	19.0	20.2	21.6	NA	3.9%	5.2%	6.5%	6.7%	100.0	103.9	109.3	116.4	124.2
Public Administration and Defence	21.4	22.2	22.9	24.0	24.0	NA	4.1%	3.2%	4.5%	0.2%	100.0	104.1	107.4	112.3	112.5
Services	54.8	57.5	63.8	69.5	74.2	NA	4.8%	11.0%	9.0%	6.8%	100.0	104.8	116.4	126.8	135.4
Gross Domestic Product (GDP)	394.1	413.5	452.6	512.5	575.0	NA	4.9%	9.5%	13.2%	12.2%	100.0	104.9	114.8	130.0	145.9
Plus: Net Income from Abroad	(5.0)	(6.6)	(6.4)	(6.7)	(5.6)	NA	32.0%	-2.6%	5.1%	-16.2%	100.0	132.0	128.6	135.2	113.2
Gross National Product (GNP)	389.1	406.9	446.2	505.8	569.4	NA	4.6%	9.7%	13.3%	12.6%	100.0	104.6	114.7	130.0	146.3
Per Capita GNP (Baht)	7,530.0	7,728.0	8,325.0	9,274.0	10,269.0	NA	2.6%	7.7%	11.4%	10.7%	100.0	102.6	110.6	123.2	136.4
GDP Deflator	257.4	264.9	276.9	294.1	311.4	NA	2.3%	4.5%	6.2%	5.9%	100.0	102.9	107.6	114.3	121.0

MISCELLANEOUS	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Human Resources															
Population (millions)	51.68	52.65	53.60	54.54	55.45	1.9%	1.9%	1.8%	1.8%	1.7%	100.0	101.9	103.7	105.5	107.3
Labor Force	26.40	27.10	28.00	29.00	24.00	10.0%	2.7%	3.3%	3.6%	-17.2%	100.0	102.7	106.1	109.8	90.9
Trade															
Exports	193.37	233.38	301.45	403.57	515.85	10.3%	20.7%	29.2%	33.9%	27.8%	100.0	120.7	155.9	208.7	266.8
Imports cif	251.17	241.36	334.21	513.11	656.43	2.5%	-3.9%	38.5%	53.5%	27.9%	100.0	96.1	133.1	204.3	261.3
Imports, fob	226.65	217.83	301.63	463.10	592.44	2.6%	-3.9%	38.5%	53.5%	27.9%	100.0	96.1	133.1	204.3	261.4
Trade Balance (Deficit)						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Prices															
Wholesale Prices	100.0	99.6	105.5	114.2	119.4	0.0%	-0.4%	5.9%	8.2%	4.6%	100.0	99.6	105.5	114.2	119.4
Consumer Prices	100.0	101.8	104.4	108.4	114.2	2.5%	1.8%	2.6%	3.8%	5.4%	100.0	101.8	104.4	108.4	114.2
Currency	26.650	26.130	25.070	25.240	25.690	-1.8%	-2.0%	-4.1%	0.7%	1.8%	100.0	98.0	94.[illegible]	94.7	96.4

-11-

The Thai economy is one of the most dynamic in the world, with double digit growth over the last two years. Virtually all of this growth has been generated by the private sector. The section in Table 2.A.1, labeled Indices of Economic Indicators, shows that the highest growth rates have been achieved in those sectors that are dominated by the private sector. For example, the financial, construction, and manufacturing sectors have expanded by over 100 percent since 1985 compared to 57 and 34 percent increases in the transportation/communications sector and the Government respectively.

Diversified Economy

Thailand has a relatively diversified economy with strength in several sectors. Thailand has maintained a reasonably balanced economy with manufacturing (25.4 percent of gross national product) agriculture (15 percent), wholesale and retail trade (15.5 percent), and services (13 percent) being the dominant sectors. See Graph 2.A.1.

Export Strength

The Thai economy has achieved an impressive record of economic expansion since 1983, characterized by surging exports, declining budget and trade deficits, price stability, and an investment boom. Table 2.A.1 shows the rapid increase in these areas. For example, exports increased by 167 percent from 1985 to 1989. This economic boom is taking place against the backdrop of rapid structural shifts in Thailand that have made the economy distinctly export oriented and established manufacturing as the main export sector.

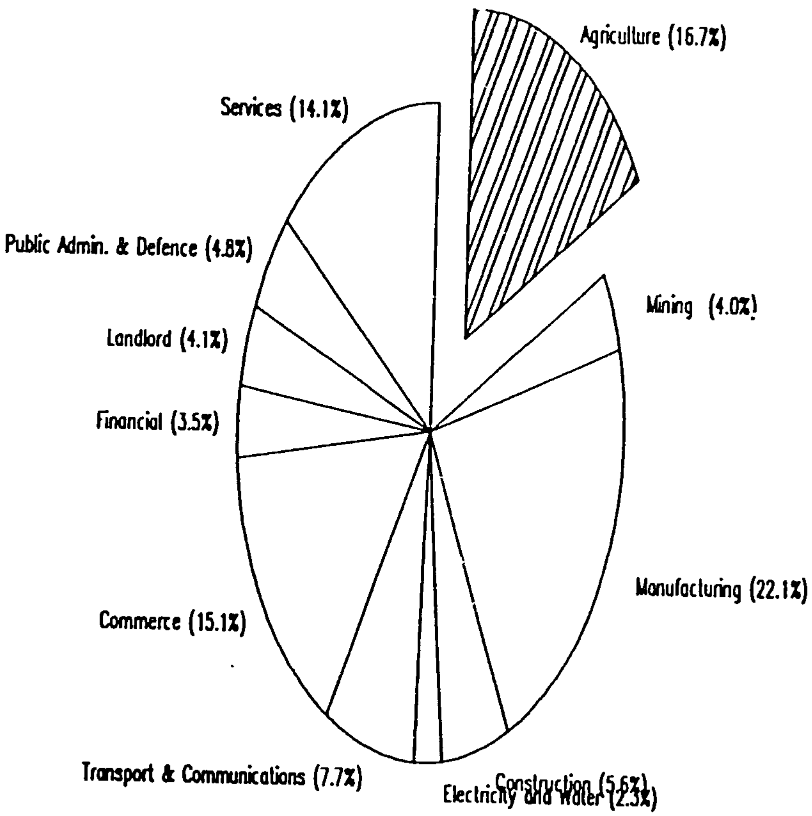
Led by manufacturers, merchandise exports have surged by an average of 25 percent per annum since 1986. While this boom was most directly triggered by a 30 percent depreciation of the real effective exchange rate since 1985, it also reflects a longer-term shift in the Thai economy from agriculture to manufacturing. Graph 2.A.1 shows that between 1985 and 1989, manufacturing increased its percentage share of the GNP from a 22.1 percent share to 25.4 percent share. Thailand has been further aided by the depreciation of the US dollar, the main currency in the basket upon which the Baht is pegged, and the rising cost pressures on manufacturers in Japan and the Asian newly industrializing countries.

Government Lags Private Sector by Design

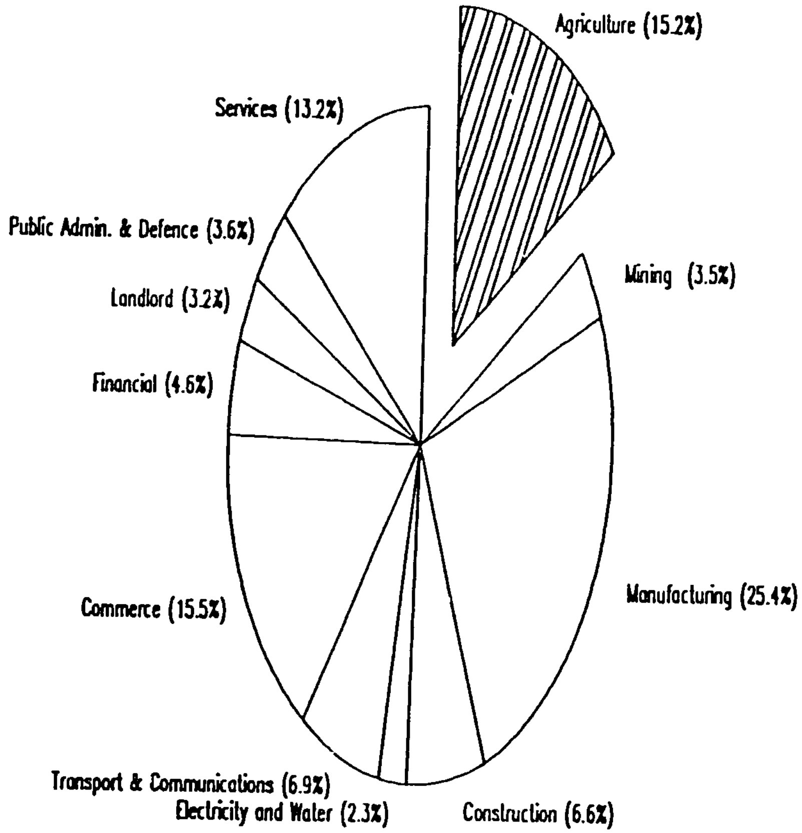
The RTG slowed the growth of Government expenditures by scaling back investment programs and employment during the latter half of the eighties. In Table 2.A.1, the section on Government Finances, shows that the Government held expenditure to 25 percent during this period. SOE Employment was held almost level, increasing less than two percent per annum. This during a period in which the GNP grew by 77 percent.

Chart 2.A.1 Sectoral Composition of GDP in Thailand

1985



1989



6.

TABLE 2.A.2. GOVERNMENT FINANCES AND SOE'S

(in billions of baht, unless otherwise noted)

	1985	1986	1987	1988	1989	ANNUAL PERCENTAGE CHANGES 1985	1986	1987	1988	1989	INDICES OF CHANGE 1985 equals 100 1985	1986	1987	1988	1989
Government Finance															
Surplus/Deficit (-)	(55.1)	(48.3)	(28 4)	14.9	36.3	62.1%	-12.4%	-41.2%	NA	143.4%	100.0	87.6	51.5	(27.1)	(65 9)
Revenue	162.6	171.8	196 5	251.1	305 2	6.2%	5 7%	14.4%	27.8%	21.5%	100 0	105.7	120 8	154.4	187.7
Grants Received	[illegible] 8	5 5	6 9	5 8	6 8	-3 5%	44 6%	25 7%	-15 3%	16.9%	100 0	144 6	181 8	154 0	180.0
Expenditure	216 8	220 8	227.1	235 8	270 9	13.5%	1.8%	2 8%	3 8%	14 9%	100 0	101 8	104 7	108 8	125 0
Lending Minus Repayments	5 3	4 7	4 7	6 2	4 8	NA	-10.2%	-1 6%	33 4%	-23 4%	100.0	89.8	88 3	117.9	90 3
Financing															
Net Borrowing	54.9	50 9	27.2	(5 5)	(36 3)	56.2%	-7.4%	-46 5%	NA	560.8%	100.0	92.6	49 6	(10.0)	(66.1)
Domestic	36.8	39 5	23.2	(11.0)	(38.4)	20.8%	7.5%	-41.3%	NA	249.7%	100.0	107.5	63.1	(29.9)	(104.5)
Foreign	18.2	11.4	4.0	5.5	2.1	282.8%	-37.4%	-64.5%	36.2%	-61.2%	100.0	62.6	22.2	30.2	11.7
Use of Cash Balances	0.8	(2.6)	1.1	(9 4)		NA	NA	NA	NA		100.0	(345.2)	148 4	(1,233.0)	
Debt: Domestic	291.2	330.8	354.0	343.0		14.4%	13.6%	7.0%	-3.1%		100.0	113.6	121.5	117.8	
Foreign	93.2	107.2	113.5	121.0		48.3%	15.0%	5.9%	6.6%		100.0	115.0	121.8	129.8	
State Owned Enterprises	1985	1986	1987	1988	1989e	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Revenues	205.57	221.41	235.41	270.97	308.94	11.6%	7.7%	6.3%	15.1%	14.0%	100.0	107.7	114.5	131.8	150.3
Operating and Nonoperating Expenditures	185.78	195.41	206.25	227.36	248.54	18.6%	5.2%	5 5%	10.2%	9 3%	100.0	105.2	111.0	122.4	133.8
Corporate Income Tax	0.74	0.96	1.15	2.67	3.21	-30.8%	29.7%	19 8%	132.2%	20.2%	100.0	129.7	155.4	360.8	433.8
Net Operating and Non Operating Income	12.63	15.17	22.29	30.77	42.20	-26.2%	20.1%	46.9%	38.0%	37.1%	100.0	120.1	176.5	243 6	334.1
Dividend and Distribution	6.47	6.55	7.49	8.38	13.24	49.8%	1.2%	14.4%	11.9%	58.0%	100 0	101.2	115.8	129.5	204.6
Bonus	1.22	1.20	1.72	2.14	2.46	-4.7%	-1.6%	43 3%	24.4%	15.0%	100 0	98.4	141.0	175.4	201.6
Retained Income	22.01	31.08	35.10	43.00	56.32	-17.7%	41.2%	12.9%	22.5%	31.0%	100 0	141.2	159.5	195.4	255.9
Capital Expenditure	35.71	35.44	32.44	48.60	45.30	8.2%	-0.8%	-8.5%	49.8%	-6.8%	100.0	99.2	90.8	136.1	126 8
Financing Requirement	(13.70)	(4.36)	2.66	(5.60)	11.06	118.8%	-68.2%	NA	NA	NA	100.0	31.8	(19 4)	40.9	(80.7)
Financing Sources:															
Total	14.31	4.36	(2.66)	5.62	(10.98)	144.2%	-69.5%	NA	NA	NA	100.0	30.5	(18.6)	39.3	(76.7)
External (net)	9.78	4.09	(2.16)	(3.25)	2.96	1.3%	-58.2%	NA	50.5%	NA	100.0	41.8	(22.1)	(33.2)	30.3
Domestic (net)	7.39	5.93	7.88	15.76	3.33	NA	-19 8%	32.9%	100.0%	-78.9%	100.0	80.2	106.6	213.3	45.1
Changes in/use of assets	(2.86)	(5.66)	(8.38)	(6.89)	(17.27)	-10.3%	97.9%	48 1%	-17.8%	150.7%	100 0	197.9	293.0	240.9	603.8
Employees (Excludes recently privatized SOE's)	251,672	259,144	259,273	261,477	261,476	2.1%	3.0%	0 0%	0.9%	0.0%	100 0	103.0	103.0	103.9	103.9
COMPARISONS:															
SOE'S TO ECONOMY	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989					
Capital expenditure to gross capital formation	14.86%	14.92%	11.17%	12.86%	NA	7.5%	0.4%	-25.2%	15.2%	NA					
Expenditures to government expenditures	85.69%	88 50%	90 83%	96 43%	91.74%	4.5%	3 3%	2 6%	6 2%	-4.9%					
Revenue to gross domestic product	20.27%	20 21%	18 79%	17 98%	17.25%	NA	-0.3%	-7.1%	-4.3%	-4.1%					
Revenue to non-agricultural GDP	24.34%	24.14%	22.47%	21.56%	20.33%	NA	-0.8%	-6 9%	-4.0%	-5.7%					
Earnings to non-agricultural GDP	1.50%	1.65%	2 13%	2.45%	2.78%	NA	10 6%	28 7%	15.1%	13 4%					
Employment to total monetary sector employme	0.95%	0 96%	0 93%	0 90%	1.09%	-7.1%	0.3%	-3 2%	-2 6%	20 8%					

Notes:

Sources: IMF, Bank of Thailand, World Bank

SOE figures are on a fiscal year basis, all others are on a calendar year basis.

Second, the Royal Thai Government (RTG) expanded revenues by 88 percent during this period. This helped turn a Baht 55 billion deficit into a Baht 36 billion surplus.

Third, the RTG capped the public sector's external borrowing and contained capital expenditures by state enterprises. For instance, net external borrowing of the SOEs in 1988 was negative in 1987 and 1988 during a period of rapid economic expansion.

Despite the rapid growth, the RTG was able to hold down price inflation. The wholesale price index during this period increased less than 20 percent or approximately 3.7 percent per annum.

Bottlenecks

These favorable changes have not been without costs. As discussed in greater length below, a drastic slowdown in public investment has left the Thai economy struggling with serious bottlenecks in industrial infrastructure. The power, water, telecommunications, and transportation sectors are dominated by the Government SOE's. And as shown in the indices in Table 2.A.1, these sectors have lagged the overall economy.

After several years of cutbacks in public investment programs, the sudden surge in exports and inflow of direct investment has caught the country unprepared and further aggravated the bottlenecks in the system. As a result, the infrastructure is increasingly inadequate for maintaining rapid economic growth. For example, the Klong Toey port is running at greater than its rated capacity in an attempt to keep up with the growth in imports and exports, the Telephone Organization of Thailand faces an unmet demand for telephone lines that exceeds 800,000 lines, and the Electricity Generating Authority of Thailand is examining alternatives ranging from co-generation to power purchases from Laos to meet demand. The infrastructure is increasingly inadequate for maintaining rapid economic growth.

Continuing Need to Balance Financial Discipline with Demand

Thailand's experience in the last few years amply demonstrates the importance of maintaining sound macroeconomic balances as a prerequisite for strong economic growth. Rapid industrial expansion will pose two challenges to the Government in keeping fiscal and external balances in order.

First, whereas the share of fixed investment in gross domestic product (GDP) will rise sharply in the industrial take-off phase; savings are unlikely to respond quickly, thereby widening the current account deficit. This would imply a continued reliance on foreign capital and vulnerability of Thailand's external balances to adverse external shocks.

Second, acceleration in industrial growth will increase the need for investment in infrastructure and may, as a consequence, strain fiscal balances if revenues are not raised commensurately.

Future Issues

To maintain growth, Thailand will need to attract more investment capital, managerial expertise, and technical skills into its infrastructure. All of these are in short supply in the public sector given the demands for these factors in the private sector. The recent surge in oil prices have placed an additional strain on the finances of the Government and further threaten to slow down the flow of capital into these sectors.

Continued growth depends on maintaining fiscal discipline, increasing the productivity of the SOEs, and mobilizing the capital, labor, and managerial and technical expertise to rapidly upgrade Thailand's infrastructure (roads, ports, airports, power, telecommunications, etc.).

In the next section, we will examine an increasingly important mechanism for the mobilization of capital in Thailand, the capital markets. These financial markets can play a key role in directing investment funds to undercapitalized SOEs.

B. The Equity Market in Thailand

The team has urged the RTG to consider using the equities market and the Securities Exchange of Thailand (SET) to privatize several of the large SOEs by populist share sale. The purpose of this section is to analyze the potential of the Thai stock market to act as an ally in such an approach to privatization.

Recommendations and parameters for floating shares of a candidate SOE may be summarized as follows:

- Above all, broad base the share sale for the large and profitable SOEs when feasible. This will allow more low and middle income Thais to participate in Thailand's growing prosperity, and help to democratize the market. A sample of how this might be done is included in the report on EGAT which describes the $US 1.9 billion share issue of the Korean Electric Power Company (Kepco).

- Choose financially strong and widely known candidates. Thai International, EGAT and TOT would be good choices.

- The absorptive capacity of the market is estimated to be 4-5 billion baht ($US160-200 million), though the price and quality of a share sale are obviously key variables. Experience in other countries indicates that a successful share floatation can often exceed expectations, and pave the way for larger subsequent share sales.

- Structure the share sale so that the price per share is low and attractive relative to value. That will make the shares more appealing to Thai investors, especially those buying shares for the first time. It will help to achieve an oversubscription, and a successful transaction. It also creates a healthy aftermarket.

- Coordinate timing of flotation among the Ministry of Finance (MOF), SET and Bank of Thailand (BOT) so that other large securities sales are not done at same time. A surplus of securities can readily depress the overall stock market.

- Allow foreign participation and consider charging a premium as feasible.

- Begin background work for listing early, especially for the monopoly utilities such as EGAT and TOT.

Requirements for a Successful SOE Flotation.

Assuring the success of floating a large SOE depends on a variety of factors:

Financial quality of listing. Both foreign and domestic securities firms have emphasized that the next SOE listing must be successful, in part to counter the poor performance of both the Krung Thai Bank and Northeast Jute Mill flotations. Accordingly, the SOE selected must be financial strong, and the architecture of the privatization must be first-rate. Among the larger SOEs which could meet those criteria are Thai International, EGAT, TOT, and the Communications Authority of Thailand (CAT).

Performance of the SET. On July 25, 1990, the SET index reached a record high of 1143.78. On August 7, the SET index fell 86.69 points, its sharpest one day fall ever, closing at 922.35. Since then it has dropped nearly 50 percent and at the end of November 1990 was trading at around 600. As in most other equity markets around the world, this fall was triggered by the oil price increase following the Iraqi invasion of Kuwait, though the SET was overheated when it peaked in July.

In November, the Bank of Thailand raised the interest rate ceiling on bank loans which pushed the market down even further (nearly 100 points).

The informal consensus of the securities firms we interviewed is that the SET will recover sometime between April and November of 1991, depending to a large degree on how soon the Iraq conflict is resolved. Certain firms, such as Jardine Fleming, are bearish and think the market is still overvalued. In fact, Jardine expects the SET index to fall to around 500 before it recovers. Similarly, a member of Crosby securities voiced that same opinion in an October interview with the press.

SET Index Performance

Year	86	87	88	89	90E
SET index	207	285	387	879	600
PER	12.3	9.3	12	26.4	14

(Year end)

Source: SET
Estimates are those of the team

On the other hand, an argument can be made that the SET could recover sooner (within six months) rather than later (over a year), given the underlying strength of the Thai economy and positive growth in earnings projected for Thailand. This, at least, is the implication of the two Tables below. Together they show that only Malaysia rivals Thailand in the Baring projections for 1990-91 of both GDP and Earnings growth.

GDP Growth Forecast*

	10yr(AVG)	88	89	90E	91E
Thailand	7.3%	13.2	12.3	9.5	7.3%
Korea	8.3%	12.4	6.7	8	5%
Malaysia	5.8%	8.7	8.5	8.5	7%
Japan	4.2%	5.7	4.9	4.6	3.5%
USA	2.7%	4.4	3	.9	1.2%

Source: Baring Securities
Unit: Percent

Oil Price: January Brent: $US29.50
*Assumes oil price at US$30/barrel

Inflation Adjusted Earnings Growth Forecast*

Year	88	89	90E	91E
Thailand	67	59	29	13%
Korea	20	-6	-19	-11%
Malaysia	46	41	35	10%
Japan	22	16	0	-3%
USA	36	-4	-11	-15%

Source: Baring Securities
Unit: percent
* Assumes oil is at US$30/barrel

Growth in Market Capitalization. A straightline projection of growth in market capitalization of the SET would put the market in the 1-1.25 trillion baht ($US40-50 billion) range in 1992-93, about where the Korean market was in 1987-88.

As a check on that figure, a table on market capitalization as a percent of GDP has been included to show that assuming the SET can reach a trillion baht by 1992, it would still only equal about 50 percent of GDP, in line with Korea and half of Malaysia's.

Market Capitalization

Year	86	87	88	89	90E	91E	92E	93E
Thailand	2.9	5.4	8.8	25.7	22	32.7	42.6	53.2
Korea	13.9	33	94.3	141	115			
Malaysia	15	18.5	23.3	39.8	43.8			

Source: Baring Securities
Unit: $US billions

Market Capitalization/GDP

Year	86	87	88	89	90E	91E	92E	93E
Thailand	6.9	11.5	15.3	39.9	33.1	40.3	48.9	57.2%
Korea	14.1	25.7	55.7	68.9	51.6%			
Malaysia	60	60	70	110	104%			

Source: SET, Baring Securities, KSE
Unit: percent

New Listings. Though the price of shares can be expected to do well as profits and dividends rise, the primary source of the growth in market capitalization will be from new issues. The SET's goal is to have 400 companies listed by 1995. Sixty firms are scheduled for listing in 1991 alone which may prove ambitious unless the SET picks up fairly soon. At any rate, if the SET is to achieve its goal, an average of 35 firms per year will have to be listed between now and 1995. That works out to a little more than one and a half a week.

Number of Companies Listed on SET

Year	86	87	88	89	90E	91E	92E	93E	94E	95E
Companies	93	109	141	175	220	285	315	345	375	400

Source: SET

Size of Issue Relative to Market Capitalization. The most important question in this analysis is how large a flotation can the SET handle. The Table below indicates that over the last four years the average size for new issues has between 68 million baht to around 317 million baht ($US 2.7-12.7 million). This is quite small. The largest issues have generally been no more than 4.5 billion baht ($US 180 million).

One reason the absorptive capability of the SET has been limited to date is that the investor pool is small, both in terms of the actual number of individuals who own shares and the number of institutions which are active in the market. Changes, however, are afoot that could alter this situation in the next two to three years.

Average Flotation Size on SET

Year	87	88	89	90E
New Company Issues	17,242	24,460*	111,000	123,000
New Company listings	20	36	35	45
Avg size of listing	86	68	317	273

Source: SET
Unit: Million baht
*Figure includes issue of two mutual funds

Investor Base and Composition. Thailand will have fewer than 400,000 shareholders by the end of 1990, less than one percent of the total population. This is small by any standards and in percentage terms only a fraction of what one finds in Korea or Taiwan where at least 13 to 14 percent of the population holds shares.

This could change markedly over the next two years, however, now that the SET is encouraging securities firms set up provincial offices. Until recently, their offices were concentrated in Bangkok where only a small portion of the population resides. Nor is increasing the individual investor base so daunting a task providing the conditions are right. It was only four to five years ago that less than 4 percent of the Korean population held shares. Investor participation can be increased very rapidly within an economy and a broad based share issue of an SOE is an ideal way of doing that.

Individual Shareholders

Year	86	88	89	90E
Shareholders	182	229	255	400
Shareholders/Pop.	.34%	.4%	.4%	.9%

Source: SET
Unit: thousands of persons

Major Institutional Investors

Institutional investment is likewise not as yet broadly developed in Thailand but changes are afoot which could markedly enhance institutional participation in the SET over the next two to three years.

Institutional Investors

Year	86	88	89	90E	91E
Percent of total # shares	71	75	57	56	60%
Percent of total # shareholders	2.9	3.2	3.8	3.5	3.5%

Source: Baring Securities
Unit: percent

The Mutual Fund Company is currently the dominate institutional player in Thailand. They have an exclusive license to manage mutual funds on the SET and currently, their several domestic funds account for about 4.5 percent of the SET.

For a variety of regulatory and other reasons, other institutions do not play a major role in the market though taken together, their holdings dominate the SET. Once again changes are in the offing here which could dramatically raise the profile of certain institutional investors, such as pension funds over the next three to five years. A partial list of the SET funds is shown in the table below:

Mutual Fund Company Portfolio

Fund name	Type	Issue amount	Year launched
1 Sinpinyo 4	Closed end	US$11.9 M	87
2 Sinpinyo 5	Closed end	47.5	87
3 Subthawee 2	Closed end	19.8	88
4 Sub Somboon	Open end	unlimited	86
5 Ruam Pattana	Closed end	39.6	87
6 Than Phum	Closed end	39.6	89

Source: Phatra Research Institute

According to Schroder's, there are only 570 registered pension funds in Thailand with a current value of $US 165 million. Only 1,070 companies currently have pension schemes, but Schroeder's maintains that this figure is expected to grow 26 percent in 1991 and 1992.

Moreover, the Social Security bill which will become effective in March of 1991 will require all companies to join its pension fund scheme. This will affect some 100,000 companies and 1.5 to 1.7 million employees. Other reforms are underway or being contemplated which would allow banks to underwrite securities and manage pension funds.

There are twelve life insurance companies in Thailand. They are not major players on the SET, mainly, it seems, because of two important restrictions. One is that they cannot hold more than 2 percent of the equity of any company and the second is that they must value equities at the book value of the investee company. This is a serious inhibiting factor which precludes insurance companies from being able to take a long-term view, as the volume of business they could write would be reduced by virtue of undervalued assets. As of the end of 1989, the insurance companies had only 3.1 billion Bt ($US124 million) invested in equities. Modifying these restrictions could add a major new institutional player to the market.

There are already 14 foreign investment funds and two more are on the way. Small wonder then that foreign securities houses firmly maintain that foreign appetite Thai equity is still "strong." Not surprisingly, foreign investors are just the opposite of Thai individual investors in that they prefer stocks with large capitalization, like Thai International or EGAT. That preference should probably enter in the Government's calculation of how much foreign participation they should have for a large SOE versus a small one.

Thai Investor Behavior. Both foreign and domestic securities experts claim that Thai individual investors show little interest in "fundamentals" when making a decision to invest in an equity. In fact, a recent Thanakom survey indicated that only 1 percent of the investors surveyed review basic financial date before making an investment decision. They prefer instead to invest in "small stocks" that are more easily subject to speculative swings.

This would partially explain the healthy level of turnover found on the SET and in any case, is certainly no surprise. Portfolio investment and management is a comparatively new discipline in Thailand. Moreover, the same observation has been made of a number of stock markets across East Asia, including those in Taiwan and Korea. Similarly, securities experts claim that Thai investors prefer stocks with a relatively low price per share. However irrational that may be it likewise is true of several other Asian capital markets and should be factored into the share structure of any major SOE issue, particularly one that is broad-based.

Market Liquidity

	86	87	88	89	90E
Annual trading value	1.1	4.6	6.3	14.8	19.5

Source: Baring Securities
Unit: $US billion

Technical Developments on the SET. The SET trading system is currently manual. The SET has engaged the Midwest Stock Exchange to computerize its trading system. The project is supposed to be completed by the second quarter of 1991 though meeting that date seems unlikely in light of certain technical problems. In any case, before the end of 1991, the SET should have an automated trading system in place which is linked up to most if not all the major brokers. This holds the potential of vastly increasing the speed and ease of the trading and settlement process. Also, trading currently takes place only three hours per day. Once the automated trading system is introduced, the SET plans to add an afternoon session.

However, the SET's Securities Registration Department has independent data processing facilities from the rest of the SET. This department could not cope with the new register where large numbers of shareholders were involved, as would be the case in a populist privatization of the type the team has recommended. A consultancy is needed to design and implement an adequate registration system.

The team has identified some other legal and technical obstacles that would have to be overcome before a broad-base share sale could be undertaken:

- The need for directors to sign every share.
- The need to stamp large volumes of share certificates for stamp duty purposes.
- The length of time between share sale and listing on the SET is far too long.

Chapter 3

Overview of the State Owned Enterprises in Thailand

A. Importance of the State Owned Enterprises in Public Finance and the Economy

Summary

Although the State Owned Enterprises (SOEs) have played an important role in Thailand's economy in the past, they are moving to a role of lesser importance and in several cases into decline. The causes include the rapid growth of the private sector, an inability to respond to the market, an inability to raise capital, and a lack of incentive to meet market pressures.

Role of the SOEs in the Thai Economy

The SOEs play an important role within the Thai Economy. Although, they are only responsible for 5.4 percent of the Gross Domestic Product of Thailand; SOEs hold monopoly positions in such key sectors as transportation, communications, power and water.[1] These include domestic and international telephone communications, electricity generation and distribution, rail transport, Bangkok to province inter-city bus routes, water distribution in certain regions, etc. Table 3.A.1 contains a descriptive list of the SOEs.

Earnings

SOEs in Thailand vary in profitability. Of the 61 enterprises, the top 15 return 96 percent of the profits. Seven reported no earnings in 1989. Five lost substantial amounts of money--over B 1.67 billion (US$ 67 million) in 1989 with the Bangkok Metropolitan Transit Authority accounting for 51 percent of this amount. Overall, the SOE's earned B 45.9 billion (US$ 1.84 billion) before subsidies of B 4.138 billion. Earnings were 14.7 percent of revenues.

Share of Gross Domestic Investment

The SOE's have an 11.1 percent share of the gross domestic investment in the Thai Economy (1987 figures). Sectoral breakdowns would range from a one hundred percent share in the case of electricity generation and distribution to less than one percent in

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[1] The Confidential World Bank Report No: 7787-TH, Thailand: Issues of State Enterprise Efficiency, June 26, 1989 contains ample discussion of the points in this section. The reader is referred to the report for additional information on the role of SOE's in the economy.

Table 3.A.1

State Owned Enterprises

Thailand

Name of Group or Organization	Acronym	Description	Sector	Founded
Krung Thai Bank, Ltd.	KTB	Commercial bank	Finance and Insurance	1966
Government Savings Bank	GSB	Savings bank	Finance and Insurance	1946
Electrical Generating Authority of Thailand	EGAT	Electricity generation and transmission	Public Utilities	1968
Thai Airways International, Ltd.	TAI	International and domestic airline services	Transportation	1988
Telephone Organization of Thailand	TOT	Domestic telephone services	Communications	1954
Bank of Agriculture and Agricultural Cooperatives	BAAC	Agricultural credit	Finance and Insurance	1966
Provincial Electrical Authority	PEA	Electricity distribution in provincial areas	Public Utilities	1960
Petroleum Authority of Thailand	PTT	Produce and distribute oil and gas	Public Utilities	1978
The Government Housing Bank	GHB	Provisions of mortgages and housing loans	Finance and Insurance	1973
Metropolitan Electricity Authority	MEA	Electricity distribution in BMR	Public Utilities	1958
State Railway of Thailand	SRT	Passenger and freight train services	Transportation	1951
Metropolitan Waterworks Authority	MWWA	Produce and distribute water in BMR	Public Utilities	1959
Expressway and Rapid Transit Auth. of Thai.	ERTAT	Operate toll-paying rapid transit systems	Transportation	1972
Communications Authority of Thailand	CAT	International telecommunications, and postal services	Communications	1976
Airports Authority of Thailand	AAT	Manage and operate Bangkok and Chiang Mai airports	Transportation	1979
Thailand Tobacco Monopoly	TTM	Monopoly supply of cigarettes and production of cigarettes	Industry	1953
National Housing Authority	NHA	Housing for low and middle-income groups	Public Utilities	1972
Provincial Waterworks Authority	PWA	Distribute water in provincial areas	Public Utilities	1979
Port Authority of Thailand	PAT	Manage and operate Klong Toey and Sattahip ports	Transportation	1951
The Marketing Organization for Farmers	MOF	Market agricultural products and supply services	Commerce and Service	1974
Office of the Rubber Replanting Aid Fund	RRAF	Promote rubber production	Promotion	1960
Public Warehouse	PWO	Purchase and distribute agricultural products	Commerce and services	1955
Industrial Estate Authority of Thailand	IEAT	Provide industrial estates	Public Utility	1972
Forestry Industry Organization	FIO	Manage plantations, reforestation, logging, sawmilling.	Industry	1956
Government Lottery Bureau	GLB	Run government lottery	Commerce and Service	1974
Government Pharmaceutical Organization	GPO	Procure and produce drugs	Industry	1966
Dhipaya Insurance Co.	DIC	Insurance company	Finance and Insurance	1975
Transport Co., Ltd.	TCL	Provincial bus services	Transportation	1959
Thai Plywood Co., Ltd.	TPC	Produce plywood and wood products	Industry	1952
Mass Communications Organization of Thailand	MCOT	TV, radio, and news information services	Communications	1977
Bangkok Mass Transit Authority	BMTA	Bus services in Bangkok Metropolitan Region (BMP)	Transportation	1976
Liquor Distillery Organization	LDO	Monopoly production and supply of alcohol, produce liquor	Industry	1963
Sugar Factory, Inc.	SFI	Produce and distribute sugar and by-products of sugar cane	Industry	1965
Textile Organization	TO	Produce and distribute textiles	Industry	1955
Office of the Public Pawnshop	OPP	Pawn broker	Finance and Insurance	1974
Aeronautical Radio of Thailand	ART	Air traffic control services	Communications	1963
Express Transportation Organization of Thailand	ETO	Freight transport by land and waterways	Transportation	1953
Dairy Farm Promotion Organization of Thailand	DFPOT	Promote dairy farming	Industry	1971
Fish Marketing Organization	FMO	Fish marketing facilities	Commerce and Service	1953
Tourism Authority of Thailand	TAT	Promote tourism industry	Promotion	1979
Rubber Estate Organization	REO	Produce, purchase and distribute rubber and rubber by-products	Industry	1961
Bang-na Glass Organization	BGO	Produce glass and glass by-products	Industry	1955
Cold Storage Organization	CSO	Store aquatic animals & agric. products, produce & distribute ice	Industry	1958
Tanning Organization	TO	Engaged in tanning activities on behalf of Government	Industry	1955
Sports Authority of Thailand	SAT	Promotion, co-ordination and organization of sports	Promotion	1964
Offshore Mining Organization	OMO	Provision of mines to private and public sector	Industry	1975
Battery Organization	BO	Produce and distribute batteries	Industry	1955
Bangkok Dock Co., Ltd.	BDC	Construct, repair and maintain warships	Industry	1957
Thailand Inst. of Scientific & Technological Research	TISTR	Conduct and promote scientific and technology research	Promotion	1963
Zoological Park Organization	ZPO	Collect and conserve animals for education and recreation	Promotion	1954
Thai Maritime Navigation Co., Ltd.	TMNC	Shipping services	Transportation	1940
The Police Printing Press	PPP	Printing for Police Department and other public bodies	Industry	1953
Marketing Organization	MO	Runs produce market in Bangkok	Commerce and Service	1953
Inst. for the Promotion of Teaching Science and Tech.	IPTST	Provide equipment and methods for scientific and technological training	Promotion	1972
Playing Cards Factory	PCF	Monopoly supply and production of playing cards	Industry	1938
Lamphoon Provincial Co., Ltd.	LPC	Provincial wholesale and retail trading companies	Commerce and service	
Prajinburi Provincial Co., Ltd.	PPC	Provincial wholesale and retail trading companies	Commerce and service	
Preserved Food Organization (privatized)	PFO	Produce preserved food for soldiers & civilians, produce vinegar	Industry	1955
Surintr Provincial Co., Ltd.	SPC	Provincial wholesale and retail trading companies	Commerce and service	
Synd. of Thai Hotels & Tourist Enterprises (privatized)	THTE	Erewhon Hotel?	Promotion	
Thai Airways Co., Ltd.	TAC	Domestic air transportation	Transportation	1988

Rankings of State-Owned Enterprises

Thailand

(1989)

(Baht Millions)

Name of Group or Organization	Balance Sheet: Total Assets	Rank	Liabilities	Rank	Equity	Rank	Income Statement: Revenue	Rank	Expense	Rank	Profit/(loss) pre-tax	Rank
Krung Thai Bank, Ltd.	221,203	1	211,562	1	9,640	6	10,199	10	9,385	9	814	14
Government Savings Bank	125,703	2	116,552	2	9,151	7	12,702	8	11,018	7	1,684	10
Electrical Generating Authority of Thailand	122,466	3	79,051	3	43,415	1	42,650	3	32,226	3	10,424	1
Thai Airways International, Ltd.	59,210	4	47,669	4	11,541	4	44,088	2	36,667	2	7,421	2
Telephone Organization of Thailand	50,373	5	37,491	6	12,882	3	13,596	7	7,808	10	5,788	3
Bank of Agriculture and Agricultural Cooperatives	48,091	6	44,044	5	4,046	16	4,737	12	4,471	14	266	20
Provincial Electrical Authority	43,416	7	35,249	7	8,167	8	25,591	5	23,128	5	2,463	6
Petroleum Authority of Thailand	37,649	8	24,309	9	13,250	2	45,744	1	43,996	1	1,747	9
The Government Housing Bank	25,973	9	24,406	8	1,567	21	2,336	19	2,152	16	184	24
Metropolitan Electricity Authority	21,135	10	15,560	10	5,575	11	27,506	4	26,637	4	870	13
State Railway of Thailand	20,762	11	13,287	12	7,475	10	4,036	14	4,628	13	(592)	60
Metropolitan Waterworks Authority	19,399	12	13,885	11	5,514	12	4,532	13	3,581	15	950	12
Expressway and Rapid Transit Auth. of Thai.	13,077	13	9,328	14	3,749	18	1,111	28	745	30	366	18
Communications Authority of Thailand	12,558	14	1,910	20	10,648	5	10,568	9	6,909	11	3,659	4
Airports Authority of Thailand	10,173	15	6,036	17	4,137	15	3,237	17	1,233	22	2,004	8
Thailand Tobacco Monopoly	9,997	16	1,834	21	8,163	9	21,344	6	18,765	6	2,579	5
National Housing Authority	8,636	17	6,987	15	1,650	20	1,210	24	850	26	360	19
Provincial Waterworks Authority	6,902	18	1,814	22	5,088	14	1,902	20	1,534	18	368	17
Port Authority of Thailand	6,712	19	1,205	24	5,507	13	3,745	16	1,568	17	2,177	7
The Marketing Organization for Farmers	4,694	20	6,268	16	(1,575)	60	1,232	22	1,361	20	(129)	59
Office of the Rubber Replanting Aid Fund	4,318	21	305	32	4,013	17	2,571	18	1,421	19	1,150	11
Public Warehouse	3,997	22	3,348	18	649	26	970	29	956	25	14	38
Industrial Estate Authority of Thailand	2,595	23	2,146	19	449	29	287	38	210	41	77	28
Forestry Industry Organization	2,538	24	220	37	2,317	19	1,175	27	706	29	389	16
Government Lottery Bureau	1,654	25	1,168	25	486	28	9,662	11	9,505	8	157	25
Government Pharmaceutical Organization	1,564	26	150	41	1,414	22	1,483	21	1,247	21	236	22
Dhipaya Insurance Co.	1,325	27	1,219	23	106	42	577	32	551	32	26	33
Transport Co., Ltd.	1,089	28	266	34	823	24	1,225	23	810	27	415	15
Thai Plywood Co., Ltd.	971	29	238	36	733	25	938	30	794	28	144	26
Mass Communications Organization of Thailand	955	30	46	45	909	23	500	34	261	39	239	21
Bangkok Mass Transit Authority	787	31	9,792	13	(9,006)	61	3,847	15	4,700	12	(853)	61
Liquor Distillery Organization	715	32	136	43	578	27	461	35	265	37	196	23
Sugar Factory, Inc.	656	33	257	35	400	30	823	31	730	31	92	27
Textile Organization	557	34	345	30	211	37	374	37	367	35	7	42
Office of the Public Pawnshop	498	35	162	40	336	32	74	51	44	53	30	32
Aeronautical Radio of Thailand	494	36	459	28	35	49	261	39	261	38	0	52
Express Transportation Organization of Thailand	471	37	763	27	(291)	58	1,186	26	1,143	24	44	29
Dairy Farm Promotion Organization of Thailand	458	38	397	29	61	47	1,195	25	1,188	23	7	44
Fish Marketing Organization	411	39	138	42	273	33	97	50	78	50	19	34
Tourism Authority of Thailand	408	40	28	50	380	31	533	33	490	33	43	30
Rubber Estate Organization	397	41	165	39	232	35	252	41	236	40	17	36
Bang-na Glass Organization	381	42	287	33	94	43	426	36	415	34	11	39
Cold Storage Organization	351	43	846	26	(495)	59	107	49	183	43	(76)	58
Tanning Organization	317	44	194	38	123	41	260	40	277	36	(18)	57
Sports Authority of Thailand	276	45	42	47	235	34	115	48	111	49	4	46
Offshore Mining Organization	266	46	36	49	230	36	172	43	154	44	18	35
Battery Organization	197	47	42	46	155	38	139	46	132	45	7	43
Bangkok Dock Co., Ltd.	185	48	38	48	147	40	141	45	125	47	16	37
Thailand Inst. of Scientific & Technological Research	174	49	95	44	79	44	187	42	186	42	1	49
Zoological Park Organization	151	50	1	55	150	39	49	53	47	51	2	48
Thai Maritime Navigation Co., Ltd.	88	51	318	31	(230)	57	147	44	115	48	32	31
The Police Printing Press	75	52	2	52	73	45	49	54	38	54	10	40
Marketing Organization	74	53	2	53	72	46	138	47	132	46	7	45
Inst. for the Promotion of Teaching Science and Tech.	49	54	8	51	41	48	54	52	45	52	9	41
Playing Cards Factory	17	55	1	54	16	50	22	55	18	55	3	[illegible]
Lamphoon Provincial Co., Ltd.	0	56	0	58	0	55	0	56	0	59	0	54
Prajinburi Provincial Co., Ltd.	0	57	0	56	0	54	0	60	0	57	0	50
Preserved Food Organization (privatized)	0	58	0	59	0	51	0	61	0	61	0	55
Surin Provincial Co., Ltd.	0	59	0	61	0	52	0	57	0	58	0	56
Synd. of Thai Hotels & Tourist Enterprises (privatized)	0	60	0	60	0	53	0	59	0	56	0	51
Thai Airways Co., Ltd.	0	61	0	57	0	56	0	58	0	60	0	53
TOTALS	897,589		722,201		175,388		312,563		266,684		45,879	
STATISTICS												
Average	16,320		13,131		3,189		5,683		4,849		834	
Minimum	0		0		(9,006)		0		0		(853)	
Maximum	221,203		211,562		43,415		45,744		43,996		10,424	
Standard Deviation	35,926		32,199		6,464		10,509		9,169		1,827	
Subtotal Top 15 SOEs	831,189		689,264		160,154		280,801		243,424		44,145	
Top 15 as Percent of Total	92.60%		95.44%		91.31%		89.84%		91.28%		96.22%	

Name of Group or Organization	Government Financing: Capital Budget	Rank	Remittance to Treas.	Rank	Subsidy	Rank	Productivity Indicators: No. of Employ.	Rank	Revs/Emp Baht	Rank	Profit/Emp Baht	Rank
Krung Thai Bank, Ltd.	251	23	0	55	0	48	13,163	8	774,829	23	61,826	34
Government Savings Bank	5,824	3	675	10	0	20	7,645	10	1,661,417	12	220,254	16
Electrical Generating Authority of Thailand	13,540	1	1,061	4	186	9	31,732	1	1,344,057	13	328,489	9
Thai Airways International, Ltd.	4,154	5	665	11	0	39	14,123	7	3,121,682	5	525,447	4
Telephone Organization of Thailand	11,812	2	819	5	0	52	18,186	6	747,618	25	318,252	10
Bank of Agriculture and Agricultural Cooperatives	3,354	8	0	61	0	61	7,037	[illegible]	673,204	28	37,841	38
Provincial Electrical Authority	3,856	7	206	14	332	5	26,038	2	982,826	18	94,574	28
Petroleum Authority of Thailand	4,154	6	726	8	0	26	3,713	16	12,319,841	2	470,598	5
The Government Housing Bank	13	40	20	21	0	57	594	37	3,932,895	4	309,226	11
Metropolitan Electricity Authority	2,105	10	756	6	4	15	11,649	9	2,361,253	8	74,661	31
State Railway of Thailand	1,817	11	0	44	1,431	1	21,707	5	185,932	52	(27,272)	56
Metropolitan Waterworks Authority	4,713	4	91	17	303	6	5,852	13	774,357	24	162,413	19
Expressway and Rapid Transit Auth. of Thai.	2,625	9	84	19	67	11	1,535	27	723,850	27	238,619	13
Communications Authority of Thailand	1,801	12	1,086	3	8	13	21,979	4	480,839	34	166,491	17
Airports Authority of Thailand	1,296	14	690	9	0	24	2,505	20	1,292,263	14	800,060	2
Thailand Tobacco Monopoly	173	25	2,595	2	0	54	7,472	11	2,856,569	6	345,219	8
National Housing Authority	520	17	7	26	385	4	2,175	21	556,368	33	165,577	18
Provincial Waterworks Authority	1,139	15	222	13	412	3	5,247	15	362,514	40	70,185	32
Port Authority of Thailand	1,408	13	742	7	270	7	5,841	14	641,157	30	372,753	6
The Marketing Organization for Farmers	118	27	0	45	0	28	593	38	2,077,707	11	(217,403)	61
Office of the Rubber Replanting Aid Fund	61	29	0	41	1	16	2,114	22	1,216,310	15	544,115	3
Public Warehouse	3	47	7	27	0	45	445	40	2,180,854	10	32,315	39
Industrial Estate Authority of Thailand	917	16	0	40	0	18	337	45	851,632	22	228,487	14
Forestry Industry Organization	312	19	296	12	0	58	3,237	17	362,984	39	120,022	25
Government Lottery Bureau	33	33	2,733	1	0	47	714	35	13,532,815	1	220,392	15
Government Pharmaceutical Organization	164	26	89	18	0	19	1,729	24	857,542	21	136,547	21
Dhipaya Insurance Co.	NA	61	4	29	0	59	248	48	2,325,411	9	104,194	26
Transport Co., Ltd.	439	18	64	20	0	21	2,950	18	415,254	35	140,573	20
Thai Plywood Co., Ltd.	174	24	0	47	0	32	1,567	26	598,705	32	92,144	29
Mass Communications Organization of Thailand	301	20	98	15	0	27	798	31	626,967	31	299,674	12
Bangkok Mass Transit Authority	46	31	0	35	0	49	22,703	3	169,435	53	(37,579)	59
Liquor Distillery Organization	17	39	97	16	0	41	532	39	866,090	19	368,008	7
Sugar Factory, Inc.	23	36	17	22	0	23	743	33	1,107,026	17	124,092	24
Textile Organization	2	49	0	36	0	37	1,936	23	192,934	51	3,580	48
Office of the Public Pawnshop	7	44	12	24	0	25	230	49	320,261	42	130,435	22
Aeronautical Radio of Thailand	253	22	0	49	0	36	869	29	300,598	44	0	50
Express Transportation Organization of Thailand	53	30	0	51	0	40	2,858	19	415,045	36	15,269	43
Dairy Farm Promotion Organization of Thailand	96	28	1	33	0	55	1,062	28	1,125,518	16	6,422	46
Fish Marketing Organization	38	32	8	25	0	53	323	46	300,402	45	57,399	36
Tourism Authority of Thailand	29	35	0	37	526	2	719	34	741,349	26	59,360	35
Rubber Estate Organization	32	34	12	23	0	43	689	36	365,922	38	23,991	40
Bang-na Glass Organization	18	38	0	39	0	51	1,568	25	271,939	47	7,079	45
Cold Storage Organization	8	43	0	53	0	44	407	44	261,794	49	(186,806)	60
Tanning Organization	6	45	0	59	0	56	857	30	302,812	43	(20,513)	57
Sports Authority of Thailand	267	21	0	38	244	8	435	41	263,931	48	9,609	44
Offshore Mining Organization	0	52	0	42	0	22	264	47	651,439	29	69,583	33
Battery Organization	3	48	4	28	0	29	422	43	329,787	41	16,232	42
Bangkok Dock Co., Ltd.	2	50	3	32	0	33	163	52	862,699	20	98,037	27
Thailand Inst. of Scientific & Technological Research	20	37	0	58	155	10	747	32	250,897	50	1,606	49
Zoological Park Organization	12	41	0	57	7	14	424	42	115,708	54	4,410	47
Thai Maritime Navigation Co., Ltd.	NA	60	0	60	0	60	26	55	5,669,615	3	1,237,308	1
The Police Printing Press	3	46	4	31	0	17	132	53	369,318	37	78,409	30
Marketing Organization	0	53	4	30	0	31	53	54	2,612,264	7	125,283	23
Inst. for the Promotion of Teaching Science and Tech.	9	42	0	43	52	12	195	50	274,872	46	44,513	37
Playing Cards Factory	0	51	1	34	0	35	194	51	112,371	55	17,002	41
Lamphoon Provincial Co., Ltd.	0	57	0	52	0	42	0	57	0	56	0	51
Prajinburi Provincial Co., Ltd.	0	59	0	56	0	50	0	56	0	57	0	52
Preserved Food Organization (privatized)	0	56	0	50	0	38	0	59	0	58	0	53
Surin Provincial Co., Ltd.	0	58	0	54	0	46	0	61	0	59	0	54
Synd. of Thai Hotels & Tourist Enterprises (privatized)	0	54	0	46	0	30	0	60	0	60	0	55
Thai Airways Co., Ltd.	0	55	0	48	0	34	0	58	0	61	0	56
TOTALS	68,022		13,898		4,384		261,476					
STATISTICS												
Average	1,237		253		80		4,754					
Minimum	0		0		0		0					
Maximum	13,540		2,733		1,431		31,732					
Standard Deviation	2,491		525		208		7,179					
Subtotal Top 15 SOEs	63,603		13,369		4,383		220,374					
Top 15 as Percent of Total	93.50%		96.19%		99.97%		84.28%					

Name of Group or Organization	Financial Performance: ROA	Rank	ROE	Rank	Return on Sales	Rank	Debt/Equity	Rank
Krung Thai Bank, Ltd.	0.4%	48	8.4%	38	8.0%	32	21.95	1
Government Savings Bank	1.3%	42	18.4%	20	13.3%	25	12.74	4
Electrical Generating Authority of Thailand	8.5%	24	24.0%	14	24.4%	14	1.82	20
Thai Airways International, Ltd.	12.5%	17	64.3%	1	16.8%	20	4.13	12
Telephone Organization of Thailand	11.5%	18	44.9%	4	42.6%	5	2.91	6
Bank of Agriculture and Agricultural Cooperatives	0.6%	47	6.6%	44	5.6%	35	10.89	14
Provincial Electrical Authority	5.7%	27	30.2%	10	9.6%	30	4.32	10
Petroleum Authority of Thailand	4.6%	30	13.2%	28	3.8%	39	1.84	2
The Government Housing Bank	0.7%	45	11.7%	30	7.9%	33	15.58	19
Metropolitan Electricity Authority	4.1%	34	15.6%	25	3.2%	43	2.79	15
State Railway of Thailand	-2.9%	52	-7.9%	52	-14.7%	53	1.78	16
Metropolitan Waterworks Authority	4.3%	29	17.2%	21	21.0%	17	2.52	21
Expressway and Rapid Transit Auth. of Thai.	2.8%	38	9.8%	34	33.0%	11	2.49	39
Communications Authority of Thailand	29.1%	4	34.4%	6	34.6%	8	0.18	11
Airports Authority of Thailand	19.7%	9	48.4%	3	61.9%	1	1.46	11
Thailand Tobacco Monopoly	25.8%	7	31.6%	9	12.1%	26	0.22	45
National Housing Authority	4.2%	32	21.8%	16	29.8%	12	4.24	24
Provincial Waterworks Authority	5.3%	28	7.2%	41	19.4%	18	0.36	8
Port Authority of Thailand	32.4%	3	39.5%	5	58.1%	2	0.22	43
The Marketing Organization for Farmers	-2.7%	51	8.2%	39	-10.5%	52	(3.98)	56
Office of the Rubber Replanting Aid Fund	26.6%	6	28.7%	11	44.7%	4	0.08	35
Public Warehouse	0.4%	49	2.2%	47	1.5%	47	5.16	30
Industrial Estate Authority of Thailand	3.0%	36	17.1%	22	26.8%	13	4.78	37
Forestry Industry Organization	15.3%	12	16.8%	23	33.1%	10	0.10	60
Government Lottery Bureau	9.5%	20	32.4%	8	1.6%	46	2.40	18
Government Pharmaceutical Organization	15.1%	13	16.7%	24	15.9%	22	0.11	26
Dhipaya Insurance Co.	2.0%	39	24.5%	13	4.5%	38	11.55	9
Transport Co., Ltd.	38.1%	1	50.4%	2	33.9%	9	0.32	22
Thai Plywood Co., Ltd.	14.9%	14	19.7%	19	15.4%	23	0.33	3
Mass Communications Organization of Thailand	25.0%	8	26.3%	12	47.8%	3	0.05	40
Bangkok Mass Transit Authority	-108.5%	55	9.5%	35	-22.2%	54	(1.09)	17
Liquor Distillery Organization	27.4%	5	33.9%	7	42.5%	6	0.24	59
Sugar Factory, Inc.	14.0%	15	23.1%	15	11.2%	28	0.64	29
Textile Organization	1.2%	43	3.3%	46	1.9%	45	1.63	47
Office of the Public Pawnshop	6.0%	26	8.9%	37	40.7%	7	0.48	46
Aeronautical Radio of Thailand	0.0%	50	0.0%	51	0.0%	50	13.12	32
Express Transportation Organization of Thailand	9.3%	21	-15.0%	55	3.7%	41	(2.62)	5
Dairy Farm Promotion Organization of Thailand	1.5%	41	11.1%	32	0.6%	49	6.48	31
Fish Marketing Organization	4.5%	31	6.8%	43	19.1%	19	0.51	13
Tourism Authority of Thailand	10.5%	19	11.2%	31	8.0%	21	0.07	50
Rubber Estate Organization	4.2%	33	7.1%	42	6.6%	34	0.71	28
Bang-na Glass Organization	2.9%	37	11.8%	29	2.6%	44	3.07	27
Cold Storage Organization	-21.6%	54	15.4%	26	-71.4%	55	(1.71)	42
Tanning Organization	-5.6%	53	-14.3%	54	-6.8%	51	1.58	7
Sports Authority of Thailand	1.5%	40	1.8%	48	3.6%	42	0.18	33
Offshore Mining Organization	6.9%	25	8.0%	40	10.7%	29	0.16	25
Battery Organization	3.5%	35	4.4%	45	4.9%	36	0.27	41
Bangkok Dock Co., Ltd.	8.6%	23	10.9%	33	11.4%	27	0.26	34
Thailand Inst. of Scientific & Technological Research	0.7%	46	1.5%	49	0.6%	48	1.20	23
Zoological Park Organization	1.2%	44	1.2%	50	3.8%	40	0.01	44
Thai Maritime Navigation Co., Ltd.	36.6%	2	-14.0%	53	21.8%	15	(1.38)	57
The Police Printing Press	13.7%	16	14.2%	27	21.2%	16	0.03	48
Marketing Organization	9.0%	22	9.2%	36	4.8%	37	0.02	49
Inst. for the Promotion of Teaching Science and Tech.	17.6%	11	21.1%	18	16.2%	21	0.20	58
Playing Cards Factory	19.6%	10	21.2%	17	15.2%	24	0.08	38
Lamphoon Provincial Co., Ltd.	NA	58	NA	60	NA	57	0.00	56
Prajinburi Provincial Co., Ltd.	NA	59	NA	59	NA	59	0.00	54
Preserved Food Organization (privatized)	NA	56	NA	56	NA	58	0.00	53
Surin Provincial Co., Ltd.	NA	61	NA	61	NA	61	0.00	51
Synd. of Thai Hotels & Tourist Enterprises (privatized)	NA	57	NA	58	NA	60	0.00	55
Thai Airways Co., Ltd.	NA	60	NA	57	NA	56	0.00	52
STATISTICS								
Average	7.0%		15.9%		13.7%		1.42	
Minimum	-108.5%		-15.0%		-71.4%		0.01	
Maximum	38.1%		64.3%		61.9%		6.48	
Standard Deviation	19.2%		15.6%		20.7%		1.66	

This list excludes:
Bank of Thailand
Bangchak Petroleum Co., Ltd.
PTT Exploration and Production Co., Ltd.
Northeast Jute Mill Co., Ltd. (privatized)
Bang-Pa-In Paper Mill (privatized)

the case of the Preserved Food Organization. See Table 3.A.2 for an asset ranked list of the SOE's and their performance in various categories.

Annual Borrowing Requirements

The SOE's require large amounts of capital; especially those in such capital intensive and strategic sectors as communications, utilities, and transportation. As a group, the SOE's net borrowings exceeded B 6.3 billion in 1989 and B 51.7 billion domestically and externally from 1985 through 1989. Table 2.A.1 contains a summary of SOE borrowing during this period. Table 3.A.2 shows the capital budgets of the SOEs. The largest capital budgets were:

	billions of baht
Electricity Generating Authority of Thailand	13.540
Telephone Organization of Thailand	11.812
Government Savings Bank	5.824
Metropolitan Waterworks Authority	2.105
Thai Airways International, Ltd.	4.154

This is a change in borrowing practices; historically, the SOEs borrowed even more. The pattern changed after 1985, when the RTG placed a borrowing ceiling of one billion US dollars on the SOE's. They also required that at least 25 percent of funding requirements come from the SOEs cash flow. The use of internal sources is evidenced in Graph 3.A.1, Financing Sources of the SOEs.

Market Value of Enterprises

The SOE's range from small, secondary players in their markets such as the Playing Card Factory to multi-billion dollar businesses competing internationally such as Thai Airlines to multi-billion dollar monopolies such as the Electricity Generating Authority of Thailand. Indeed, were the profitable enterprises to be sold at a price earnings multiple of fifteen, their market capitalizations would add B 499 billion or 80 percent to the total market capital of the Securities Exchange of Thailand (SET). See Table 3.C.1, Valuations of SOEs, for more detail.

Employment in the SOE's

The number of persons employed in SOE's in 1989 totalled 261,476 persons. This is 12 percent of the modern sector labor force, and .9 percent share of total employment in Thailand. As a group, the SOE's are the largest employer in the country after the Government.

The SOEs are highly unionized compared to the private sector in Thailand. Almost all SOE's have unions. According to the Department of Labor, of the 300,000 union members in Thailand, 200,000, or approximately 66 percent work for SOEs. The effectiveness of the unions (or the weakness of management) is reflected in the higher average salaries and fringe benefits for SOE employees compared to the private sector as a whole. See Chapter 3, Section D for more details.

Employment growth in the SOEs and government sectors has been less rapid than in the economy as a whole. The RTG enacted measures to restrict employment growth in these enterprises and productivity has gone up correspondingly during these last few years. While SOE employment grew by 7 percent per annum from 1973 to 1984, it grew just 3.9 percent from 1985 to 1989. See the section on SOEs in Table 2.A.2.

Social and other roles

It is alleged that the SOE's play a key role in promoting various social concerns within the Thai Economy. These include moderation of competition (inter-city bus transport), increasing the quality of products and services (lumber products and bus services), and influence on pricing (petroleum products company).

For the most part, there is little evidence to suggest that the SOE's serve social roles as most policies affecting the sectors that the SOE's serve are set by the regulatory ministry and are not affected by SOE participation in the market. Thus, moderation of competition is more affected by the restrictions on market entry by the Ministry of Transportation and Communication, the quality levels by market factors, and the pricing ceilings allowed by the Department of Commerce than by any activities of the SOE within the sector.

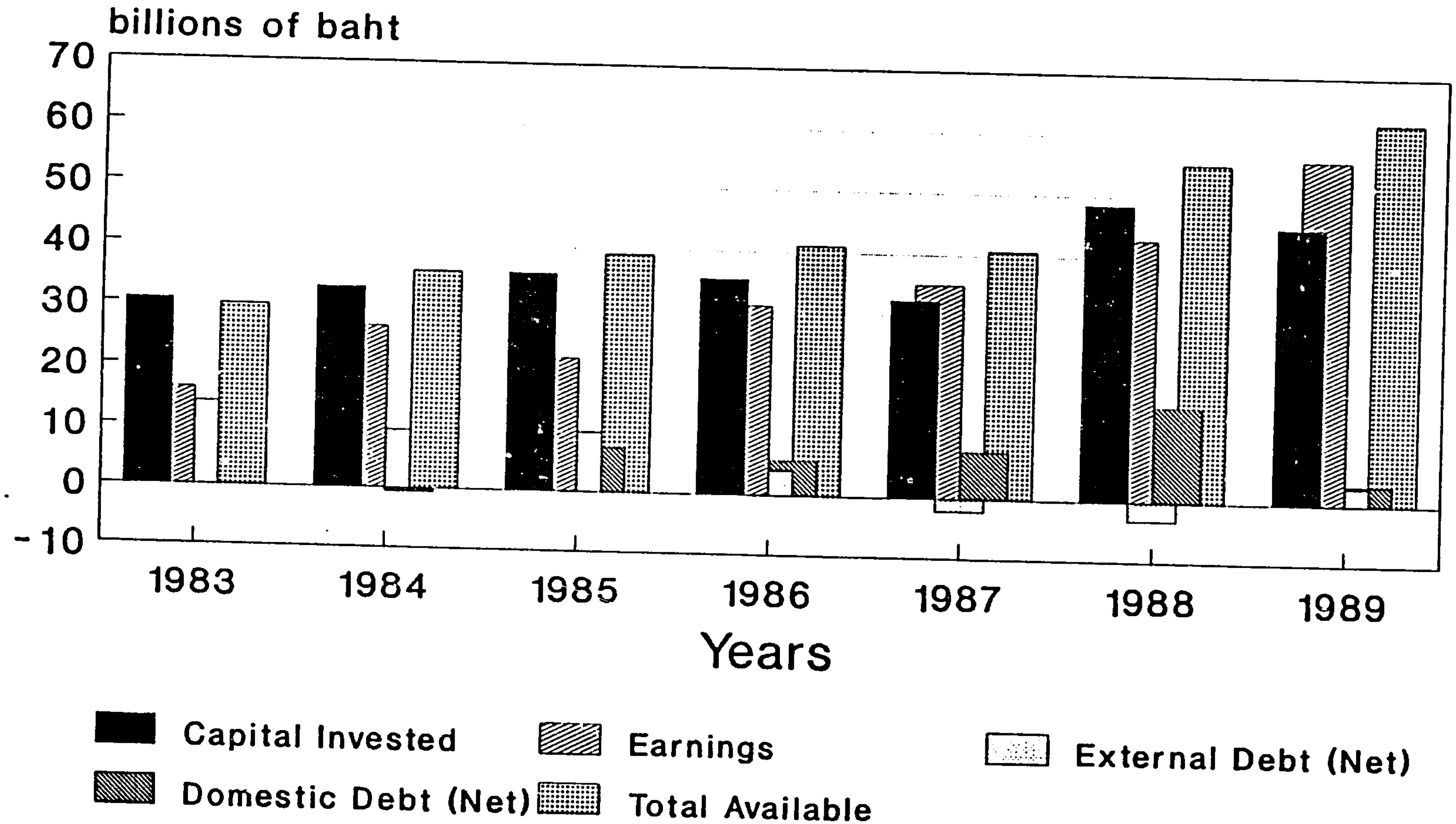
It is interesting to note what is not contained in the SOE portfolio. Unlike many other countries, there are few large manufacturing companies, e.g. there are no steel companies or cement companies. Relative to other countries, Thailand has emphasized the importance of the private sector in its strategy for economic development. Thus, privatization is already off to a good start by virtue of the enterprises that are already in the private sector and do not have to be privatized.

Moreover, Thailand has adopted a policy of "pre-emptive privatization," i.e. a policy not to create new state-owned enterprises to deal with new technology and demand for new goods and services. Rather, the private sector will be the economic agent which will meet the supply as the structure of demand changes in Thailand as production and incomes grow.

Public Finance

To a limited extent, the SOE's finance the regulatory agencies and the Government through their taxes and dividends. This is a source

SOE FINANCING
Capital Available for Investment



Graph 3.A.2

33

of funding for the Government, returning net B 9.5 billion in dividends and distributions in 1989. (Offsetting the B 13.9 billion in remittances were B 4.384 billion in explicit subsidies.)

As the World Bank Report documents, the returns to the Royal Thailand Government (RTG) of the SOE's are lower than the taxes and distributions that would have been paid by privately run enterprises. Applying a 30 percent tax rate on the profits of these enterprises and a 5 percent dividend (losses are eliminated), they should have remitted to the Treasury B 18 billion in 1989. Graph 3.A.2 shows that only 16 SOEs returned 35 percent or more to the RTG. The shortfall is a minimum of B 8.5 billion; this is an implicit subsidy to the SOEs.

The Role of the SOE's is Declining:

Although the SOE's remain an important force in numerous sectors, their role is declining. As was discussed in Chapter 2 and can be seen in Table 2.A.1, the SOE's are growing less quickly than the economy as a whole. For example, the ratio of SOE revenues to gross domestic product declined from 24.34 to 20.33 percent from 1985 to 1989. Capital expenditures by the SOEs increased only 27 percent during this time period.

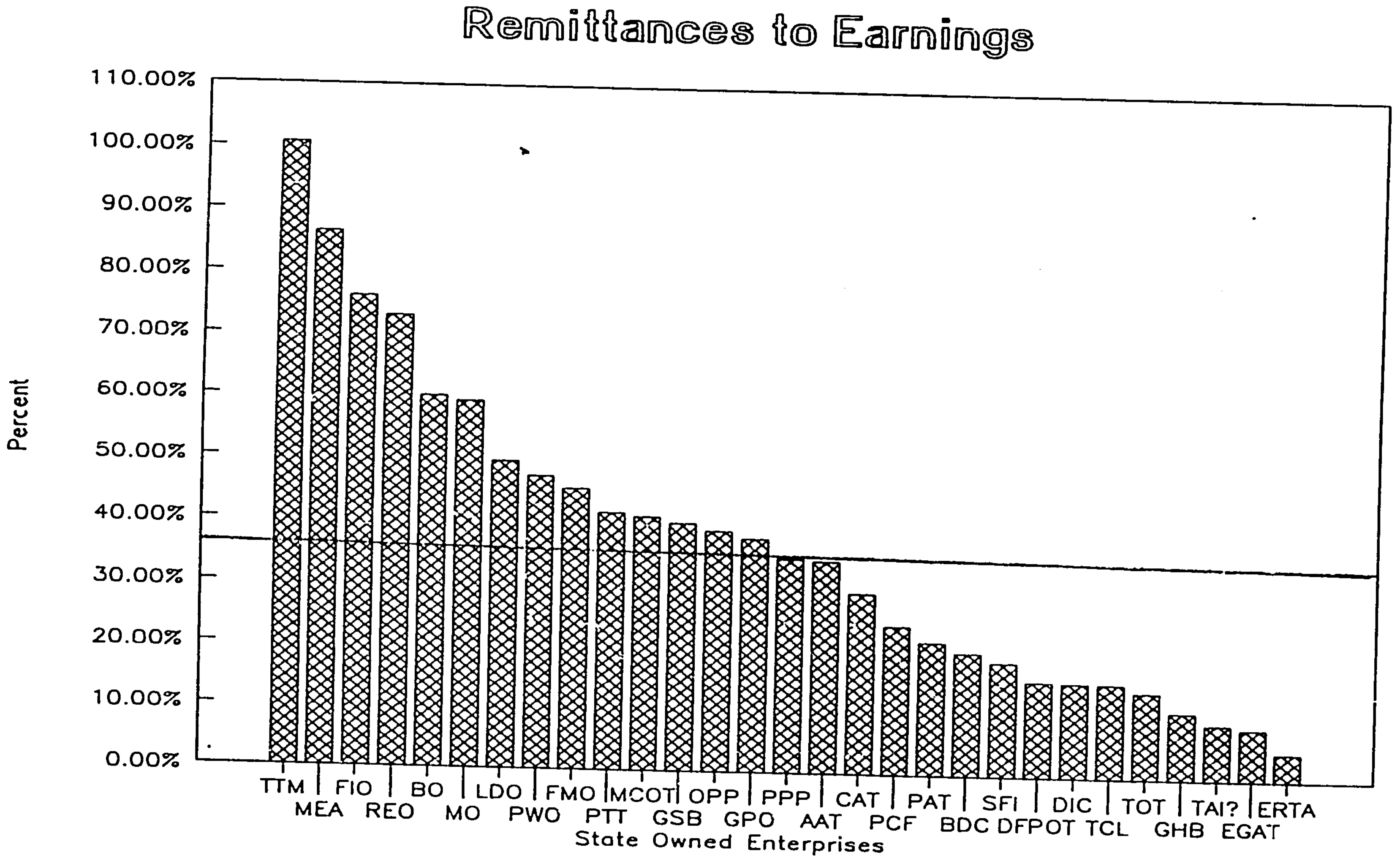
This slow down in investment into key sectors is increasingly affecting Thailand's ability to grow and to compete internationally. Lack of telephone lines, lack of electricity generating capacity, and lack of adequate transportation infrastructure, etc. limit companies' ability to produce and compete.

SOEs are Unable to Meet Current and Projected Market Demand

As Table 2.A.1 illustrates, SOEs are unable to meet market demands based on retained earnings alone. Capital expenditures are not keeping up with the growth in Thailand's economy. For example, the Telephone Organization of Thailand installed 150,000 fewer lines in 1989 than it did in 1985 despite an unmet demand for 800,000 additional lines. It was estimated by a recent team of consultants that the TOT would take 30 years to meet current suppressed demand, let alone any growth in demand, were the TOT to finance all their expansion from retained earnings.

Failing to meet the demand places additional strain on the Thai economy and weakens its competitive position in world markets. Calls for orders cannot get through, factories cannot be built for lack of electricity, shipments cannot get through the ports due to backlogs, trucks cannot deliver raw materials on time to the factories due to traffic congestion, and so forth.

Graph 3.A.2


Remittances to Earnings
110.00%
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
Percent
TTM
MEA
FIO
REO
BO
MO
LDO
PWO
FMO
PTT
MCOT
GSB
OPP
GPO
PPP
AAT
CAT
PCF
PAT
BDC
SFI
DFPOT
DIC
TCL
TOT
GHB
TAI?
EGAT
ERTA
State Owned Enterprises

Capital Requirements to Meet Demand Forecasts

The capital requirements of the SOE's to meet market growth are substantial. Obtaining these figures would require in-depth analysis on an industry by industry basis to confirm, but their is sufficient evidence of the magnitude of these requirements. For example, EGAT projects a need for B 184 billion in additional capital to meet market demand over the next five years. TOT would require B 650 billion to meet market demands for telephone lines over the next 25 years. The BMTA would require B 5 billion to purchase buses to replace its current fleet over an eight year period.

Annual investment requirements for these three companies alone over the next five years, would exceed the RTG's $1.0 billion annual limit by $1.27 billion per annum.

Unfortunately, while capital is the primary constraint slowing down the SOEs it is not the only one. The next section will examine these constraints in detail.

B. Main Problems Associated with State Owned Enterprises

Summary

As discussed in the previous section, the SOEs have lagged the economy in terms of growth. The reasons for this include: A) capital constraints, B) the slow decision-making and review process of the SOEs, C) regulatory restrictions, D) management and labor restrictions, and E) lack of market discipline. To a certain extent, these constraints reflect the changing requirements of markets in Thailand and internationally. It is becoming less and less acceptable for businesses to take customers for granted or to delay in responding to the market. The markets in Thailand and, especially, internationally are competitive and unforgiving. To maintain their competitive positions, the SOEs must find solutions to the constraints facing them.

1. Capital constraints

The primary problem facing the large State Owned Enterprises (SOEs) is the constraint on capital for investment purposes. Thailand's rapid economic growth has placed great demand on the infrastructure of the country including the transportation, communications, and utility sectors of the economy. The large SOEs in these areas find themselves faced with tremendous demand for services but feel they have insufficient capital to expand.

Some SOEs have partially solved their problem by managing their cash flow more effectively. It has been a requirement of the RTG since 1985 that the SOEs fund 25 percent of their expansion from working capital. Such organizations at the Express Transport Organization and the Telephone Organization of Thailand (TOT) attacked the working capital portions of their balance sheets with reasonable success and found capital for investment.

At the same time, most SOEs have not been particularly aggressive at searching out alternate sources of capital or methods of meeting demand. For example, the TOT, despite its improvement in use of working capital, was installing fewer lines per annum in 1989 than it had in 1985. The BMTA has made few additions to its basic services despite annual increases in traffic in Bangkok. Such slowness in responding to tne market has contributed greatly to the tremendous backlogs of pent up demand for these services.

The SOE's are more limited in their ability to raise investment capital than private sector firms due both to their positions as SOE's and due to the RTG's control of SOE borrowing over the last several years. First, the SOE's have less flexibility in raising debt or equity capital than do the private sector firms and it takes longer to obtain those funds. While private sector firms can borrow locally and internationally, raise equity capital locally and internationally, or establish joint ventures with local and foreign firms, the SOE's are limited to equity infusions from one source, the Government, and primarily finance their expansion from a combination of retained earnings and debt. In both cases, the SOEs face significantly longer cycles, more levels of approval, and more restrictions on their ability to finance than a private firm would in the same line of business.

Second, the Government has established a policy of limiting the SOE's ability to borrow additional funds. The RTG's decree? of 1985 limited the annual borrowing of the State Enterprises to $1,000,000,000 and required them to finance 25 percent of their expansion through retained earnings. This resulted in an overall improvement in the profitability of the SOEs, who were forced to manage their cash flow better while holding back on capital expenditures. See Graph 3.B.1. for an illustration.

Unfortunately, this has slowed the growth of the large, capital intensive SOE's such as Thai International, EGAT, and TOT which are faced with rapidly expanding demand and insufficient internal capital to finance expansion. Because of government restrictions on borrowing, the SOEs have tended to lose their contacts with the local and international financial community, and thus lose their financial sophistication. The SOEs have had to rely to a large extent on retained earnings to finance their needed capital expenditures. This has resulted in under investment relative to demand for services.

The team supports the government's austerity measures vis a vis the SOEs. The policy of limiting government or government-guaranteed access to capital is sound. Now the RTG needs to enable the SOEs to access private sector equity and debt capital on the basis of the companies' own financial performance. This in turn would require passage of the Privatization Law and, depending upon the specific SOE, additional legislation to revise the legal character of the SOE or to privatize the organizations.

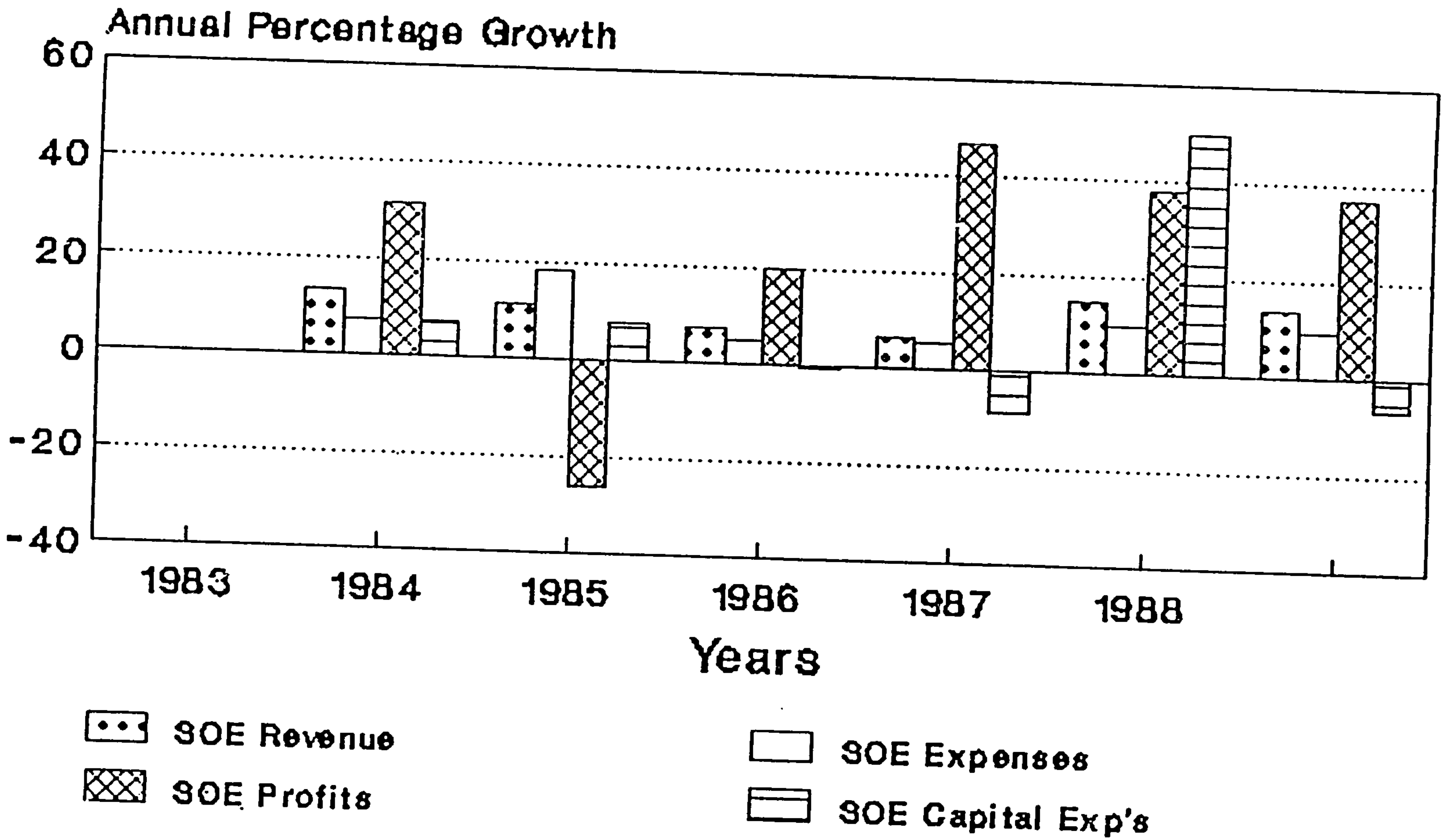
To summarize, the structure of SOEs, the limited sources of capital available to SOEs, and the restrictions on their ability to raise both debt and equity capital has slowed their overall growth. Were the SOEs private, they would be able to solve their capital constraints in most instances.

2. Conflicting objectives

Other SOEs are the victims of conflicting objectives. Perhaps the most notorious example is the BMTA, the Bangkok bus company, which is supposed to keep urban transport fares low. However, this corrupts its financial position, which makes it unable to provide quality bus transportation in sufficient quantities to enable it to carry out its primary purpose. Low fares = insufficient capital = fewer buses = more people must use other transportation = higher overall transport costs. In this case, the policy is

Graph 3.B.1

SOE Annual Percentage Change
Thailand



DAAS\TECTEMP

39.

counterproductive; a better policy would be to increase competition and fares to stimulate the growth of public transportation.

3. Organizational Restrictions

Organizationally, the SOEs are ill-equipped to deal with the pace of change in the rapidly developing Thai economy. The average SOE manager cannot make decisions as quickly or as freely as his private sector counterpart. The organizational structures of SOEs do not help either. They are large bureaucratic structures with considerable layers of oversight by various government ministries.

For example, the overseeing ministries and government regulations restrict the SOE manager's ability to hire and fire workers, to purchase materials and equipment, to make capital and operating decisions, to acquire other firms and expertise, to set rewards, bonuses, and salaries, and to develop or extend into new product lines. Each of these procedures tends to slow down the speed at which managers can accomplish their priorities. And, in an environment where competition is increasingly time-dependent, these delays place the SOEs at a competitive disadvantage.

This type of micro-management can hardly be expected to result in improved SOE performance. The possibility of operating free of such rules and regulations has attracted the management of many SOEs to the concept of privatization. In general, almost every SOE would benefit from privatization that would relax the restrictions on their ability to make operating and capital decisions. Let us examine some of these restrictions in more detail.

4. Labor restrictions and policies

Labor is heavily regulated and labor rates are established that place the State Enterprises at a disadvantage vis-a-vis the private sector. Although the differentials appear to be disappearing in recent years, labor costs in 1988 were 100 percent higher on average in the unskilled and semi-skilled positions than those in the private sector, 30 to 43 percent higher in the higher skilled trades, and about 10 percent lower in the executive level than those in the private sector. Since then, the SOEs have fallen behind in various technical areas, especially in the engineering fields. Further, benefit packages are more lucrative. This would be acceptable were the State Enterprises more productive than the private sector. Unfortunately, they are not.

The causes of lower productivity are many but the primary causes would appear to be lack of market discipline on the enterprises. For years the SOEs have had protected markets, protected prices, protected jobs, access to government subsidies, preferential access to capital, and little requirement to return a profit to the government. With the change in policy in 1985, this has changed.

40

Graph 3.B.1 shows that operating margins of the SOEs have improved dramatically from 1985 to 1989. Further, per employee productivity figures improved during this period. For example, at TOT the lines per employee increased from 37 to 63.

Managers of some SOEs blame the unions for problems within the enterprise and as discussed above, the SOEs are much more unionized than the private sector. This limits management's ability to control its costs. Still, observation seems to indicate that management sets the tone with the unions and effective managers seldom have major problems with their unions. A number of organizations with strong management, such as the ETO and EGAT, have essentially eliminated union problems over the years.

To be fair, the personnel policies of the government are restrictive and make it more difficult to rid the typical SOE of unproductive workers. Difficult but not impossible; the BMTA alone releases 80 employees per month for cause. In other organizations, however, less motivated workers can rely on the system's inefficiencies and management inertia to allow them remain employed while contributing little to the SOEs production.

5. Management compensation

While labor rates are higher in the SOE's than in the private sector, managers, engineers, technicians, and highly skilled individuals are paid less. This results in a weakening of the SOEs in many ways. Good managers and skilled employees can find better opportunities in the private sector and so leave. This does not imply that the managers remaining in the SOEs are not good or efficient, just that they have the opportunity to leave. So the SOEs are vulnerable to loss of key managerial talent.

SOE salaries are subject to the approval of the Ministry of Finance, Comptroller General's Office. With the boom in the economy, and surge in demand for managers and engineers, the SOEs are experiencing a "brain drain." This comes at a time when many of the SOEs are facing significant demand for increased output of their services.

6. Management Constraints

Management is constrained in its ability to manage certain aspects of its operations. Prices, procurement of supplies, hiring and firing of labor, capital investments, are all subject to greater regulation, impediments, and delays than companies in the private sector. The time delays can add significantly to the cost of the SOEs.

Finally, one source of potential expertise acts as a constraint on the SOEs by its absence. Board members are appointed by the

Government and are generally comprised of civil servants, SOE managers, or retired politicians. Persons who may not understand the business or the requirements of the marketplace. There are relatively few private sector businessmen represented on the boards; thus, the boards do not serve to bring in experienced counsel to management.

7. Market Restrictions

Prices for the products of many SOE's are established by either the supervising ministry or by the Commerce Department. This limits the SOE's ability to respond to the market and may burden it unduly with losses, as is the case of the Bangkok Metropolitan Authority.

The SOE's are also controlled in their ability to enter related markets, although it does not seem to affect their ability to manage various real estate transactions. Entry into markets is also regulated by the supervising ministry. For example, transportation and communications are controlled by the Ministry of Transport and Communications (MOTC) which has divided up control of these sectors into a series of monopolies. Most firms cannot compete across boundaries. Rather than gaining efficiencies or economies of scale from this approach, the policy has created multiple monopoly niches, each of which turns out to be less efficient and less responsive to the market. Here more competition would be in order.

8. Purchasing Restrictions

Most SOE's are required to use other SOEs or government facilities as part of their inputs. A list of the various inputs that must be purchased from other SOEs include:

Banking services	Krung Thai Bank
Petroleum	Petroleum Authority of Thailand
Inter-provincial trucking	Express Transport Organization
Insurance	Dhiphiya Insurance
Ocean Shipping	Maritime Transport Company
Inter-city bus	The Transport Company
Air travel	Thai International

This does not include the government monopolies that allow only one SOE in an industry, e.g., the TOT, CAT, EGAT, etc.

This restricted procurement makes each SOE less competitive domestically and internationally, since it cannot get the best price and/or service available in the market. This reduces its own operating performance, profits, and actually reduces workers' job security. As a result, the level of service provided to the Thai consumers is reduced. Further, those SOEs that have captive business from the other SOEs show higher revenues than they might have in a freely competitive market. This disguises the true financial positions of those SOEs.

9. Procurement Regulations

Finally, SOE must go through the same bidding and procurement procedures as government ministries. This is a slow procedure that can noticeably delay the SOEs ability to compete in the market. One point raised repeatedly by managers of SOEs was the exceptional delays in obtaining approval for computer purchases. The premise of the National Computer Coordinating Committee may be sound, to insure compatibility of systems. However, rather than approve each purchase, it should develop a set of standards and monitor procurement on an exception basis so that only non-standard systems require a review.

10. Constraints on expansion/diversification

To expand facilities or to diversify to meet customer demand is a slow process in the SOEs. The list of approvals for a capital project is extensive and may the signatures of dozens of persons across a half-dozen ministries. SOEs may have some advantages in their ability to use government lands or to clear certain regulatory hurdles due to their preferred position within the bureaucracy.

Still, while the private sector is also constrained in its ability to obtain permits for capital projects, it faces far fewer hurdles and is able to decide on a project, raise capital, and build more quickly. For this reason, several of the SOEs are forming Joint Ventures with the private sector to get around the slow nature of approval within the government. These include the recent $3 billion telephone project with the Charoen Phokphand/British Telecom Group and an announcement by the Thai Plywood Company that it was entering into a joint venture with a private firm to build its third hardboard factory.

11. Monopoly Restrictions and Costs

There are also monopolies established that limit not only the SOEs but other Thai companies as well. An example of this is the monopoly granted to ETO to haul goods from the ports in Bangkok. ETO's slow and uneven performance results in additional congestion in the ports. (ETO for its part points out that it would like to haul more goods from the ports at the night time, but that the Port Authority's unions will not sanction shifts after 4:30 p.m.)

The team's recommendation is, as an interim measure before privatization, to phase out these monopoly privileges and permit the private sector to compete as a supplier of goods and services to Thai State Owned Enterprises.

43

12. Self-imposed constraints

Although the legal and regulatory constraints listed above can be real and frustrating, one senses that the stronger managers are able to work around many of the problems. It was interesting to talk with managers of SOEs who believed that the real problem was not the restrictions and constraints facing mangers, but the lack of initiative and creativity on the part of many companies toward solving their problems. Only after several years of capital restrictions are the SOEs beginning to voice serious interest in privatization; and their interests are not in the benefits of privatization per se but in obtaining the additional capital to continue expansion.

Further, it is fair to say that some SOEs seize upon the restrictions listed above as an excuse; rather, than attempt to solve some serious problems within their organization. The Ministry of Finance has asked managers to let it know of unnecessary regulations so the MOF can make changes; however, according to the MOF, the managers have not come forward with suggestions despite several requests. Independently, the MOF announced that it will consider some forms of deregulation for the SOEs.

Thus, one must take some of the restrictions and complaints of the SOEs with a grain of salt. Let us examine one constraint in greater detail as it is raised so often by management as the main obstacle to privatization, the unions.

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C. The State Owned Enterprises

Summary

The 61 SOEs are a diverse group spread across seven sectors, but they dominate the strategic infrastructure sectors--energy, transport, communications, and utilities. Typically, the top 15 SOEs represent 90 percent of the assets, revenues, profits, etc. of the SOEs. Most are reasonably well-managed, but five SOEs cost Thai taxpayers B 1.67 billion in 1989.

Diverse Group

The SOEs are a heterogenous group. Most are corporations with profit making roles. There are about 18 large corporations, a number of smaller ones, and several that are really non-profit institutions such as the Thai Institute of Scientific and Technology Research. Refer to Table 3.A.1 for a descriptive list of the SOEs.

Although improvements can be made, most of Thailand's SOEs are reasonably well managed. Almost all report earnings and a few are world class companies, such as Thai International Airways and the Electricity Generating Authority of Thailand (EGAT). Refer to Table 3.A.2 for a list of the SOEs ranked by asset size along with key financial information.

The Best Performing SOEs.

Ranking the SOEs for 1989 data by assets, equity, revenue, and profit before taxes, and number of employees points to some important characteristics of the SOEs.

In almost all cases, the top 15 SOEs by ranking in each of the different categories typically account for more than 90 percent of the assets, etc. of all of the SOEs in that category. For example, for the top 15 SOEs, ranked by assets, account for 92.6 percent of all SOE assets. This trend is indicated as follows:

	Top 15 SOEs as a Percent of Total
Assets	92.6%
Equity	91.3%
Revenue	89.8%
Pre-tax Income	96.2%
Employees	84.3%

Not surprisingly, there are SOEs that consistently rank in the top 15 in each of these categories. They include:

Electricity Generating Authority of Thailand
Petroleum Authority of Thailand
Telephone Organization of Thailand
Thai Airways International, Ltd.
Krung Thai Bank, Ltd.
Government Savings Bank
Provincial Electrical Authority
Thailand Tobacco Monopoly
Metropolitan Electrical Authority
Metropolitan Waterworks Authority
Port Authority of Thailand
Provincial Waterworks Authority
Communications Authority of Thailand
Airport Authority of Thailand
Expressway and Rapid Transit Authority.

The implication of this concentration is clear. By focusing on the larger companies, the greatest impact from privatization can be achieved. The desired impact in this case is to mobilize private sector capital to enable the SOEs to expand. For these reasons, the Team included Electricity Generating Authority of Thailand (EGAT) and the Telephone Organization of Thailand (TOT) in the study.

On a more general basis, Table 3.C.1 shows a valuation of SOEs ranked by their potential market values.[1] Again, the top 15 SOEs, if privatized through a share offering, would represent 93 percent of the total stock market capitalization for all SOEs. Graph 3.C.1 shows this more clearly.

The infusions of capital of primarily share issues would take the form of equity but also some debt, depending on the state of the balance sheet. Other desirable impacts would include the use of private sector management techniques to increase the efficiency and profitability of the scarce resources that SOEs command.

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1 The assumptions for this scenario are listed at the bottom of Table 3.C.1. Briefly, the current market multiple of 15 times earnings was multiplied against earnings less subsidies.
Taxes are based on the 30 percent rate applied to publicly traded companies.
Dividends are based on a 10 percent rate times the 50 percent of shares left in RTG hands. Where the enterprise loses money, it is assumed (optimistically) that subsides are eliminated.
Finally, the earnings streams of taxes and dividends are added to the interest earnings, at a 12 percent rate, of the 50 percent of the shares sold. This gives the present value figure listed in the column.
In actuality, most of the SOEs would conduct share issues to raise additional equity for infrastructure expansion. In those cases, the effective receipts will be cut in half; 50 percent ownership of the additional equity invested in the SOE.

Valuations of State Owned Enterprises

Thailand

(1989)

(Baht Millions)

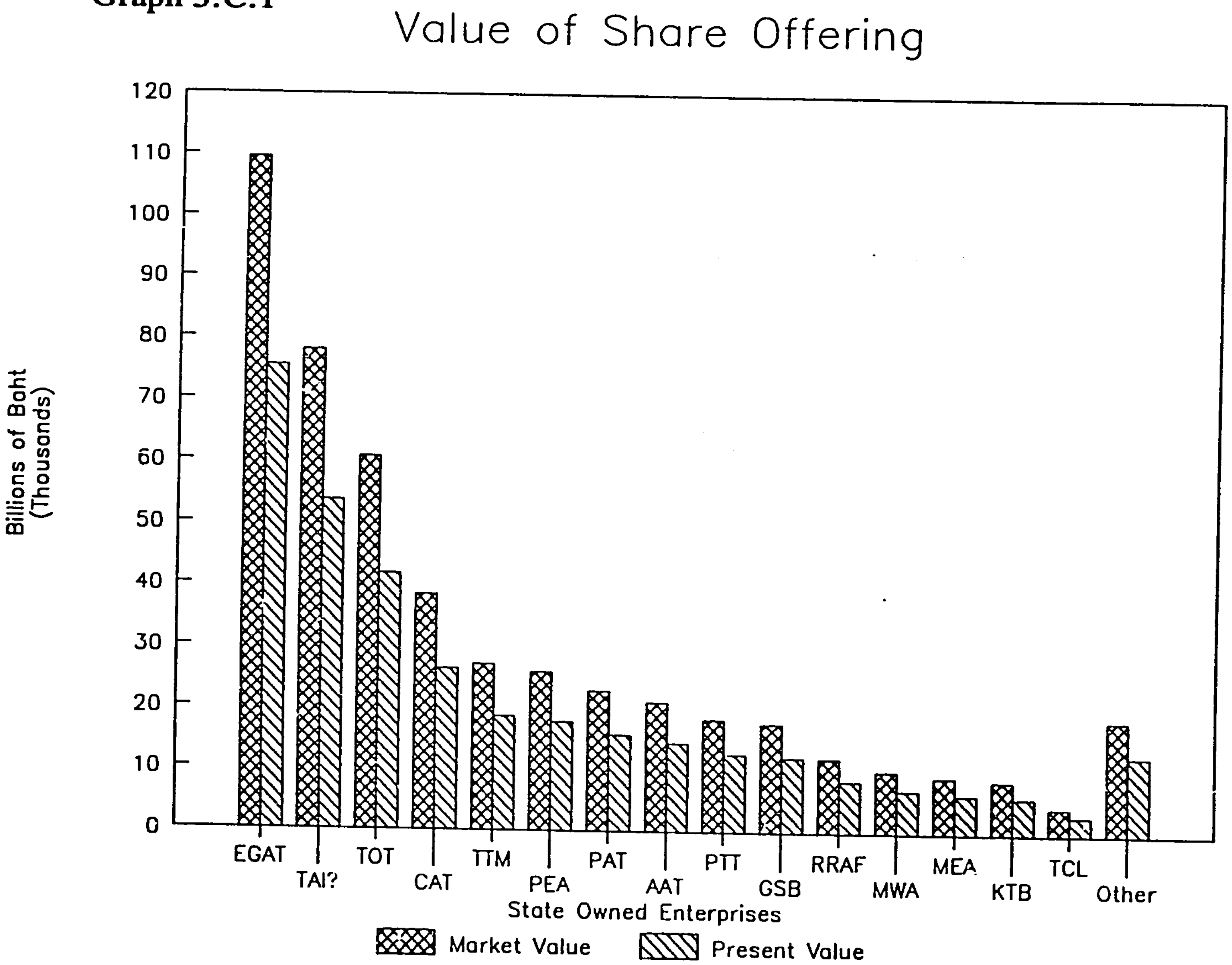
Name of Group or Organization	Valuation Indicators: Net to Gvt./ Earnings	Rank	Value	Rank	Value to Book	Rank	Taxes	Dividends + end to Subsidy	Sell Shares	Present Value	Rank
Electrical Generating Authority of Thailand	8.4%	29	109,448	1	2.52	14	3,127	521	54,724	75,337	1
Thai Airways International, Ltd.	9.0%	28	77,919	2	6.75	1	2,226	371	38,960	53,635	2
Telephone Organization of Thailand	14.1%	26	60,771	3	4.72	4	1,730	289	30,386	41,831	3
Communications Authority of Thailand	29.5%	18	38,423	4	3.61	6	1,098	183	19,211	26,448	4
Thailand Tobacco Monopoly	100.6%	2	27,085	5	3.32	9	774	129	13,542	18,643	5
Provincial Electrical Authority	-5.1%	53	25,857	6	3.17	10	739	123	12,928	17,798	6
Port Authority of Thailand	21.7%	20	22,861	7	4.15	5	653	109	11,431	15,736	7
Airports Authority of Thailand	34.4%	17	21,044	8	5.09	3	601	100	10,522	14,485	8
Petroleum Authority of Thailand	41.5%	11	18,347	9	1.38	27	524	87	9,173	12,629	9
Government Savings Bank	40.1%	13	17,680	10	1.93	20	505	84	8,840	12,170	10
Office of the Rubber Replanting Aid Fund	-0.1%	52	12,078	11	3.01	11	345	58	6,039	8,314	11
Metropolitan Waterworks Authority	-22.3%	54	9,980	12	1.81	21	285	48	4,990	6,869	12
Metropolitan Electricity Authority	86.5%	3	9,132	13	1.64	25	261	43	4,566	6,286	13
Krung Thai Bank, Ltd.	0.0%	43	8,545	14	0.89	36	244	41	4,273	5,882	14
Bangkok Mass Transit Authority	0.0%	31	0	61	NA	54	0	853	0	4,821	15
State Railway of Thailand	0.0%	38	0	60	NA	50	0	592	0	3,345	16
Transport Co., Ltd.	15.4%	25	4,354	15	5.29	2	124	21	2,177	2,907	17
Forestry Industry Organization	76.2%	4	4,079	16	1.76	23	117	19	2,040	2,808	18
Provincial Waterworks Authority	-51.6%	55	3,867	17	0.76	38	110	18	1,933	2,662	19
Expressway and Rapid Transit Auth. of Thai.	4.6%	30	3,846	18	1.03	33	110	18	1,923	2,647	20
National Housing Authority	-104.9%	56	3,781	19	2.29	16	108	18	1,891	2,603	21
Bank of Agriculture and Agricultural Cooperatives	0.0%	46	2,796	20	0.69	41	80	13	1,398	1,925	22
Mass Communications Organization of Thailand	41.0%	12	2,511	21	2.76	12	72	12	1,255	1,728	23
Government Pharmaceutical Organization	37.8%	15	2,479	22	1.75	24	71	12	1,239	1,706	24
Liquor Distillery Organization	49.5%	8	2,056	23	3.55	7	59	10	1,028	1,415	25
The Government Housing Bank	10.9%	27	1,929	24	1.23	29	55	9	964	1,328	26
Government Lottery Bureau	1736.5%	1	1,652	25	3.40	8	47	8	826	1,137	27
Thai Plywood Co., Ltd.	0.0%	35	1,516	26	2.07	19	43	7	758	1,044	28
The Marketing Organization for Farmers	0.0%	41	0	59	NA	55	0	129	0	728	29
Sugar Factory, Inc.	18.6%	22	968	27	2.42	15	28	5	484	666	30
Industrial Estate Authority of Thailand	0.0%	42	809	28	1.80	22	23	4	404	557	31
Cold Storage Organization	0.0%	51	0	58	NA	51	0	76	0	430	32
Express Transportation Organization of Thailand	0.0%	50	458	29	NA	49	13	2	229	315	33
Tourism Authority of Thailand	-1233.4%	59	448	30	1.18	30	13	2	224	308	34
Thai Maritime Navigation Co., Ltd.	0.0%	34	338	31	NA	48	10	2	169	233	35
Office of the Public Pawnshop	39.0%	14	315	32	0.94	35	9	2	158	217	36
Dhipaya Insurance Co.	15.5%	24	271	33	2.57	13	8	1	136	187	37
Fish Marketing Organization	45.3%	10	195	34	0.71	40	6	1	97	134	38
Offshore Mining Organization	0.0%	39	193	35	0.84	37	6	1	96	133	39
Rubber Estate Organization	73.1%	5	174	36	0.75	39	5	1	87	119	40
Bangkok Dock Co., Ltd.	20.0%	21	168	37	1.14	32	5	1	84	115	41
Public Warehouse	47.3%	9	151	38	0.23	44	4	1	75	104	42
Tanning Organization	0.0%	32	0	57	NA	52	0	15	0	99	43
Bang-na Glass Organization	0.0%	47	117	39	1.24	28	3	1	58	80	44
The Police Printing Press	34.8%	16	109	40	1.49	26	3	1	54	75	45
Inst. for the Promotion of Teaching Science and Tech.	-599.1%	58	91	41	2.22	18	3	0	46	63	46
Textile Organization	0.0%	49	73	42	0.34	43	2	0	36	50	47
Battery Organization	60.0%	6	72	43	0.46	42	2	0	36	50	48
Dairy Farm Promotion Organization of Thailand	15.5%	23	72	44	1.17	31	2	0	36	49	49
Marketing Organization	59.2%	7	70	45	0.96	34	2	0	35	48	50
Sports Authority of Thailand	-5844.5%	60	44	46	0.19	45	1	0	22	30	51
Playing Cards Factory	24.2%	19	35	47	2.23	17	1	0	17	24	52
Zoological Park Organization	-385.0%	57	20	48	0.13	47	1	0	10	14	53
Thailand Inst. of Scientific & Technological Research	-12908.3%	61	13	49	0.16	46	0	0	6	9	54
Aeronautical Radio of Thailand	0.0%	44	0	56	NA	56	0	0	0	0	55
Lamphoon Provincial Co., Ltd.	0.0%	45	0	51	NA	58	0	0	0	0	56
Prajinburi Provincial Co., Ltd.	0.0%	48	0	54	NA	53	0	0	0	0	57
Preserved Food Organization (privatized)	0.0%	37	0	52	NA	57	0	0	0	0	58
Surintr Provincial Co., Ltd.	0.0%	36	0	55	NA	60	0	0	0	0	59
Synd. of Thai Hotels & Tourist Enterprises (privatized)	0.0%	33	0	50	NA	61	0	0	0	0	60
Thai Airways Co., Ltd.	0.0%	40	0	53	NA	59	0	0	0	0	61
TOTALS			499,235				14,264	4,045	249,618	353,067	
STATISTICS											
Average	13.7%		9,077		1.99		255	72	4,457	6,305	
Minimum	-71.4%		0		0		0	0	0	0	
Maximum	61.9%		109,448		6.75		3,127	853	54,724	75,337	
Standard Deviation	20.7%		20,101		1.48		570	159	9,978	13,684	
Subtotal Top 15 SOEs			463,523				13,244	3,705	231,761	320,885	
Top 15 as Percent of Total			92.85%				92.85%	91.59%	92.85%	90.89%	

This list excludes:
Bank of Thailand
Bangchak Petroleum Co., Ltd.
PTT Exploration and Production Co., Ltd.
Northeast Jute Mill Co., Ltd. (privatized)
Bang-Pa-In Paper Mill (privatized)

ASSUMPTIONS		
	Taxrate	30%
	Dividend	5.00%
	Shares_Sold	50.00%
	P/E Ratio	15
	Years	10
	Discount_Rate	12.00%

47

Graph 3.C.1


Value of Share Offering
Billions of Baht (Thousands)
120
110
100
90
80
70
60
50
40
30
20
10
0
EGAT
TAI?
TOT
CAT
TTM
PEA
PAT
AAT
PTT
GSB
RRAF
MWA
MEA
KTB
TCL
Other
State Owned Enterprises
Market Value
Present Value

The Worst Performing SOEs

Privatization can also be used to help turn around the relatively few poorly performing SOEs. According to 1989 records, only five SOEs lost money while six had negative equity; of these only two were really important--the Bangkok Mass Transport Authority, Bangkok's bus company, and the State Railway of Thailand. See Table 3.C.2. Both lose money primarily because of government policies, price controls, and lack of attention to internal management issues.

Still, there are some major differences between the railway and the bus company. The State Railway of Thailand actually ranks 10th among the SOEs in equity. It has vast holdings of land throughout Thailand and owns prime property in Bangkok. If its land holdings were stated at current market values, the State Railway of Thailand might be one of the most valuable SOEs.

The Bangkok Metropolitan Transport Authority (BMTA), clearly an outlier among the SOEs, is quite another story. Its financial management and records are dismal. It ranks 15th among the SOEs in revenues, indicating that it has much room for management actions. However, it has accumulated losses for so long that its net worth at the end of 1989 was a <u>negative</u> B 9 billion (a negative US $360 million.)

These liabilities pose a problem for the Thai financial system since they are debts that the SOEs cannot hope to repay. Eventually, they must be written off or the Government must pay from its pocket for them. The liabilities also seriously affect the performance of other SOEs. For example, the Petroleum Authority of Thailand is owed B 3 billion by the BMTA, an issue of increasing importance during this period of higher oil prices. Because of the implications of these losses upon other SOEs, the BMTA was selected for the team's consideration to determine what role the private sector might be able to play in stemming some of these losses.

Three other companies which lost money in 1989 were the Marketing Organization for Farmers, the Cold Storage Organization and the Tanning Organization. These were not reviewed by the team because their relatively minor position among the SOEs. The Marketing Organization for Farmers is second in terms of negative net worth, with a minus B 1.6 billion, or just over US$ 63 million. Others with negative net worth are the Express Transportation Organization of Thailand, the Cold Storage Organization, the Thai Maritime Navigation Co. The Cold Storage Organization is currently being privatized.

A number of SOEs returned relatively little on their equity and would sell for less than book value were they offered on the capital markets. Graph 3.C.2 illustrates the SOEs that are earning relatively little for the RTG's invested capital. These are enterprises that should be reviewed more carefully by the RTG to determine the reasons for this low return.

SOEs Included in the Study

Due to time limitations, the team visited with the management of what we considered to be the 20 most likely SOE candidates for privatization. Graph 3.C.3 places some of these enterprises in a matrix of ease of privatization and attractiveness to the private sector. The circles represent the relative importance, subjectively defined as revenues, asset size, and importance to the economy of the SOEs. The phases indicate which SOEs might be dealt with first, second, and third.

Based on the team's recommendations made at a presentation in October 1990, the Comptroller General concurred on the following candidates for in-depth study: Krung Thai Bank, Thai Plywood, Thai International, Electricity Generating Authority of Thailand, Telephone Organization of Thailand, and the Bangkok Metropolitan Transport Authority. These are analyzed in detail in Chapter 4.

SOEs Visited but not Studied in Depth

The team visited another fourteen SOEs, some of which would be candidates for share offerings. A brief description of each firm follows.

Dhipaya Insurance provides non-life insurance to government agencies, SOEs, and increasingly to private sector clients. Dhipaya is a small SOE, ranking 27th in assets, 42nd in equity, 32nd in revenue, and 33rd in pre-tax profit.

The company is competitive in its field, ranking fifth among more than 60 companies. Non-life insurance is a growing industry: in 1989, non-life premiums increased by 35.8 percent.

Though the company and the insurance regulations would have to be researched in more depth, it is a potentially attractive candidate for privatization for several reasons.

First, the Ministry of Finance's equity position is an already low 55.6 percent. A transaction reducing this to below 50 percent could be easily arranged. If it were not an SOE, it could compete more aggressively with less regulations. There is no union at Dhipaya. Dhipaya faces a growing "brain drain" problem in the increasingly competitive Thai insurance market. Privatization may be a real possibility in 1991 when current members on the Board of Directors, not favorably disposed to privatization, resign.

Table 3.C.2 **State Owned Enterprises with Losses or Negative Equity**

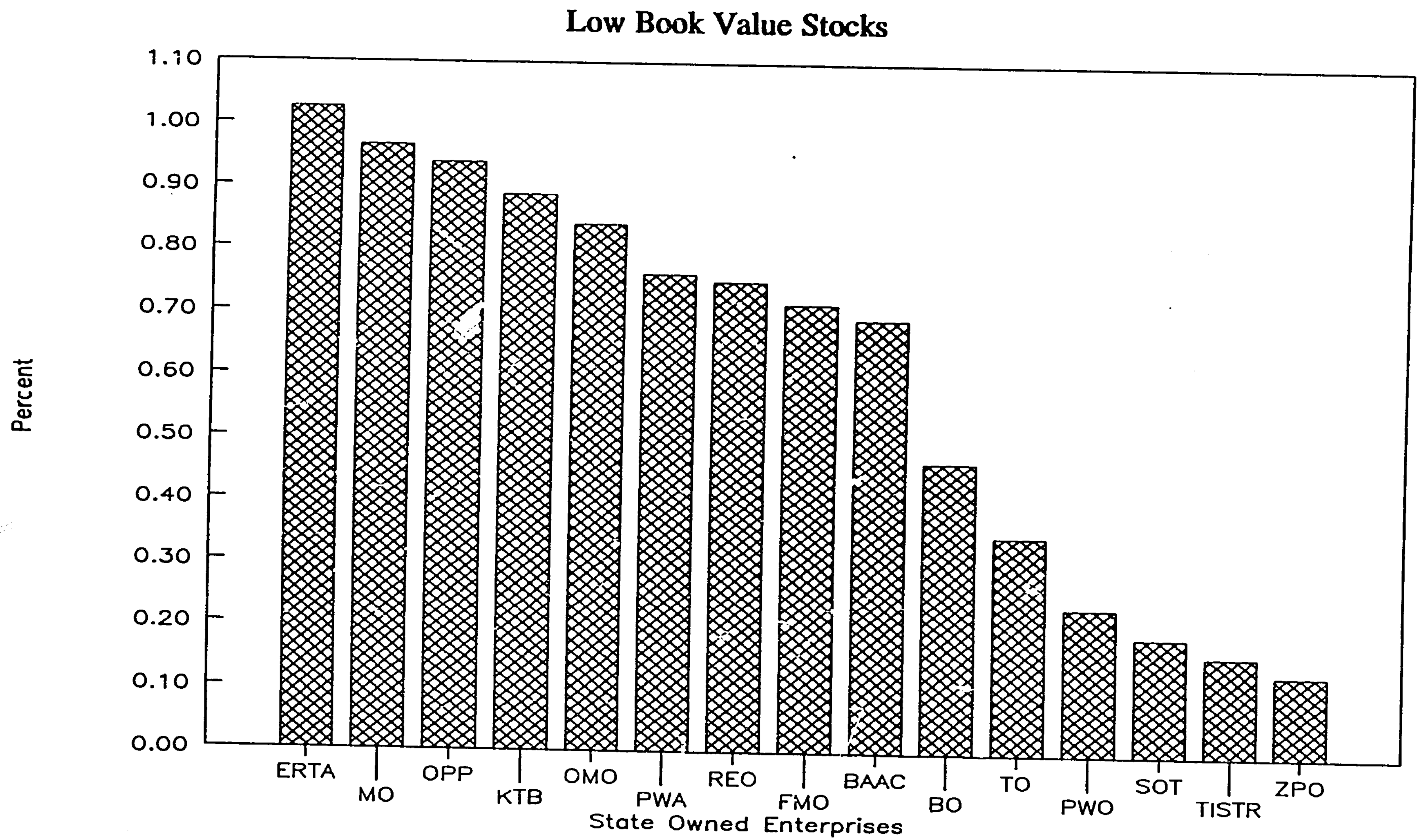
Thailand

(1989)

(Baht Millions)

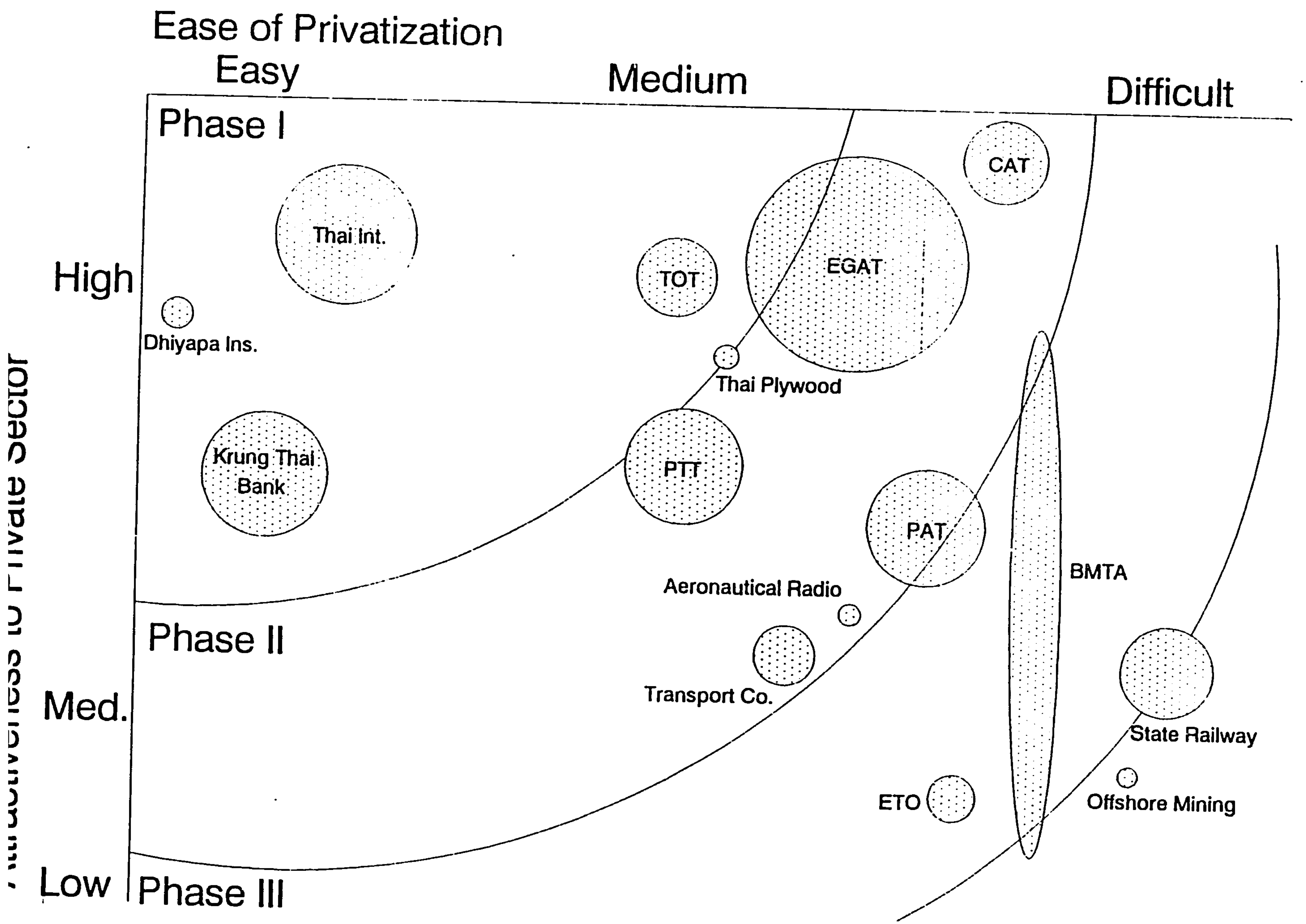
Name of Group or Organization	Total Assets	Liabil-ities	Equity	Revenue	Expense	Profit(loss) pre-tax	No. of Employ.
Bangkok Mass Transit Authority	787	9,792	(9,006)	3,847	4,700	(853)	22,703
State Railway of Thailand	20,762	13,287	7,475	4,036	4,628	(592)	21,707
The Marketing Organization for Farmers	4,694	6,268	(1,575)	1,232	1,361	(129)	593
Cold Storage Organization	351	846	(495)	107	183	(76)	407
Tanning Organization	317	194	123	260	277	(18)	857
Thai Maritime Navigation Co., Ltd.	88	318	(230)	147	115	32	26
Express Transportation Organization of Thailand	471	763	(291)	1,186	1,143	44	2,858
Total	27,470	31,469	(3,999)	10,814	12,406	(1,592)	49,151

Graph 3.C.2



Low Book Value Stocks
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Percent
ERTA
MO
OPP
KTB
OMO
PWA
REO
FMO
BAAC
BO
TO
PWO
SOT
TISTR
ZPO
State Owned Enterprises

Graph 3.C.3 **Privatization Matrix**



<u>The Petroleum Authority of Thailand (PTT)</u> is one of the giants among the SOEs. It ranks 8th in assets, 2nd in equity, 1st in revenue, and 9th in pre-tax profits. It ranks only 16th in employees, indicating the capital intensive-nature of its business, and also its past efforts in contracting-out for services.

PTT is recognized as one of the well-managed SOEs. It competes with foreign origin petroleum companies such as Shell and Caltex. It has pioneered the use of setting up subsidiaries in which it owns a less that 50 percent position to escape SOE regulations and salary caps. Like some of the other large SOEs it has significant capital needs that it cannot meet given the governments current financial policies. It may be a good candidate to go to market and raise equity.

<u>Port Authority of Thailand (PAT)</u> manages the main Bangkok Port at Klong Toey, and the smaller Sattahip. It is overseeing construction at Laem Chabang, designed to relieve the growing port congestion at Bangkok which is one of the main infrastructure constraints on the Thai economy. Originally, all four ports at Laem Chabang were to be privatized. Now, two are to be a part of the PAT union, and two are to be operated by the private sector.

In the future, PAT should concentrate on regulatory functions and let the private sector increasingly perform commercial operations:

- The private sector could build and operate sites away from the main port complex for breaking up and distributing container contents. This would help relieve congestion.

- PAT should contract out for the operation of cargo handling cranes, shifters, tractors and forklifts.

<u>The Airport Authority of Thailand (AAT)</u> is an important SOE. Its financial record is very strong. AAT owns and operates Thailand's four international airports (Bangkok, Chiang Mai, Phuket and Hat Yai.) It has contracted out a number of services. Its major activity for the remainder of the decade will be to oversee the construction of a second international airport in Bangkok to accommodate sharply increasing arrivals.

With stringent RTG ceilings on capital expenditures, AAT is reviewing a variety of means to finance this expansion, including joint ventures with Thai International and foreign carriers. They are also considering selling shares. Other possibilities for privatization exist, such as utilizing foreign firms, e.g., Lockheed Air Terminal, for airport development, management and operations, and aviation services.

<u>The Transport Company</u> provides regional and intercity bus services. It also operates more than 100 bus terminals throughout the country. It appears to be relatively well managed, but, like many

54

of its SOE siblings, its operations are severely hampered by a number of government regulations. Because it has granted concessions to operate 90 percent of the buses and routes to private operators, the distortions and inefficiencies in this sector are mitigated. The team considers it a "back-burner" candidate for privatization.

The Express Transportation Organization (ETO) provides trucking services. It operates in a competitive market. However, it has monopoly privileges at the Port Authority, which accounts for majority of revenue. Many cite its vagaries of performance as a contributing factor to the congestion at the port. Current management is very strong, though, and has achieved profit after fourteen years of losses.

In the long-run, there is little economic or social rationale for ETO to remain as an SOE. A sale of assets or merger with private firm is the most likely outcome. In the short run, its monopoly privileges vis-a-vis Port Authority need to be phased out.

Aeronautical Radio of Thailand (ART) is responsible for the provision of air traffic control services, aeronautical communications and airline communication. It has as shareholders all the airlines regularly serving Thailand as its shareholders, with the RTG as the majority shareholder.

Its most serious problem is "brain drain," as its staff tend to be highly skilled and in demand by the private sector. It is attempting to set up subsidiaries of which it owns less than 50 percent to avoid SOE status and hence salary ceilings, and in effect contract out much of its work. Another possibility might be for the airlines to acquire majority positions.

The Offshore Mining Organization (OMO) mines tin offshore. There are no easy or particularly attractive alternatives for the Offshore Mining Organization (OMO.) It operates in an industry which is undergoing difficulties. It is in a risky business tied to one product output, tin, with no ability to influence price. The world price of tin is currently very low with no relief in sight.

Within a ailing industry, its position is quite weak. In Thailand, it faces competition from a number of other private sector companies involved in mining for tin both offshore and on land. It can sell to only one producer, and has little or no bargaining leverage with it. Management's strategy for long-term survival is predicated on securing exclusive access to government-owned lands. This approach underscores the company's vulnerable and indeed precarious position. Given that the original rationale for its existence has been overtaken by events, a sell-off assets to private sector companies is probably the only feasible approach over time.

SOEs Not Included in the Study

Some SOEs that may be viable candidates for some form of privatization include several in the financial sector: Government Savings Bank, the Bank of Agriculture and Agricultural Cooperatives, the Government Housing Bank, the National Housing Authority. Other possible candidates include the Metropolitan Waterworks Authority and Provincial Waterworks Authority, the Government Pharmaceutical Organization, the Mass Communications Organization of Thailand, and the Liquor Distillery Organization.

Future Selection of SOEs for Privatization

Once a technical unit is established in the Comptroller Generals Department, the Government will have the ability to analyze candidates for privatization and undertake the transactions on an ongoing basis.

For illustrative purposes, a Privatization Options table is included. Table 3.C.1 ranks the SOEs by present value along with their potential revenue streams from taxes and dividends. Again, 90 percent of the value of privatization lies in the top 15 candidates. Refer to Graph 3.C.1 for a graphic description of the relative size of these privatizations. [2]

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2 How might the RTG deal with these SOEs? One method is to conduct an initial financial screening as above and then determine the best method of privatization. Table 3.C.3 contains one such analysis. The table lists strategies based upon the profit motivations, profitability, capital requirements, and size of the potential offering. It is assumed that a share offering can be done only for a profit oriented enterprise with sufficient profits to exceed B 625 million in market capitalization. Less than this, would be handled by a private placement or, in the case of a money losing enterprise, by restructuring. Large SOEs, defined as a potential market capitalization above B 5 billion, would need to go to the market in several stages or "tranches". These strategies are meant to be illustrative and would require analysis on a case-by-case basis to determine the proper method of privatization.

56

Table 3.C.3

Privatization Options for State Owned Enterprises
Thailand
(1989)
(Baht Millions)

Name of Group or Organization	Options: Profit Motivation	Profit-able?	Option	Needs Capital?	Issue or Offer	Public or Private	Single or Multiple	Special Regulation Required?
Electrical Generating Authority of Thailand	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	Yes
Thai Airways International, Ltd.	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	No
Telephone Organization of Thailand	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	Yes
Communications Authority of Thailand	Business	Yes	Sell Shares	No	Offer	Public	Tranche	Yes
Thailand Tobacco Monopoly	Business	Yes	Sell Shares	No	Offer	Public	Tranche	No
Provincial Electrical Authority	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	Yes
Port Authority of Thailand	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	Yes
Airports Authority of Thailand	Business	Yes	Sell Shares	No	Offer	Public	Tranche	Yes
Petroleum Authority of Thailand	Business	Yes	Sell Shares	No	Offer	Public	Tranche	Yes
Government Savings Bank	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	No
Office of the Rubber Replanting Aid Fund	Nonprofit	Yes	NA	No	NA	NA	NA	No
Metropolitan Waterworks Authority	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	Yes
Metropolitan Electricity Authority	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	Yes
Krung Thai Bank, Ltd.	Business	Yes	Sell Shares	Yes	Issue	Public	Tranche	No
Bangkok Mass Transit Authority	Business	No	Restructure	Yes	NA	NA	NA	Yes
State Railway of Thailand	Business	No	Restructure	Yes	NA	NA	NA	Yes
Transport Co., Ltd.	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
Forestry Industry Organization	Nonprofit	Yes	NA	No	NA	NA	NA	No
Provincial Waterworks Authority	Business	No	Restructure	Yes	NA	NA	NA	Yes
Expressway and Rapid Transit Auth. of Thai.	Business	Yes	Sell Shares	Yes	Issue	Public	Majority	Yes
National Housing Authority	Business	No	Restructure	No	NA	NA	NA	Yes
Bank of Agriculture and Agricultural Cooperatives	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
Mass Communications Organization of Thailand	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
Government Pharmaceutical Organization	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
Liquor Distillery Organization	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
The Government Housing Bank	Business	Yes	Sell Shares	No	Offer	Public	Majority	Yes
Government Lottery Bureau	Indeterminate	Yes	NA	No	NA	NA	NA	No
Thai Plywood Co., Ltd.	Business	Yes	Sell Shares	Yes	Issue	Public	Majority	No
The Marketing Organization for Farmers	Indeterminate	No	NA	No	NA	NA	NA	No
Sugar Factory, Inc.	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
Industrial Estate Authority of Thailand	Business	Yes	Sell Shares	No	Offer	Public	Majority	No
Cold Storage Organization	Business	No	Restructure	No	NA	NA	NA	No
Express Transportation Organization of Thailand	Business	Yes	Sell Shares	Yes	Issue	Private	Majority	No
Tourism Authority of Thailand	Nonprofit	No	NA	No	NA	NA	NA	No
Thai Maritime Navigation Co., Ltd.	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Office of the Public Pawnshop	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Dhipaya Insurance Co.	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Fish Marketing Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Offshore Mining Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Rubber Estate Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Bangkok Dock Co., Ltd.	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Public Warehouse	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Tanning Organization	Business	No	Restructure	No	NA	NA	NA	No
Bang-na Glass Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
The Police Printing Press	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Inst. for the Promotion of Teaching Science and Tech.	Nonprofit	No	NA	No	NA	NA	NA	No
Textile Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Battery Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Dairy Farm Promotion Organization of Thailand	Nonprofit	Yes	NA	No	NA	NA	NA	No
Marketing Organization	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Sports Authority of Thailand	Nonprofit	No	NA	No	NA	NA	NA	No
Playing Cards Factory	Business	Yes	Sell Shares	No	Offer	Private	Majority	No
Zoological Park Organization	Nonprofit	No	NA	No	NA	NA	NA	No
Thailand Inst. of Scientific & Technological Research	Nonprofit	No	NA	No	NA	NA	NA	No
Aeronautical Radio of Thailand	Business	No	Restructure	No	NA	NA	NA	No
Lamphoon Provincial Co., Ltd.	Indeterminate	No	NA	No	NA	NA	NA	No
Prajinburi Provincial Co., Ltd.	Indeterminate	No	NA	No	NA	NA	NA	No
Preserved Food Organization (privatized)	Indeterminate	No	NA	No	NA	NA	NA	No
Surintr Provincial Co., Ltd.	Indeterminate	No	NA	No	NA	NA	NA	No
Synd. of Thai Hotels & Tourist Enterprises (privatized)	Indeterminate	No	NA	No	NA	NA	NA	No
Thai Airways Co., Ltd.	Indeterminate	No	NA	No	NA	NA	NA	No

D. The Unions

Thailand has approximately 300,000 unionized workers and 704 trade unions. This is only a small percentage of the 7.2 million workers in manufacturing, mining, utilities, construction and trading. Roughly two-thirds of the unionized workers and 131 unions, or 20 percent of the unions, are in state owned enterprises.

In addition to individual unions in enterprises, Thailand has three types of labor organizations. They are:

* <u>Labor Federations</u>. These are formed by two or more unions under the same employer or within the same industry. They currently number 17.

* <u>Labor Congresses or Councils</u>. These are formed by 15 or more unions and federations. They currently number 5.

* <u>Labor Relations Groups</u>. These are formed by any combination of unions and federations, and not legally registered with or supervised by the government. They are concerned with a broad variety of issues arising on an ad hoc basis and considered of importance to membership. At any one time 2 to 20 of these organizations may be operational.

Exhibit III.C.1. contains an organization chart summarizing the relationships and numbers of union related organizations in Thailand.

Unions in Thailand are invariably against privatization. The definition of "privatization" is often blurred, the articulated reasons for the opposition vary, individual opposition efforts are fractionalized among the various unions and union groups, but the theme is the same--privatization is to be stopped if possible. Union attitudes towards privatization may be characterized as:

-Fear of loss of one or more dimension of job security,

-Distrust of the government's willingness and ability to place privatized SOE's under the control of proper managers,

-Suspicion of possible sales of the most viable portions of SOE's to politically affiliated groups in the private sector.

-Fear of control by foreign interests. Unions seem to understand, however, that government regulations make such an outcome very improbable, so this objection, though used occasionally, is not an important fear of union officials or workers.

An analysis of wage, salary and benefit packages in the SOEs, the private sector and the public sector help explain the job security fear of unionized workers in the SOEs. One outcome of the present system of labor negotiation may be an overemphasis on wage and benefit improvements and under-emphasis on intrinsic improvements in workers that will enhance their skill and productivity levels. The comparison of salary increases of workers in the private sector, the civil service and the SOEs between 1982 and 1987 in Exhibit III. C. 2. suggests that this may be the case.

These data indicate that overall salaries of SOE staff grew from 128 to 151 percent of private sector salaries during the period 1982 -1987. By contrast, civil service salaries grew only from 87 to 90 percent of private sector salaries during the same period.

Exhibit III.C. 3. shows the current differences in salaries by occupational levels for these three groups of workers. Reference to the exhibit indicates that workers in all occupational categories except management are paid between 130 and 200 percent of the salary of comparable workers in the private sector. Managers in SOEs are, however, only paid about 89 percent, on average, of what their counterparts are paid in the private sector.

All civil service workers, by contrast, are paid between 65 and 89 percent of private sector salaries. And civil service managers are paid the least relative to private sector workers, 65 percent of their private sector counterparts.

These data suggest in two ways the need for a closer connection between wage increases, responsibility, and worker productivity. First, managers are paid surprisingly poorly in relation to their private sector counterparts.

Second, wages of other occupational groups are dramatically inversely related to skill levels: technical staff are paid 143 percent of their private sector counterparts, while semi - skilled workers are paid 200 percent of their counterparts' salaries in the private sector.

Exhibit III.C.1.

Union Related Organizations in Thailand

Parliament

Cabinet

Ministry of Interior

Ministry of Finance

National State Enterprise Committee (NSEC)
- Chaired by the Deputy Prime Minister
- Composed of 37 members Govt., PS and SOE's

Department of Labor
-Labor Relations Committee
- Investigates:
+ Unfair Employer Practices
+ Treatment of Unions
+ National Security Issues

Comptroller General's Office
- Implements legislation for SOE worker:
+ Wages and Salaries
+ Other Benefits

National Labor Development Advisory Board (NLDAB)
- Has 20 members
- Chaired by Prof. Chila Hongladolum of Tomassat University
  - SOE and Private Sector Unions
  - Govt. and Academia
  - Private Sector Employers

Ministry of Justice
- controls Tripartite Labor Mediation through the:
  + Central Labor Courts (Tries Individual Worker Grievances)

Labor Unions (704)

Labor Federations (17)

Labor Congresses/Councils (5)

Labor Relations Groups(2-20)
Non - Registered Union Research/Lobby Function
- Address Min. Finance and NSEC on Wage and Salary Issues
- Address the Cabinet and PM on labor issues

EXHIBIT III.C.2.

COMPARISON OF SALARIES OF PUBLIC AND PRIVATE SECTOR
AND STATE ENTERPRISE WORKERS
(Relative to Private Sector Size)

WORKER GROUP	1982	1987
State Enterprises	128%	151%
Public Sector	87%	90%
Private Sector	100%	100%

Source: Dr. Fredric William Swierczek and Dr. Vuthiphong Priebjrivat, "The Myths and Reality of State Enterprise Salaries", Centre for State Enterprises Studies, Thammasat University, The Nation, Wednesday, November 16, 1990

EXHIBIT III.C.3.

COMPARISON OF SALARIES BY OCCUPATIONAL LEVEL
(Relative to Private Sector Size)
(1987 Baht)

ORKER GROUP	MANAGEMENT	CLERICAL STAFF	PROFESNL TECHNICAL	SKILLED LABOR	SEMI SKILLED
tate Enterprises	10,136 89%	5,873 130%	8,908 143%	5,889 193%	4,079 199%
ublic Sector	6,368 65%	3,987 89%	5,568 89%	3,612 82%	2,596 73%
rivate Sector	11,367 100%	4,502 100%	6,228 100%	3,052 100%	2,045 100%

ource: Dr. Fredric William Swierczek and Dr. Vuthiphong Priebjrivat, "The yths and Reality of State Enterprise Salaries", Centre for State Enterprises tudies, Thammasat University, The Nation, Wednesday, November 16, 1988

THAI INTERNATIONAL

PRIVATIZATION ISSUES

Summary.

Thai International provides the most immediate opportunity for meaningful privatization. The Ministry of Finance, the Ministry of Transport and Communications, and the Board of the airline are in agreement that privatization should proceed in some way.

The objective of the privatization is to provide the airline with the means to expand its fleet to increase the frequency of flights between existing destinations. The mode of privatization contemplated at this time is for there to be issues of new shares, first on the local market to citizens and then to others for a total amount of up to 25 percent of the then equity, together with a leasing arrangement with a private company yet to be formed (the Special Purpose Company or "SPC"), which would buy aircraft and then lease them to Thai International.

Given the fact that the SPC transaction may constitute a financing lease and therefore count as a debt obligation and thus be against the administrative policy of the Ministry of Finance to limit debt, the practicality of the SPC facet to the raising of capital is still in doubt. It is possible that the leases may be structured as operating leases by not having a bargain purchase option, but it is said that there might then be adverse tax consequences.

However, there seems to be no dispute that there will be a share issue in the not too distant future, and it appears that the appointment of financial advisors is imminent. Finance One, a local finance company associated with Paribas of France (a 20 percent shareholder of Finance One), is the leading contender. Credit Lyonaisse is reportedly working on the structure of the SPC.

The rare degree of consensus for some form of privatization led the team to determine that this could be the flagship transaction which could popularize privatization in Thailand.

The team believes that it is very important to structure the share issue in a broad-based fashion in order to launch a first-rate privatization program. A share issue would also be financially prudent for Thai because its present balance sheet reflects a high debt to equity ratio.

Background. Thai International is the national flag carrier. It is generally rated as one of the best airlines in the world, serving more that 40 destinations on 4 continents. It was merged in 1988 with the much smaller Thai Airways, which provided domestic and regional service.

Thai International is formed under the Civil and Commercial Code, and its shares are owned by the Ministry of Finance. The Articles of Association of Thai International empowers only the Board of Directors, by a vote of 75 percent, to transfer shares or assign any rights in any share.

The Board, according to the existing Articles, must consist of representatives of a number of government ministries, agencies and the air force, and that Board only can elect the President and Executive Vice-President of the company. Only one of the designated Board members can be a representative of the Ministry of Finance, the owners of the shares. The Board cannot exceed eleven members composed of the following:

Commander in Chief, Royal Thai Air Force
Permanent Secretary, Ministry of Communications
Representatives of: The Airport Authority of Thailand
The Royal Thai Air Force
The Ministry of Communications
The Ministry of Finance
The Department of Public Prosecution
The Ministry of Foreign Affairs
The Office of the NESDB

Although directors are appointed by general meetings of shareholders, the directors must always hold the positions referred to in the preceding paragraph, according to the existing Articles of Association. The Chairman of the Board must be the Commander-in Chief, Royal Thai Air Force and the Vice Chairman of the Board must be the Permanent Secretary of the Ministry of Communications. Therefore, under the present Articles, the shareholder cannot appoint Board members who are not in the designated positions or representatives of the stated arms of Government.

The only way that the shareholders can exercise any real power over the operations of the company would appear to be as a result of the use of their right to summon an extraordinary general meeting and change the Articles to the effect that the shareholders can appoint any directors they wish, not just those in the designated positions. Only then would the shareholders be able, through the Board, to have the power to decide on matters pertaining to the issue of new shares in the company or the transfer of shares.

Unless the shareholder can take control, the contemplated share offer will be undertaken on terms which are dictated by the directors. From our discussions with various parties in a position to know, the structure of the share issue now under consideration may not fully exploit the opportunity which is presented to popularize privatization.

The only way for the Ministry of Finance to ensure that the structure of a share sale is as it wishes is either (i) to sell some of its own shares (rather than there being a new issue); or, (ii) exercise control, by virtue of its shareholding, over new issues or, (iii) use persuasion.

Proposed Structure of the Share Sale.

As we understand it there is no plan to incorporate the following classic features of a privatization through the public share offer:

- Widespread distribution and the involvement of as many Thai citizens as possible in the share sale (given the constraint of cost-effectiveness).

- Deliberately seeking a large over-subscription so as to benefit the after-market.

It is understandable why this is so. If it is believed that the shares can be easily taken up by a relatively small number of applicants, then the underwriters and selling agents will try to sell the shares in the way which involves the least effort and cost, as the fees to be earned are just a percentage of the sum raised, however it is raised. The attraction of large numbers of applicants is a costly process and it is one that the company does not need to go through to achieve its objective of raising additional capital.

At first glance, it might appear that the only beneficiary of a widespread share offer is Government, not the underwriters, brokers or the company.

There would, however, be beneficial effects for the company if there was a widespread share issue. First, if enough individuals apply for the shares and there is an oversubscription, institutions can be awarded less than they wish and this will mean increased demand in the after-market which will bolster the price of the share. Secondly, the airline will receive a tremendous public relations benefit if hundreds of thousands of persons become shareholders, and it is likely that Thai International will be their airline of choice for travel.

Financial Performance of Thai International.

The financial data in the tables point out that a share issue, in addition to initiating the privatization program, would help solidify Thai's financial position.

Recent Performance. The financial tables at the end of this section capture the turnaround of Thai International during the last two years. Revenue and earnings have shown strong growth and improvement over this period. Operating margins have shown steady growth since 1985. After-tax margins are also very strong compared to 1985-1987.

Cash generated from net earnings has been complemented by depreciation and amortization and some balance sheet items. It has enabled Thai to finance its acquisition of assets, and pay back some long term debt, from cash flow from operations for two of the last three years.

Return on equity grew steadily from 1985 to 1988. An analysis of the components of return on equity shows that the sharply improving EBIT margin accounts for most of this change. A second important factor in the rise in return on equity was the fact that Thai improved its ability to retain pre-tax income as reflected in lower tax rates.

An analysis of the drop in return on equity for 1989 slows a slight drop in EBIT margin. However, the 1988 EBIT figure is somewhat misleading since it includes proceeds from the sale of assets. The real decline on the return on equity lies, ironically, in the decrease in leverage. (The related decline in the interest burden helped ROE somewhat, but this was not enough to compensate.)

This points to the improvement in the capital structure of Thai International. Whereas equity increased from 1988 to 1989 by 43 percent, long-term debt decreased by over 5 percent, and long term debt and other long term liabilities overall decreased by nearly 2 percent. In fact, between 1985 and 1989, equity more than tripled, while long term debt and other long term liabilities have only doubled. As the balance sheet clearly indicates, its growth in equity has come almost exclusively from retained earnings.

Interest has become less of a burden, and the improved solvency position of Thai is reflected in the ratios of earnings and cash flow from operations to interest expense, though the cushion provided is by no means optimal.

<u>The need for more equity</u>. Though Thai has improved its capital structure, it still remains much too heavily burdened by debt. Its total debt to equity ratio was 3.0 at the end of 1989. Given the highly variable nature of airline operations, and their vulnerability to recessions, increases in oil prices, and other shocks, Thai needs to increase its equity base further. Current press reports that Thai's earnings have been under pressure since the Gulf Crisis underscore this point.

The planned $4.2 billion expansion program puts a greater emphasis on the need to increase equity. To rely too heavily on debt to finance the expansion program would be to return Thai to the precarious position that it was in 1985, while leaving it even more exposed in the event of a downturn in business.

How, then, is Thai to increase its equity base? The RTG could increase its equity position in Thai. This would be, however, contrary to the government's carefully crafted policy of fiscal restraint. A better alternative, the RTG is currently considering raising equity for Thai International from the Thai public. The analysis above certainly supports this decision.

Such a share issue would accomplish several useful things:

- Promote share distribution in one of Thailand's blue-chip corporations to a broad and diversified segment of the Thai population

- Mobilize previously untapped savings. The SOEs will need a lot of capital in the future and new sources of savings from those who have not been a part of the formal capital markets need to be included.

- Create a new class of investors who will also be able to support additional share offers of SOEs as well as private sector companies.

Thai International

(Table A)
Income Statement
Thousands of Baht

	1989	1988	1987	1986	1985
Revenue	43,107,562	35,917,836	28,393,730	23,849,015	20,229,134
(Depreciation and Amortization)	4,674,577	3,984,022	3,012,635	2,418,718	1,703,498
Total Operating Expenses	33,671,139	28,683,989	22,995,317	20,462,160	18,366,334
Operating Income	9,436,423	7,233,847	5,398,413	3,386,855	1,862,800
Other Income (Net)	(77,967)	1,404,064	(1,346,416)	(151,200)	150,051
Earnings before Interest and Taxes	9,358,456	8,637,911	4,051,997	3,235,655	2,012,851
Interest	1,937,570	2,115,835	1,859,471	1,738,881	1,011,709
Earnings before taxes	7,420,886	6,522,076	2,192,526	1,496,774	1,001,142
Taxes on earnings	2,719,639	2,333,881	815,755	652,415	441,192
Net earnings	4,701,247	4,188,195	1,376,771	844,359	559,950
Dividends Paid	700,000	0	0	0	0
Memo: Interest as a Percent of Net Earning	41.2%	50.5%	135.1%	205.9%	180.7%

Thai International

(Table B)
Balance Sheet

	1989	1988	1987	1986	1985
Current Assets:					
Cash and Cash Equivalents	8,264,417	6,097,076	2,818,199	922,389	980,921
Accounts Receivable	4,944,944	4,960,658	3,860,024	3,102,515	2,914,395
Inventories	1,642,389	1,563,399	1,124,490	863,362	477,228
Prepaid Expenses	700,426	571,180	559,676	397,701	401,678
Other Current Assets	2,136,520	445,931	640,171	709,647	1,023,379
Total Current Assets	17,688,696	13,638,244	9,002,560	5,995,614	5,797,601
Long Term Assets:					
Fixed Assets, Net	39,749,012	36,996,020	25,849,728	22,705,515	19,885,336
Investments	257,037	256,947	244,606	247,156	232,209
Other LT Assets	5,888,996	7,250,609	6,370,467	7,271,365	2,520,280
Total Assets	63,583,741	58,141,820	41,467,361	36,219,650	28,435,426
Current Liabilities:					
Accounts Payable	1,756,930	1,354,093	1,401,614	688,147	807,813
Notes Payable	92,638	95,475	88,725		
Current Portion of LT Loans	2,294,078	2,048,545	1,768,202	1,701,509	1,433,377
Other Current Liabilities	9,353,610	8,791,737	5,860,532	5,139,256	5,045,051
Total current liabilities	13,497,256	12,289,850	9,119,073	7,528,912	7,286,241
Long term debt	15,259,429	16,083,650	9,849,848	6,804,467	7,335,388
Other long term liabilities	18,912,612	18,685,122	15,603,437	16,368,039	9,139,923
Deferred income taxes					
Total liabilities	47,669,297	47,058,622	34,572,358	30,701,418	23,761,552

Stockholders' equity					
Capital stock	2,230,000	1,400,000	1,400,000	1,400,000	1,400,000
Retained Earnings	13,683,444	9,683,198	5,495,003	4,118,232	3,273,874
Total stockholders' equity	15,913,444	11,083,198	6,895,003	5,518,232	4,673,874
Total Liabilities and Equity	63,582,741	58,141,820	41,467,361	36,219,650	28,435,426

Thai International

(Table C)
Operating Performance

	1989	1988	1987	1986	1985
Revenue	43,107,562	35,917,836	28,393,730	23,849,015	20,229,134
Percent Change	20.0%	26.5%	19.1%	17.9%	15.3%
Operating Income	9,436,423	7,233,847	5,398,413	3,386,855	1,862,800
Percent Change	30.4%	34.0%	59.4%	81.8%	-23.1%
Operating Margin	21.9%	20.1%	19.0%	14.2%	9.2%
EBIT	9,358,456	8,637,911	4,051,997	3,235,655	2,012,851
Percent Change	8.3%	113.2%	25.2%	60.7%	-31.2%
EBIT Margin	21.7%	24.0%	14.3%	13.6%	10.0%
Pre-Tax Income	7,420,886	6,522,076	2,192,526	1,496,774	1,001,142
Pretax Margin	17.2%	18.2%	7.7%	6.3%	4.9%
Tax	2,719,639	2,333,881	815,755	652,415	441,192
Tax Rate	36.6%	35.8%	37.2%	43.6%	44.1%
Net Income	4,701,247	4,188,195	1,376,771	844,359	559,950
Percent Change	12.2%	204.2%	63.1%	50.8%	-55.6%
After Tax Margin	10.9%	11.7%	4.8%	3.5%	2.8%

70

Thai International

(Table E)
Cash Flow Analysis

Cash Provided by Operations:	1989	1988	1987	1986	1985
Net Income	4,701,247	4,188,195	1,376,771	844,359	559,950
Depreciation and Amortization	4,674,577	3,984,022	3,012,635	2,418,718	1,703,498
Increase in Deferred taxes	0	0	0	0	0
Changes in Working Capital:					
(Increase) decrease in accounts rec.	15,714	(1,100,634)	(757,509)	(188,120)	(725,923)
(Increase) decrease in inventory	(78,990)	(438,909)	(261,128)	(386,134)	(151,084)
(Increase) decrease in other cur. assets	(1,819,835)	182,736	(92,499)	317,709	(561,839)
(Decrease) increase in payables	400,000	(40,771)	802,192	(119,666)	203,747
(Decrease) increase in other cur. liab.	561,873	2,931,205	721,276	94,205	705,355
Net Cash Provided by Operations	8,454,586	9,705,844	4,801,738	2,981,071	1,733,704
Memo:					
Cash PBO as Percent of Net Income	179.8%	231.7%	348.8%	353.1%	309.6%

21

Thai International

(Table G)
Return on Investment Analysis

	1989	1988	1987	1986	1985
1. Return on Average Equity	34.8%	46.6%	22.2%	16.6%	12.7%
Disaggregation of return on equity:					
a. EBIT Margin	21.7%	24.0%	14.3%	13.6%	10.0%
b. Asset Turnover	0.71	0.72	0.73	0.74	0.82
c. Interest Burden	3.2%	4.2%	4.8%	5.4%	4.1%
d. Financial leverage (average assets to equity)	4.51	5.54	6.26	6.34	5.60
e. Tax retention rate	63.4%	64.2%	62.8%	56.4%	55.9%
Return on Average Equity [((axb)-c)xdxe]	34.8%	46.6%	22.2%	16.6%	12.7%
2. Return on Average Total Assets	9.7%	11.1%	6.6%	5.6%	4.6%
3. Return on LT Liabilities and Equity	12.4%	14.2%	8.3%	7.3%	6.2%
4. Equity Growth Rate	29.6%	46.6%	22.2%	16.6%	12.7%

Thai International

(Table H)

Capital Structure and Long-Term Solvency Ratios

	1989	1988	1987	1986	1985
1. *Total debt to equity*	3.00	4.25	5.01	5.56	5.08
2. *Total debt to total debt plus equity*	0.75	0.81	0.83	0.85	0.84
3. *Long term debt to equity*	2.15	3.14	3.69	4.20	3.52
4. *Total equity to total debt*	0.33	0.24	0.20	0.18	0.20
5. *Fixed assets to equity*	2.50	3.34	3.75	0.00	4.25
6. *Current liabilities to total debt*	0.28	0.26	0.26	0.25	0.31
7. *Ratio of earnings to interest expense*	2.43	1.98	0.74	0.49	0.55
8. *Cash from operations to interest exp.*	4.36	4.59	2.58	1.71	1.71

PRIVATIZATION ISSUES AND PLAN OF ACTION

KRUNG THAI BANK

Introduction. The purposes of this paper are to (i) determine whether this SOE would be likely to benefit from privatization and, if so, (ii) recommend ways as to how the privatization process might proceed.

Privatization in this context means the shifting of control from the Government to the private sector, not the occasional new issues of shares representing a minority interest.

Each of the paper's objectives is further explained below:

(i) Determining whether privatization would be beneficial

A clear reason for privatization would be a prerequisite in Thailand, given the lack of consensus in high political circles as to whether and to what extent privatization will be authorized. This case is built in Part I hereof.

The team believes that the fundamental problem of the Bank is the fact that it is state controlled.

As a result of state ownership, the Bank is (i) forced into uneconomic policy support activities which impinge on profitability, regardless of contrary assurances; (ii) the private sector deals with it to a much lesser extent than it could and private sector custom is vital to growth and profitability; (iii) investors are concerned with issues stemming from Government ownership; (iv) there is insufficient imperative to improve performance because of the automaticity of deposits and consortium loan business; (v) Government ownership has facilitated a situation where the reported financial results often obscure the true state of affairs; and, (vi) service delivery is not competitive. Where all this could lead if corrective action is not taken is disaster for the Bank.

The fundamental commercial need of a bank is capital and deposits. A bank can loan the all the funds raised from equity increases and, in the case of deposits, minus a cash reserve of 7 percent and liquid assets (as defined) of 20 percent of deposits. A bank in Thailand must also maintain an 8 percent level of equity to certain assets, mainly loans.

To maintain market share, a bank must constantly seek (i) more deposits and (ii) growth in equity through profits and new issues of shares. If a bank loses market share or does not grow in step with the growth of its customers, it will lose major customers as it becomes unable to facilitate their larger requirements, and the public perception of such a bank will not be as positive, leading to a reduction in the growth of deposits. Actual contraction can take place in such circumstances and this accelerates geometrically

14

as the bank becomes less profitable or even makes losses, particularly if overheads are not then reduced on a timely basis.

The fundamental operating strategy of a bank is to have the maximum differential between the cost of funds and interest income (maximizing the spread). However, this must be tempered by the prudence needs of matching positions in currencies, maturity terms and interest rates, as banks cannot afford to be speculators. In addition, banks must seek to earn fees for a variety of customer services.

(ii) <u>Recommendations to implement privatization</u>

We assume that the Government will wish privatization to be carried out in such a way that risks are transferred, the proceeds are maximized and that the process is carried out in an efficient and competent manner within the highest ethical standards and with the highest degree of integrity. To do otherwise could lead to a collapse of a privatization program and expose a government to considerable political repercussions. Therefore the team's recommended plan will incorporate features which will best assure that the implementation of the plan will result in a successful privatization, if privatization is found to be warranted at all. Part II deals with privatization issues.

In the team's experience, what may at first appear to be easily accomplishable in privatization usually is not in practice. A prospectus, especially one effectively produced by Government, should conform with the highest standards and clearly inform the potential investor of relevant issues. Our review in this area is designed to determine what some of these issues might be and whether there may be some issues that are so fundamental that they require resolution before privatization should be attempted.

PART I - IS PRIVATIZATION NEEDED?

Present Intentions and Perceptions of Government

The shareholding of the Bank at 30 September 1990 as obtained from the registrar of the Bank was as follows:

Industrial Development Fund	39.04%	(Government)
Ministry of Finance	30.34	(Government)

	69.38	
Crown Property Holdings	1.52	(Sector status unclear)

	70.90	
Shareholders with over 0.5%	4.24	(5 persons)
Other shareholders	24.86	(17,000 persons)

	100.00%	
	======	

Of the above amount, foreign shareholders own 7 percent.

The composition of the share register above reflects a share issue of 10 million shares or 14.3% of the Bank in 1989 when the Bank became listed on the stock exchange, the Securities Exchange of Thailand ("SET"), and issues on an informal basis over prior years, together with trading subsequent to the listing.

The Bank's original mission, as stated on its founding in 1942, of being a vehicle to implement Government policies, still is prominent today. This is stated and demonstrated in several parts of the recent prospectus (in connection with the 1989 share offer), and Government officials, the Bank's chairman and a highly placed executive of the Bank all made it clear to us in meetings in November 1990 that they are happy with such a role for the Bank, and therefore would not wish it to be less than 50 percent Government-owned.

The team enquired as to whether the Bank's supportive role to Government might have the potential to jeopardize its viability, and received the response that this would not be a danger as the deals imposed by Government are structured in such a way as to provide adequate returns and security. If such is the case, the team enquired, why would Government need to control its own bank, as any bank would accept such business? The reason given was that an owned bank could act with greater speed.

It is claimed that savers and commercial customers are not deterred by the Bank's ownership and that the Bank benefits by having first right to deposits generated by any arm of Government.

Government and management believe that, for the foreseeable future, the Bank's continuing capital needs can be obtained through new share offers to the public from time to time as necessary, with the Government still being able to have a controlling interest.

Comments on Government Intentions and Perceptions

The deals offered by government are not as good as thought

Krung Thai is currently exposed in some major situations and is relying on undertakings from the Central Bank that it will not suffer losses. The problem is in the definition of "loss". Typically the Central Bank will provide Krung Thai with a soft loan equivalent to the non-performing asset it is forced to accept, and then require Krung Thai to invest the proceeds of the soft loan in Government paper.

Some 9,600 million baht, an amount equivalent to the entire net assets of the Bank per the 1989 balance sheet, represents "other assets" in the balance sheet and results from Government directions to the Bank, basically for bailout operations, mainly in respect of the Sayam Bank. No return is being made on these funds, but they are said to be matched by interest free deposits from the Bank of Thailand.

In the case of the Sayam Bank transaction, management perceives that Krung Thai received a good deal by taking on 14,000 million baht of deposits for 7,000 million baht of shaky loans with the difference being recorded as due from the bankrupt Sayam Bank on an interest-free basis. At the same time, the Bank of Thailand provided Krung Thai Bank with a soft loan which was reinvested in Government paper by Krung Thai and pledged as security for the loan. Krung Thai thus earns a positive spread on the latter part of the transaction while suffering a negative spread on the first part with exposure as to the collectibility of the loans and the receivable involved.

However, the assumption of responsibility for interest bearing deposits and a poor loan portfolio at a face value of half of the deposit liabilities accepted, which is done for a consideration of an interest free loan of dubious collectibility even in the long-term which is "matched" by an interest free but definitely repayable obligation classified as a current liability in the balance sheet, would not be considered a good deal in private sector commercial banking circles and would only be entered into if there were some potential intangible or synergistic benefits. If all elements of the transaction were to be valued at fair market value, there would likely be a loss to Krung Thai which would not represent the cost of any identifiable intangible asset, especially evident as the Bank did not enter into the transaction voluntarily and no other bank competed for this package. Thus while attempts might be made to relieve the Bank of losses in respect of such transactions by the structure of the deals, there is still risk.

Even if there were to be no risk involved, the Bank is harder put to attract private capital if it has a complicated balance sheet leading to note explanations and comment in the audit reports.

Policy statements and general letters of comfort which support Government's intention not to leave the Bank exposed are not enough to provide confidence. Government policy can change and so do Governments themselves. If anything, binding legal agreements should be executed in each case.

Investors could be at the mercy of a majority shareholder driven by motives which are often different from those of the private sector. Significantly more confidence would be vested in Krung Thai if Government did not have control.

Savers and borrowers are being deterred by something

In spite of Krung Thai's ability to preempt Government deposits, Bangkok Bank attracted 45% more deposits than Krung Thai in 1988 and 1989. Unlike some other countries, Thai banks' deposit-taking activities are not subject to a limit in terms of equity capital, so a bank can accept unlimited deposits and invest in Government or other securities without additional capital requirements if there is a spread to be made after meeting cash reserve and liquid assets ratios. Only certain assets, mainly loans, are subject to limits in terms of a bank's equity.

Only 21,153 million baht was received in private sector deposits by Krung Thai compared to 56,000 million baht taken in by Bangkok Bank, or 270% more, (see Table IA).

Krung Thai at the end of 1989 also had by far the highest net amount on deposit with other commercial banks in absolute terms and, in relative terms, is only marginally better than Siam Commercial Bank (a peer bank) and Nakornthon Bank (which is very small) (Table II). Perhaps because of its inability to generate private sector loan business, Krung Thai is supporting competitor banks which are instead getting this business. The net deposits with other banks by Krung Thai was some 6,000 million baht At the end of 1989 (see Table II). Add to this the fact that Krung Thai provides an additional 27,500 to the "Banking and financial" sector, three times as much in relative terms than the average of all banks, (Table III), and it is clear that Krung Thai has devoted 33,500 million baht, nearly one-fifth of its deposits, to competitors instead of to loans.

Moreover, Krung Thai's loan portfolio is lower as a percentage of total assets (66.9%) than any other local commercial bank. Even if adjustment is made to recognize assets tied up in rescue operations, by adding "other assets" to loans, only Siam Commercial Bank is marginally worse in this measure than Krung Thai, (Table IV).

Because of the lower proportion of private sector business than could have been achieved, the Bank's cost of funds are higher and income on potential earning assets is lower than would otherwise have been possible, thus reducing profitability.

Private sector deposits are cheaper than Government deposits, as a higher proportion of business deposits is in interest-free current accounts and low rate savings accounts, while Government tends to use more expensive term deposits. Even if the term deposits of some SOE's are sometimes cheaper than private sector term deposits, cheap term deposits are still more expensive than other types of deposits. (See Table V)

While demand deposits (of which 86.5% are interest free current accounts), in the whole commercial banking sector, grew by 10% in 1989 over 1988, (with an increase of 24.4 percent being recorded in respect of the business sector and private individuals), the level of demand deposits at Krung Thai actually fell slightly, to 11,123 million baht in that period, being the second consecutive fall in absolute baht in two years (the 1987/88 fall was a drastic 13.5 percent from 13,316 million baht to 11,515 million baht), (See Table I).

On the income side, loans provide better yields than investments in Government securities or deposits with other banks (Table V). Fees are earned from private sector customers more so than from Government.

At the end of 1989, loans to the Government were only 6.5 percent of total
loan balances, the bulk of which appears to be a loan to EGAT, the state electricity company, (see Table VI). Since the level of Government borrowings is so small, new loan business can only come from the private sector. Private sector banking relationships give rise to a host of income earning opportunities. It has perhaps been too easy for the Bank to gain deposits from Government so it does not try harder in respect of the private sector.

From discussions the team had with leading legal and accounting professionals practicing in Bangkok, large private sector loan business happens to come Krung Thai's way not because syndicators or borrowers particularly like the Bank, but because they feel that the project involved will thereby be perceived to have Government's stamp of approval and that the resources of Government might be brought to bear to protect investments in the project if need be since a Government institution will also be at risk. This too can tend to allow management to be complacent and not aggressively seek to establish direct private sector relationships.

As a result of all the above, Krung Thai's spread at 2.6 percent is 30.2 percent less than that of Bangkok Bank which gets 3.4 percent, taking both sides of the Sayam Bank transaction other income into account which includes security dealing profits, exchange gains and net fees. (See Table VII.)

While in the immediate future the Bank might be able to have a successful share issue, this is only due to a temporary stroke of good fortune and some technical, rather than fundamental, factors.

Krung Thai Bank was founded under another name in 1942 in order, according to the prospectus issued in July 1989, "to promote the socio- economic development of the nation". In 1966 the Bank merged with the Agricultural Bank, an institution founded to "support Government's Agricultural policy". As earlier mentioned, the same mission is still in the consciousness of management and the Government today.

According to the 1989 prospectus, no meaningful private capital was attracted when an attempt to do so was made in 1942. It is claimed by the Bank that this was due to the poor investment climate at the time due to World War II, but, considering that 5 of the 13 local commercial banks were founded between 1939 and 1944 on private capital (see Table VIII) (the privately owned Bangkok Bank opened in 1944 and it is now nearly double the size of Krung Thai), this does not appear likely to be the real reason for the failure to attract private capital. The real reason probably was fear on the part of private investors concerning the stated objective of the bank.

Government has recently determined that it will no longer provide financial support to State Owned Enterprises thus, in view of the vital continual need of a bank for additional capital as explained in the introduction to this paper, Krung Thai will have to raise equity and be profitable in order to retain its market share. The issue to be resolved is whether this can be done while Government has control.

The Bank went to the market with a very defective and suspect balance sheet in 1989 at a price that was perceived of as no bargain. Just before the offer opened, a number of negative reports appeared in the press which raised further doubts. Brokers were wrongly given the power to allocate shares in this case and they allegedly represented to reticent clients that they would use a similar power in respect of future new issues against those who did not take up shares in the flagging Krung Thai offer.

Institutions local and foreign did not apply to any great extent and were not active in the immediate after-market. Underwriters were left with shares and the price fell. (The free float in the SET is estimated to consist of activity to the extent of 40 percent by individuals and 60 percent by foreign and local institutions.)

Only recently, important foreign institutions have been buying Krung Thai shares and foreign institutions now collectively hold about 7 percent of the Bank, but the only local institutions holding above .5 of 1 percent are IFCC (a Krung Thai subsidiary and one of the underwriters) with 1.4 percent, and Book Club (an underwriter) with 0.69 percent. There are 3 foreign investors with over 0.5 percent, namely Chase Nominees with 1.05 percent, Robert Flemming Nominees with 0.57 percent and two of the Templeton funds with 0.75 percent, (see Table X). At the present market price of 128 baht per share, a 0.5 percent stake represents about 45 million baht or some US$1.8 million.

Concern in respect of fundamental matters has been attributed by the lead underwriter to the lack of participation by the institutions at the time of the primary issue. The fundamentals were the "social" mission of the bank enforceable through Government control and the suspect financial statements.

Since then "good news" has come from the Bank in that it has recovered some major non-performing loans through a dramatic surge (some say of 600 percent in the past year) in the real estate market and the value of collateral has consequently increased. In addition, the SET index has fallen and indications are that the fall has bottomed out. In view of this, larger investors have recently been taking what are for them small stakes in Krung Thai but, at the suggestion of a renewed downward trend in the market, it is expected they will quickly sell.

Institutions holding the share are presently "talking it up" which could be an indication that they are now looking for profit taking and not further purchases. The real estate market cannot be counted upon to remain at present levels and a fall could also cause institutions to become concerned and to sell shares in the bank, especially in view of recent events in Japan. If banks are making loans based on real estate collateral at existing levels, future problems could be in store.

The lesson learned is that Government ownership is a fundamental deterrent and the overly complicated and suspect accounts created a lack of confidence. The adverse publicity during the period and the alleged antics of some brokers may have convinced institutions that the issue would fail and that there would be better after-market bargains, also leading them to stay out of the issue, but the publicity would not have been possible, nor would it have been credible, if it had not had some substance. Institutions know their strength and would not have responded to exhortations of, or threats by, brokers. Without the institutions, issues are unlikely to succeed.

It is said that if a share issue was made in the present market these institutions would participate because of the technical factors. However, since there is a reluctance for an offer to be made when the market is at a low point, it is questionable whether there would be participation when an offer is made at a higher price if the same adverse fundamentals are still in place.

While it may be possible in the circumstances for the Bank to get away with another share offer for another tranche of a size that would still leave Government with a majority, the team does not believe that this is a sustainable strategy. A quantum leap in confidence of the long- term future of the Bank would be brought about if Government cleaned up the balance sheet and relinquished control.

Possible Reasons for lack of Private Sector Confidence

It appears that, for whatever reason or reasons, Krung Thai is not getting the support it wishes from the private sector. The less than desirable level of confidence on the part of the private sector, as expressed to us in meetings, is amply demonstrated not only by the undersubscribed share offer and lack of willing institutional applicants, but also by the Bank's inability to do all the banking business it should be with private sector customers. The reasons why this could have come about are:

Ownership structure. It is not unreasonable to suppose that, in common with the situation faced by many state owned commercial banks in other countries, sophisticated and large private sector customers have a general uneasiness about doing business with a government managed bank, many of whose directors are government officers who will thereby obtain intimate details of the business affairs of banking customers in the course of reviewing large credits.

Also, because of concessions and exceptions made for Krung Thai bank under the law, which provides it with several competitive advantages, there is also likely to be latent resentment on the part of the financial community against Krung Thai, regardless of the apparent cordiality of relations, and this has proven fatal to many a financial institution in times of crisis.

Apart from its monopoly in respect of Government deposits, (a point made much of in the 1989 prospectus, which may have instead emphasized a vulnerability) there are other advantages accruing to Krung Thai which are not available to other banks, as follows:

(i) By law the Bank is excluded from the requirement that small shareholders must account for a specified ownership level in order for share issues to be completed and a listing on the SET obtained.

(ii) It is similarly excepted from the anti-concentration-of-ownership listing rules and provisions in the banking legislation.

(iii) Again, by law, Krung Thai can have Government officials on its Board of Directors.

(iv) Many of the loans and risk assets of the Bank are excluded by law from the capital funding requirement of 8 percent.

This resentment possibility is not proven wrong by the fact that Krung Thai is invited to participate in, and sometimes leads,

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syndications with other banks--in such cases consortia members and project financiers obtain comfort from de facto government backing, thus it sometimes suits them to have a Krung Thai in the system. They are using the Bank to further their own interests.

In addition, Krung Thai's sheer size in the market makes it inevitable that it will automatically participate in consortium deals, but the Bank's size has in large part itself come about from its monopoly in respect of government deposits. Dealing with Krung Thai is not based on the provision of competitive service or the state of the Bank's balance sheet, it is probably due to grudging expediency driven by artificialities (size based on monopoly practice) and the opportunity to exploit government's name.

Majority government ownership is also a deterrent to private equity investors, particularly in a case where the stated objectives of the Bank include the carrying out of government policy, as this implies that due consideration may not be given to commercial criteria thus resulting in losses. The protection afforded through comfort letters may not be sufficient nor adequately compensate for opportunity costs - and the very advancement of the argument that an owned bank will act with more speed on government instructions is worrisome, as the clear implication is that there is a potential for recklessness and a reluctance on the part of the Bank to negotiate effectively.

Quality of financial statements. Also in keeping with experience in other countries, there might be a suspicion that the Bank is not as secure as the financial statements indicate on first reading. Regardless of the quality of the annual audits, given the pattern of exceptions and accommodations bestowed on the Bank in many other areas, it occurred to the team that there might be reservations as to the degree of independence since the Bank's audit is performed by a state agency.

However, discussions with persons in the financial community indicated what appears to be a contrary view, for the Auditor General's Department in Thailand presently enjoys a reputation for independence, fearlessness and technical competence.

Unsophisticated investors would if anything tend to have faith in the Auditor General's signature precisely because of the government connotation. In Thailand, even the more sophisticated investors do not consider it a disadvantage if the Auditor General, rather than a private firm, is used. This is not so in respect of foreign investors - they have the greatest faith in audit firms which have sound international reputations.

However, large Thai investors in fact only favor the government auditor by default, as the quality of bank audits by private firms is now considered less than desirable.

Although the perception of the relative audit quality for the Bank is positive, the team is extremely concerned because, following a close review of the audited financial statements of Krung Thai Bank, there are indications that in this case the reporting standard of the Auditor General's Department was not all it should have been in some very important respects in terms of (i) international norms (ii) the Central Bank's disclosure rules relating to commercial banks and (iii) the SET rules.

Although there may be explanations for all the above, the potential investor will only have the financial statements as a guide. The object of the above is to point out that the inevitable conclusion which will be drawn is that the financial statements are suspect, and significant investment cannot be attracted in such a situation.

The above not only has an adverse effect on the ability to raise capital from large investors - small investors must be considered too. The team strongly recommends that government should not again make a share offer aimed even in part to small or unsophisticated investors while there are fundamental audit qualifications and qualifying notes to the financial statements, the implications of which such persons cannot possibly be expected to understand.

Risk management. This is a subject which would require a detailed study before conclusions can be drawn. However, there are grounds to wonder whether a study is called for because:

(i) Foreign currency forward contracts are mismatched. At the end of 1989 according to the annual report, the Bank had contracted to sell foreign exchange equivalent to 17,635 million baht but only had contracts to buy 2,714 million baht Net foreign currency balances appear in the balance sheet which might cover the position, but the implication of a 25,685 million baht exposure in letters of credit would need to be known.

(ii) As earlier mentioned, the interest free loan from Sayam Bank is long term while the soft loan from the Central Bank is classified as a short term domestic borrowing.

Service and efficiency. Although the Bank's management believes that the range and quality of its services are competitive, this is not the perception outside of the Bank. Efficiency of the Bank's staff is 45.2 percent below that of Bangkok Bank when measured in terms of the volume of loans on the books per staff member, (Table IX). Approval is currently being sought to increase the level of compensation paid to staff (now 36.8 percent on average below that of Bangkok Bank per Table IX), but this in and of itself will not improve efficiency, it will only raise costs.

Strategy of Branch Expansion. Bearing in mind that Krung Thai's deposits are not being as well deployed as desirable, the team wondered whether a strategy to increase the number of branches is relevant at this time. Branches in rural areas are a source of deposits which are typically loaned by urban branches. Branch expansion is costly, and the costs should be matched with the spreads that can be earned as a result of a new branch opening. The incremental deposits cannot be assumed to be used for loans, given the underloaned position of the bank at present.

What Krung Thai seems to need most at present is a strategy which will bring about the confidence of private sector customers and investors - then expansion of the network could be undertaken if warranted.

CONCLUSION AS TO THE NEED FOR PRIVATIZATION

The above support the team's view that the Bank's prospects are jeopardized because of government ownership.

From government's own point of view, privatization would also bring about a number of fiscal benefits. The proceeds of the sale could be used to repay interest-bearing debt. Although the Bank will continue to pay taxes, government will not be in the position of paying taxes largely to itself following privatization. Improved profits following privatization will give rise to increased taxes on profits and dividends.

PART II - PRIVATIZATION STRATEGY

PRE-PRIVATIZATION REQUIREMENTS

Later in this paper it is explained that privatization of Krung Thai will necessarily have to be means of a large scale, populist share offer.

Before attempting the share sale, particularly in view of the fact that small first time investors are being sought, government has a moral obligation to ensure that the quality of the financial statements is first class and that the bank is in a strong position. As a result we suggest the program set out below:

- The composition of the Board of Directors should change to reflect more private sector membership.

- The financial statements for the last 3 years should be redone in accordance with generally accepted accounting principles and reported on by private sector auditors of international repute.

  There is nothing unusual about this -a similar exercise had to be undertaken in respect of British Telecom before it was privatized.

- If the financial statements cannot be simplified by transferring the rescue operations to the Central Bank, then any deficiencies in the capital fund as a result of restating the financial statements should be made good by converting some of the soft loans from the Central Bank to equity.

- The cost effectiveness of the branch expansion program should be investigated and a decision taken as to whether it should be pursued at this time.

- The Bank should arrange its affairs in such a way that there can be a realistic expectation of the resumption of dividends, and at such a rate as will be attractive.

THE ABSORPTIVE CAPACITY OF THE MARKET FOR THIS SHARE

Discussions with the investment community and underwriters confirm that in normal conditions an issue of 5,000 million baht can be accommodated comfortably, and this has been accomplished without serious attempts to attract vast numbers of small investors. However, there are differences between raising capital for a bank because of various constraints imposed by law, and these are discussed below.

Once the Bank is no longer controlled by government, the concentration of ownership restrictions under the Commercial Banking Act come into force. These are:

(1) A 5 percent maximum ownership by any person (Section 5 bis). At the present market capitalization this would imply a maximum holding of 403 million baht or US$16 million. Thus no institution can be approached for more than this amount.

(ii) A requirement that persons holding .5 of 1 percent or less must together hold 50 percent of the "shares sold" (Section 5 quinque).

Lawyers in Bangkok informed us that "shares sold" means the entire issued share capital of the bank, not just shares sold in a particular issue or offer. Such persons must number not less than 250. (There is a similar SET rule which is less onerous so it is not recited here.)

The implication of this is that if government were only to sell such amount of shares as would shift control, then a condition of the offer would have to be that no applicant will be awarded more than such shares as would bring his holding to 0.5 percent.

If the offer were to be for a greater amount, then it would have to be a condition that the offer would have to be withdrawn if allotments or allocations could not be done in such a way as to comply with this requirement.

(iii) Foreign ownership is restricted to 25 percent (Section 5 quinque). Since 7 percent of the Bank is already owned by foreigners, only 18 percent more can be sold to them.

(iv) Commercial banks may not accept the shares in any commercial bank as loan security (Section 12 (3)). Individuals who wished to participate in the share offer using bank loans to finance their applications would not be able to do so in a Krung Thai offer. A major source of applications is thus not available which would have come from speculators.

(v) Commercial banks may not hold shares in other commercial banks Section 12 (6)). Unlike share offers in respect of other industries, this means that commercial banks, which have authority under the law to hold up to 10 percent of a company's equity, will not be a source of applications for a Krung Thai approach to the market.

Under other legislation:

(vi) Life insurance companies cannot hold more than 2 percent in the equity of any company. In most markets, life insurance companies are an excellent source for share applications since they can take a long-term view of investments. This restriction will inhibit their ability to participate.

(vii) Life insurance companies must value equities at the book value of the investee company. This is a serious inhibiting factor which precludes insurance companies from being able to take a long-term view, as the volume of business they could write would be reduced by virtue of undervalued assets. Their only rational interest because of this restriction would be as speculators, but this would not be entertained by responsible insurance company management. The above factors explain why only 3,100 million baht was invested in equities by all the insurance companies as of the end of 1989. (1,400 million baht for life insurance companies and 1,700 million baht for general insurance companies.)

Another factor which may adversely affect the prospects of a successful large share offer is that Provident Funds have hardly any equities in their investment portfolios and possibly have no motivation or need to invest in such a way in contrast to benefit based pension schemes.

THE MINIMUM SIZE OF THE OFFER

The figures presented hereafter are based on current market conditions and the 1989 accounts of the Bank. The purpose of working through the figures is to show the methodology which can be applied at the relevant time.

Government could merely sell sufficient shares to bring its holding to below 50 percent or, since the Bank may also need to raise additional capital, the shift in control could be brought about by a combination of an offer of Government shares and an issue of new shares by the Bank.

At the end of 1989 the Bank had a net book value of 9,640.2 million baht Since the 550,000 preference shares vote and are fully participating, no adjustment is made in respect of these in spite of their extra 3 percent dividend entitlement, as it is immaterial. There are 69,450,000 ordinary shares. If traded, each preference share would logically have a value at least equal to an ordinary share given their rights, so for the purpose of these calculations it will be assumed that there is only one class of 70 million shares.

The market value of the shares, at 8 November 1990 was 128 baht per share, is 8,960 million baht, which is 92.9 percent of book value at 31 December 1989. Since the last year end, additional profits of some 1,100 million baht should have been made thus further widening the gap to around 83.7 percent as net book value will be some 10,700 million baht Large secondary offerings are usually made at a discount to the market price in recognition of commercial realities, and this will serve to widen the disparity further still, perhaps to 75.3 percent of book value if the price is discounted 10 percent below market with market capitalization at 8,060 million baht

The potential problems that may arise from selling the shares at below book value is something to be considered, but the point being made is that the minimum size of a share offer to bring government's share below 50 percent would be 30.38 percent as follows:

Amount now in private hands	24.86%	
Portion held by persons with over 0.5%	(4.24%)	
Portion held by persons with below 0.5%	20.62%	
		OFFER
Needed to bring below-0.5%-shareholders up to 50% as required by law	29.38%	29.38%
	50.0%	
Add extra 1% to shift control	1.0%	1.0%
	51.0%	30.38%

At current market capitalization discounted by 10 percent, the amount of the offer would therefore be 2,449 million baht, say 2,500 million baht

(In the role of shareholder, government is exempt from the 5 percent ownership limitation imposed by Section 5 bis of the Commercial Banking Act. This means that government can still legally hold 49 percent of the shares.)

OVERALL APPROACH TO MARKETING THE SHARE

It is clear from the team's calculations (Tables X and XI) which take the above constraints into account, that the objective must be to attract at least 230,000 applicants at an average of 10,000 baht each, with 13,500 employees participating at an average of 11,250 baht each.

In such a scenario, institutions would receive no shares, thus creating a healthy after-market demand.

Even if institutions participated to the full extent possible in the unrealistically optimistic scenario (but assuming that no new foreign institutions participate), there will be a need for 108,000 applications averaging 10,000 baht each.

Whether 108,000 applications or 230,000 applications are being sought, the need is clearly for a populist widespread share offer which will require marketing of a type not done before in Thailand. It would be desirable to obtain even greater numbers of applications, as this will put the lie to myths about privatization in general and deflate opposition in many quarters. The significance of over 1 million applications would not be lost on opponents.

Details of the type of public relations and publicity that should take place and the issues to be resolved in structuring the share offer including an employee participation scheme are set out in Appendix IV.

TABLE I

SECTOR / TYPE ANALYSIS OF DEPOSITS - 1989

(in millions of Bt.)

GOVERNMENT	Demand	Savings	Time	Total
Central Government	3,226.1	8,323.8	19,479.2	31,029.1
State Enterprises	2,256.3	13,553.6	46,076.4	61,886.3
Municipalities	107.8	1,825.6	10,024.4	11,957.8
	5,590.2	23,703.0	75,580.0	104,873.2
Percentage composition	5.3%	22.6%	72.1%	100.0%
DOMESTIC FINANCIAL INSTITUTIONS	15,013.5	3,999.5	3,747.0	22,760.0
Percentage composition	66.0%	17.6%	16.5%	100.0%
COMMERCE	17,218.4	36,356.1	45,494.8	99,069.3
Percentage composition	17.4%	36.7%	45.9%	100.0%
TOTAL BUSINESS	32,231.9	40,355.6	49,241.8	121,829.3
Percentage composition	26.5%	33.1%	40.4%	100.0%
TOTAL BANKING SYSTEM	58,732.5	365,501.2	702,951.2	1,127,184.9
Percentage composition	5.2%	32.4%	62.4%	100.0%

COMPOSITION OF DEMAND DEPOSITS IN THE BANKING SYSTEM AND CHANG

	1989 Growth	1989 Composition	1989	1988
Current accounts	16.6%	86.5%	50,872.7	43,639.7
Others	-20.1%	13.5%	7,918.0	9,915.0
Total	9.8%	100.0%	58,790.7	53,554.7

KRUNG THAI DEPOSIT COMPOSITION AND CHANGES

	Demand	Savings	Time	Total
BALANCES - 1989	11,123.0	53,423.0	123,931.0	188,477.0
Percentage composition	5.9%	28.3%	65.8%	100.0%
BALANCES - 1988	11,515.0	40,789.0	97,490.0	149,794.0
BALANCES - 1987	13,316.0	30,535.0	81,965.0	125,816.0
INCREASE/(DECREASE) FROM PRIOR YEAR				
1989 OVER 198	-3.4%	31.0%	27.1%	25.8%
1988 OVER 198	-13.5%	33.6%	18.9%	19.1%

SOURCES: Statistical Data on Commercial Banks in Thailand 1990 (Economic Publications Section, Bank of Bangkok Ltd.)

1989 Annual Report of Bangkok Bank Ltd.

TABLE II

AMOUNTS DUE TO AND FROM OTHER BANKS - 1989

	Net from/(to)	Due from banks (in millions of Bt.)	Due to banks
Bangkok Bank Ltd.	2,913.0	4,494.0	1,581.0
Krung Thai Bank Ltd.	5,908.0	9,376.0	3,468.0
Thai Farmers Bank Ltd.	1,898.0	2,564.0	666.0
The Siam Commercial Bank Ltd.	4,723.0	4,723.0	
Bank of Ayudhya Ltd.	1,650.0	1,933.0	283.0
The Thai Military Bank Ltd.	1,016.0	1,278.0	262.0
The Siam City Bank Ltd.	(388.0)	1,141.0	1,529.0
Bangkok Metropolitan Bank Ltd.	(249.0)	1,363.0	1,612.0
The Bangkok Bank of Commerce	935.0	1,218.0	283.0
First Bangkok City Bank Ltd.	(1,485.0)	650.0	2,135.0
The Bank of Asia Ltd.	(3,223.0)	276.0	3,499.0
The Union Bank of Bangkok Ltd.	(842.0)	173.0	1,015.0
The Thai Danu Bank Ltd.	(641.0)	250.0	891.0
Nakornthon Bank Ltd.	745.0	870.0	125.0
The Laem Thong Bank Ltd.	(4.0)	201.0	205.0
	12,956.0	30,510.0	17,554.0
Foreign incorporated banks	(13,548.0)	2,978.0	16,526.0

SOURCE: Statistical Data on Commercial Banks in Thailand 1990 (Economic Publications Section, Bank of Bangkok Ltd.)

92

TABLE III

INDUSTRY ANALYSIS OF LOANS - 1989

		Over/ (under) averages	Krung Thai %	All banks %
Agriculture		3.9%	10.4%	6.5%
Mining		-0.2%	0.3%	0.5%
Manufacturing		-6.6%	19.2%	25.8%
Construction		-1.5%	2.3%	3.8%
Real Estate Business		-4.6%	4.3%	8.9%
Commerce		-5.7%	24.6%	30.3%
Public Utilities		3.4%	5.2%	1.8%
Banking & financial	27.509.1	12.0%	17.9%	5.9%
Services		-2.6%	3.1%	5.7%
Personal consumption		1.9%	12.7%	10.8%
			100.0%	100.0%

SOURCE: Statistical Data on Commercial Banks in Thailand 1990 (Economic Publications Section, Bank of Bangkok Ltd.)

1989 Annual Report of Bangkok Bank Ltd.

TABLE IV

LOANS TO TOTAL ASSETS OF THAI BANKS - 1989

	Total loans + other assets	Loans	Other assets
	Percentages of total assets		
Bangkok Bank Ltd.	79.7%	78.9%	0.6%
Krung Thai Bank Ltd.	71.3%	66.9%	4.4%
Thai Farmers Bank Ltd.	77.4%	76.8%	0.6%
The Siam Commercial Bank Ltd.	70.7%	69.2%	1.5%
Bank of Ayudhya Ltd.	81.0%	80.4%	0.6%
The Thai Military Bank Ltd.	78.4%	76.9%	1.5%
The Siam City Bank Ltd.	74.9%	72.5%	2.4%
Bangkok Metropolitan Bank Ltd.	79.3%	77.0%	2.3%
The Bangkok Bank of Commerce	75.7%	73.3%	2.4%
First Bangkok City Bank Ltd.	78.4%	77.4%	1.0%
The Bank of Asia Ltd.	77.0%	76.1%	0.9%
The Union Bank of Bangkok Ltd.	76.7%	75.8%	0.9%
The Thai Danu Bank Ltd.	83.6%	82.5%	1.1%
Nakornthon Bank Ltd.	76.4%	74.9%	1.5%
The Laem Thong Bank Ltd.	75.3%	73.4%	1.9%
	76.8%	75.2%	1.6%
Foreign incorporated banks	80.4%	79.5%	0.9%

SOURCE: Statistical Data on Commercial Banks in Thailand 1990 (Economic Publications Section, Bank of Bangkok Ltd.)

TABLE V

INTEREST RATES APPLICABLE FOR 3 YEARS

		1989	1988 Rate %	1987
BANK DEPOSITS				
DEMAND		NIL	NIL	NIL
SAVINGS		7.25	6.25-7.25	5.50
TIME DEPOSITS				
	6-12 months	9.50	7.0-9.5	7.00
	12 months	9.50		
	12-24 months	9.5-10.25	7.75-9.5	7.25
	Over 24 month	10.5-11.0	8.75-9.5	7.25
BANK LOANS & OVERDRAFTS		15.00	15.00	15.00
INTERBANK LENDING RATES		12.06	10.61	6.50
GOVERNMENT SECURITIES				
BONDS		9.75	8.0-8.25	7.25-7.5
T'Bills				
	Sold at tender	n/a	5.84	3.73
3 to 30 days		n/a	5.81-5.93	3.0-3.11
31-183 days		n/a	6.04-6.4	3.21-3.46

TABLE VI

SECTOR ANALYSIS OF LOANS - 1989

	Krung Thai		All banks	
	% of total	Millions Bt.	% of total	Millions Bt.
GOVERNMENT				
Central Government		2,885.0		3,503.9
State Enterprises		7,068.1		9,794.7
Municipalities				57.9
	6.5%	9,953.1	1.2%	13,356.5
PRIVATE SECTOR				
DOMESTIC FINANCIAL INSTITUTIONS	17.9%	27,509.0	4.8%	54,382.9
BUSINESSES	56.5%	87,003.7	59.7%	671,323.8
INDIVIDUALS	12.7%	19,607.5	34.0%	382,431.0
OTHER				2,840.7
	93.5%	144,073.3	98.8%	1,110,978.4
TOTAL BOTH SECTORS	100.0%	154,026.4	100.0%	1,124,334.9

SOURCE: Statistical Data on Commercial Banks in Thailand 1990 (Economic Publications Section, Bank of Bangkok Ltd.)

1989 Annual Report of Bangkok Bank Ltd.

TABLE VII

CALCULATION OF SPREADS

(figures in '000 millions of Bt.)

INCOME

		Bangkok Bank	Krung Thai Bank
LOANS -	1989	327.3	145.2
	1988	272.4	109.8
AVERAGE		299.9	127.5
INVESTMENTS	1989	69.4	45.3
-	1988	63.2	35.5
AVERAGE		66.3	40.4
OTHER ASSETS	1989	3.3	9.7
-	1988	4.1	11.5
AVERAGE		3.7	10.6
TOTAL AVERAGES		369.9	178.5
INTEREST INCOME - 1989		38.0	17.2
GAIN ON EXCHANGE		1.3	0.3
NET FEES AND SERVICES INCOME		2.3	0.4
INCOME		41.6	17.9
RATE - INTEREST ONLY		10.3%	9.6%
- INT + EXCHG GAIN		10.6%	9.8%
- ABOVE + FEES & SERVS		11.2%	10.0%

Sources: 1989 Annual Reports of Krung Thai Bank Ltd. and Bangkok Bank Ltd.

EXPENSE

		Bangkok Bank	Krung Thai Bank
DEPOSITS -	1989	326.1	185.0
-	1988	270.1	145.7
AVERAGE		298.1	165.4
BORROWINGS	1989	41.3	9.3
-	1988	45.5	8.9
AVERAGE		43.4	9.1
TOTAL AVERAGES		341.5	174.5
INTEREST EXPENSE - 1989		26.7	12.9
RATE		7.8%	7.4%

SPREAD

	Bangkok Bank	Krung Thai Bank	Better than Krung Thai
SPREAD- INTEREST ONLY	2.5%	2.2%	109.6%
- INT + EXCHG GAIN	2.8%	2.4%	116.5%
- ABOVE + FEES & SERVS	3.4%	2.6%	130.2%

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TABLE VIII

DATE BANKS FOUNDED IN THAILAND

	Year opened
Bangkok Bank Ltd.	1944
Krung Thai Bank Ltd.	1942
Thai Farmers Bank Ltd.	1945
The Siam Commercial Bank Ltd.	1906
Bank of Ayudhya Ltd.	1945
The Thai Military Bank Ltd.	1957
The Siam City Bank Ltd.	1941
Bangkok Metropolitan Bank Ltd.	1950
The Bangkok Bank of Commerce	1944
First Bangkok City Bank Ltd.	1960
The Bank of Asia Ltd.	1939
The Union Bank of Bangkok Ltd.	1949
The Thai Danu Bank Ltd.	1949
Nakornthon Bank Ltd.	1933
The Laem Thong Bank Ltd.	1948

SOURCE: Statistical Data on Commercial Banks in Thailand 1990 (Economic Publications Section, Bank of Bangkok Ltd.)

TABLE IX

EMPLOYEE STATISTICS

EFFICIENCY

	Bangkok Bank	Krung Thai Bank	
EMPLOYEES - 1989	20,838	13,031	Persons
- 1988	20,040	12,216	Persons
AVERAGE	20,439	12,624	Persons
AVERAGE LOANS	299.9	127.5	'000 million B
LOAN VOLUME PER EMPLOYEE	14,670,482.9	10,100,209.9	Bt.
	145.2%	100.0%	

COST

	Bangkok Bank	Krung Thai Bank	
PAYROLL - 1989	3,949.0	1,801.0	'000 million B
- 1988	3,396.0	1,515.0	'000 million B
AVERAGE	3,672.5	1,658.0	'000 million B
AVERAGE EMPLOYEES	20,439	12,624	Persons
AVERAGE PAY PER EMPLOYEE	179,681.0	131,342.3	Bt.
	136.8%	100.0%	

Sources: 1989 Annual Reports of Krung Thai Bank Ltd. and Bangkok Bank Ltd.

TABLE X

ASSESEMENT OF MAXIMUM POTENTIAL SIZE OF OFFER

LOCAL

	%	
Life Insurance companies	0.0%	Unlikely, too many restrictions
General insurance companies	0.0%	
Banks	0.0%	Prohibited by law
Mutual fund	0.500%	
26 institutions at 0.4% each	10.400%	

FOREIGN

	Present holding	Remaining permitted
Chase Nominees	1.050%	0.000%
Templetons (2 accounts)	0.750%	0.000%
Robert Flemming	0.570%	0.000%
Morgan Stanley	0.460%	0.040%
NCB Trust Ltd.	0.420%	0.080%
Midland Bank Nominees	0.360%	0.140%
Lloyds Bank Nominees	0.260%	0.240%
Wardley Investment	0.250%	0.250%
Barclays Nominees	0.220%	0.280%
Baring Securities	0.220%	0.280%
Guard Nominees A/C Y	0.210%	0.290%
Trustee Savings Bank	0.190%	0.310%
Glyns Nominees	0.180%	0.320%
C.O. Nominees	0.150%	0.350%
Ichiyoshi Securities	0.120%	0.380%
State Street	0.120%	0.380%
Brown Bros. Harriman	0.110%	0.390%
Bank of Scotland Nominees	0.070%	0.430%
	4.660%	4.160%

UNREALISTIC MAXIMUM FROM INSTITUTIONS 15.060%

CALCULATION OF LEVEL OF EMPLOYEE PARTICIPATION

Average pay 135,000 Bt., say 1 month's pay per employee or 11,250 Bt. allowed in share purchase scheme at 115 Bt. per share (excluding, for this purpose, any discounts).

No. of employees		13,500	
Entitlement (Bt.)		11,250	
Sum at market		151.9	million Bt
Market price (Bt.)	115.2		
No. of shares (mn)	70.0	8,064.0	
Percentage		1.883%	

TABLE XI

NEED FOR APPLICATIONS FROM INDIVIDUALS

SCENARIO I - INSTITUTIONS APPLY FOR FULL AMOUNT POSSIBLE

		% of Bank	Mn. Bt.
TOTAL INSTITUTIONAL SOURCES		15.060%	1,214.4
EMPLOYEES		1.883%	151.9
		--------	----------
		16.943%	1,366.3
PUBLIC AT LARGE	108,353 persons	13.437%	1,083.5
		--------	----------
TOTAL OFFER		30.380%	2,449.8
		=======	=========

SCENARIO II - ONLY 7% APPLIED FOR BY INSTITUTIONS

		% of Bank	Mn. Bt.
TOTAL INSTITUTIONAL SOURCES		7.000%	564.5
EMPLOYEES		1.883%	151.9
		--------	----------
		8.883%	716.4
PUBLIC AT LARGE	173,349 persons	21.497%	1,733.5
		--------	----------
TOTAL OFFER		30.380%	2,449.8
		=======	=========

SCENARIO III - NO APPLICATIONS FROM INSTITUTIONS

The sources of after-market demand are best assured under this scenario.

		% of Bank	Mn. Bt.
TOTAL INSTITUTIONAL SOURCES		0.000%	0.0
EMPLOYEES		1.883%	151.9
		--------	----------
		1.883%	151.9
PUBLIC AT LARGE	229,797 persons	28.497%	2,298.0
		--------	----------
TOTAL OFFER		30.380%	2,449.8
		=======	=========

The Electricity Generating Authority of Thailand: Privatization Issues

Summary

Over the next several years, EGAT's most pressing challenge will be to satisfy Thailand's accelerating demand for electricity. This will require large pools of capital.

EGAT has several options to finance the required investment. The options involving privatization in the form of access to private sector capital seem to be the most advantageous and responsible. The main options are:

(1) Rely on borrowings plus EGAT's internally generated funds. However, this approach would not strengthen EGAT's balance sheet, and suffers from an over-reliance on foreign debt.

(2) Increase internally generated funds. Given current policies, rate increases would be difficult. Efficiency could be improved. But higher oil prices will reduce cash flow.

(3) Issue shares in a broad-based stock flotation. This seems to be the best medium-run strategy for raising capital. Aspects of the populist share offering of Kepco in Korea in 1989 could serve as a model for EGAT.

(4) Build, Own, Operate, and Transfer (BOOT) schemes. At present, EGAT's union favors a more limited version of this, "Build, Own, Sell," where the private sector builds a facility and then turns it over to EGAT to operate in return for a royalty consisting of a certain percentage of revenue.

(5) Co-generation and combined cycle with private sector industries. EGAT plans to make this 3 to 5 percent of EGAT's total installed capacity.

(6) Purchase increasing amounts of electricity from low-cost, neighboring producers of hydro-electricity, primarily Lao.

(7) Sell existing generating facilities and buy production.

Option (3) seems on balance to be the most advantageous medium term strategy to finance EGAT's required expansion, though it would require the most fundamental changes in EGAT's present legal and regulatory structure. Issuing just 5 percent of the shares of the company in 1992 could raise between 6 and 8 billion baht. With a steadily improving balance sheet, a eurobond or convertible eurobond issue could be a sequel to share flotation.

EGAT and the RTG need to begin revising the rate structure to one

102

which would provide certainty to private sector investors. Modern formulas such the "RPI-x" method utilized in the U.K. and more and more by regulators in the U.S., is one which provides certainty and also imposes efficiency.

Background. Among SOEs, EGAT ranks first in pre-tax profits, third in revenue, third in assets, first in equity and first in number of employees.

EGAT is an electricity generating company. It sells most of the energy it produces in bulk to two major customers, Metropolitan Electricity Authority (MEA), which services the Bangkok area, and the Provincial Electricity Authority (PEA), which services areas outside of Bangkok.

EGAT has about 7,000 Megawatts (MWs) of installed capacity, while its transmission network is comprised of about 17,000 km of lines. EGAT has a staff of around 32,000 persons, headed by a General Manager who directs six divisions.

EGAT provides all of the outside plant to deliver its energy. This plant includes switching yards, transformer lines and substations. MEA and PEA each take nearly equal shares (about 48 percent) of the total volume of energy sold.

Some energy is also sold by EGAT directly to large industrial or institutional users, such as the Port Authority of Thailand, and to some others who distribute the service to their end users. A limited amount of energy is sold to Electricite de Laos (EDL), from whom EGAT also purchases power, generated at Nam Ngum Dam.

Performance. EGAT's record of technical competence, managerial efficiency, and financial performance has been exemplary among the SOEs.

Its financial performance has improved steadily over the last four years:

	1989	1985
Revenue	42 billion	28.8 billion
ROE	24.5%	10.5%
EBIT margin	35.0%	23.6%
ROA	11.4%	6.8%
Debt-Equity	1.75	2.29

Through its foresight in exploring and utilizing lignite deposits, expanding hydro-electric capacity and more recently, substituting natural gas for imported bunker oil as fuel for thermal generation, EGAT substantially diminished its reliance on imported oil for fuel. Imported oil as an energy source dropped from 81 percent in

1980 to a very modest 11 percent as of 1989.

EGAT Energy Balance (1989)

Hydro	14%
Natural Gas	53%
Oil	11%
Lignite	20%
Purchase from Laos	2%
Total	100%

Source: EGAT

In two main respects, EGAT's performance suffers because it is an SOE. EGAT is experiencing a brain drain as engineers leave for higher paying jobs in the private sector. The implication of this is that salaries and benefits for key personnel will have to be increased, but government has been slow in responding to this market reality.

Also, EGAT suffers from inefficiencies in procurement, and other areas of planning and operations, many of which are the result of outdated government regulation.

The Need for Capital: Financing and Privatization Options

EGAT is facing an extremely rapid increase in demand, exceeding 17 percent growth for this year and next, and probably in the neighborhood of 14 percent per year for much of the rest of the decade. This is a marked increase over the 1980-87 period when demand grew at an average rate of 9.5 percent.

Over the next ten years, EGAT's requirements are on the order of 1,100 MW annually, requiring an additional 11,000 MW of generation capacity, and another 10,000 km of transmission lines. Preliminary estimates from EGAT, indicate that this will require an estimated investment outlay of well over 30 billion baht per year ($US 1.2 billion). (Please see table on following page.)

How is EGAT to finance this expansion? There are several financing options, several of which would involve privatization in the form of private sector capital and management.

(1) Borrowing plus EGAT's Internally Generated Funds. The EGAT estimates mentioned above call for financing this expansion through debt, primarily foreign debt, which is to be complemented by EGAT's internally generated funds. The same table summarizes EGAT's estimates of how it could meet its capital needs. (According to NESDB, these figures tend to be revised upward over time.)

EGAT

Gross Capital Investment Plan

(baht billions)

	1992	1993	1994	1995	1996
Development Projects	28.2	32.2	35.8	41.6	46.1
Non-Projects	2	2	2	2	2
Total	30.2	34.2	37.8	43.6	48.1

Source: EGAT as cited by NESDB (preliminary figures)

Capital Investment Sources

(baht billions)

	1992	1993	1994	1995	1996
EGAT Resource	10.9	12.6	14	15.4	17.2
Domestic Loans	3	3.7	4.6	4.4	6.1
Foreign Loans	16.3	17.9	19.2	23.8	24.8
Total	30.2	34.2	37.8	43.6	48.1

105

However, there are problems with this financing plan which make it wise to emphasize additional options.

First, it would perpetuate a less than optimal balance sheet for EGAT. At the end of 1989, its debt-equity ratio stood at 1.75. While it has shown steady improvement over the last few years and is lower than most SOEs, EGAT, as an electric company, should aim for a debt-equity ratio approaching 1. However, in 1996, under the borrowing scenario, the current debt-equity ratio would be approximately the same as it is now. EGAT would be better advised to begin to improve this ratio so that it will be able to access private domestic and international capital on more favorable terms in the future.

A second problem is the future of the government's policy on the ability of SOEs to assume debt, which is not known. The Government ceiling on foreign borrowing in 1989 was 30 billion baht ($US 1.2 billion). Of this, the government allotted 40 percent to EGAT. The 1990 ceiling is 37.5 billion baht ($US 1.5 billion). For reasons of fiscal policy, this ceiling is unlikely to rise much in the future, thereby limiting SOE and EGAT access to government capital.

Related problems would occur if investment costs rise and the demand for electricity increases. EGAT would have few degrees of freedom left if it relies exclusively on the debt and internally generated funds route.

(2) Increase EGATs internally generated funds. A relatively easy way to increase internally generated funds would be by increasing electricity rates. This could also serve dampen somewhat the surging demand for electricity.

However, raising the price of electricity is not politically favored by the government at present. It would undoubtedly be unpopular and create controversy.

Another constraint on adjusting prices is the fact that electricity is sold at a constant price throughout Thailand which, given higher transmissions costs in low density areas, indicates that cities--primarily Bangkok--effectively subsidize the provinces.

Higher oil prices are estimated to add some 2.5 billion baht a year to EGAT's current fuel costs. Should oil prices remain high, EGAT will have fewer funds available for investment.

(3) Share Flotation. There are a number of factors which favor flotation of EGAT shares. EGAT would be attractive to investors because of its financial record and good management team. A combination of both local and foreign equity investment could be sought.

As indicated above, EGAT seems to favor foreign loans for its investment needs. However, EGAT and the RTG should consider the advantages of domestic and foreign equity investment over investment primarily by way of foreign loans:

--Equity requires returns only if there are profits. If the economy is performing poorly dividends will be less. In such times, however, borrowing would continue to require interest, and even higher interest because the credit rating of the country would be reduced. If the economy is performing well dividends may be high, but that is when the country can better afford the payout.

--Equity investments are of virtually indefinite length, as contrasted to loan principal which must be repaid over a specified period.

--Equity investments do not carry an exchange risk as the investment is denominated in local currency when introduced. Loan balances are denominated in foreign currency.

Thai International shares will presumably have been floated by the time EGAT is ready for flotation. If this is done along the lines recommended by the team, it should pave the way for EGAT to tap the equity market.

An EGAT share flotation could serve as a vehicle for dramatically broadening the base of shareholders on the SET. Currently there are about 300,000 shareholders, or about one half of one percent of the population. This would continue to add both depth and breadth to the SET which is consistent with the Government's goal of making the SET a regional financial center.

An indication of the value of EGAT can be gathered by capitalizing its 1989 earnings at different price-earnings ratios. (This assumes a 30 percent tax rate, a rate currently higher than the rate of appropriation to the Ministry of Finance.)

Illustrative Valuation of EGAT based on 1989 earnings

Percent of Company Sold:

P/E	5%	20%	100%
10	3.7	14.6	73.0
15	5.5	21.9	109.5
20	7.3	29.2	145.9

Unit: Billion baht

Since the absorptive capacity of the current Thai market is probably about 5 billion baht, only about 5 percent of EGAT could be sold in any one issue, and many years would be required to pass the 50 percent threshold level before EGAT would no longer be an SOE.

Since EGAT would remain under government control for some time, investors would require fairly clear indications on government policy towards EGAT, particularly the rate structure.

Kepco: A Model for Broad-Based Flotation of EGAT shares.

The flotation of the Korean Electric Power Company in 1989 was one of a series of large state-owned enterprise flotations designated as "National Stocks." These included the Pohang Steel & Iron (Posco), Citizens National Bank, the Korea Exchange Bank, the Small & Medium Industry Bank, the Korea Telecommunication Authority and the Korea Monopoly Corporation. Posco was the first of these stocks to be floated in April of 1988.

The Kepco offer was in the broad-based, populist mode so effectively used in the case of British Telecom in 1984, and which has been gaining increasing acceptance worldwide. Kepco offered 127,750,274 shares, or 21 percent of total equity. The offering price was 13,000 won per share ($US 19.21), but for low income applications who held their shares for more than three years, the price was 9,100 won($US 13.38). This represented a significant discount of 30 percent.

"Ordinary" applicants (those not considered low income) were allocated 2 percent of the shares, low income applicants who could sell their shares at any time were allocated 23.4 percent, and low-income applicants holding shares for more than 3 years were allocated 54.6 percent. The employee stock ownership plan (ESOP) was allocated 20 percent.

Low income earners were defined as those earning less than 400,000 won a month ($US 595). All persons purchasing shares at a discount were required to open a National Stock Subscription Account with a bank.

The ESOP association of Kepco offered to finance 50 percent of the total stock purchase at a 2 percent annual interest rate and subject to the stipulation that the stock must be held for three years

The offering period was from May 27 to June 1, 1989. The share offer was oversubscribed. In all, there were an astonishing 6.7 million subscribers to the share offer, who paid US$ 1.9 billion for their shares. The shares were listed on August, and rose to 22,000 Won ($US 32.74). An interesting feature of the share offer was that no underwriter was used. Korean market capitalization at time of issue was $US 140 billion

In addition to planning for a share issue, EGAT should identify other opportunities for privatization to enable the most pressing needs to be met. Opening investment in electricity generation to private interest is an effective way to accomplish this.

The Juridical Council is reviewing the possibility of allowing EGAT to purchase power from private producers. It is expected that if endorsed by the Council, Parliament would be likely to approve.

EGAT could then participate in a range of projects with outside private partners:

(4). Build, Own, Operate and Transfer (BOOT). Under BOOT, EGAT could award contracts for the construction of facilities and their operation of a specified number of years. The financing package would be put together by a consortium, which services the debt. The consortium will expect to receive a pay-back on its investment during the period of operation.

EGAT's unions have indicated that they would accept only one version of BOOT, which they term Build, Own and Sell (BOS.) BOS scheme envisages that the private investor will use his own capital to build the plant to EGAT's specifications and while retaining nominal ownership, would immediately turn it over to EGAT to manage, operate and maintain.

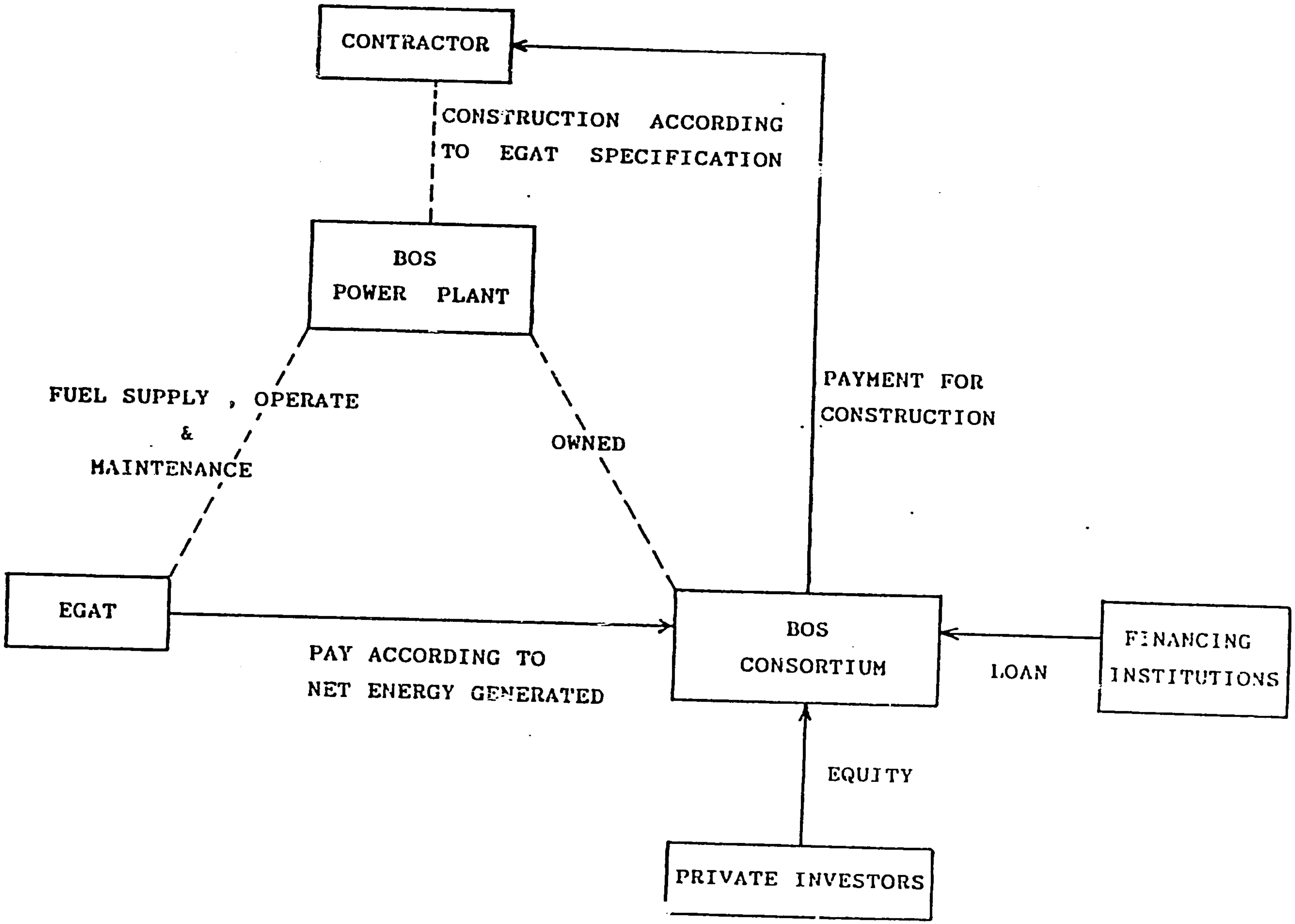
In addition to the maintenance and operation expenses, EGAT would also assume all the fuel costs, and would retain sole authority to decide and control the amount of energy to be produced.

The private investor would be given a contract guaranteeing a minimum sale of energy to EGAT. Upon completing the plant, the private investor receives EGAT's periodic payments. It remains to be seen if this proposal will succeed in attracting investors.

The scheme as presented seems to have the economic characteristics of a debt transaction in that EGAT receives present capital value in return for a fixed percentage charge against its revenue stream. It is not clear how this would be treated for the purposes of EGAT's borrowing limits. Such a scheme would increase the effective debt-ratio of the company which is in need of additional equity. In any event, new capacity under this approach would take a long time to come on stream. The Nation reported that the first BOS plant could come on stream by 1997 if construction begins in 1992.

(5). Co-generation and Combined Cycle. EGAT recognizes that increased utilization of co-generation helps improve both industrial and electricity generation efficiency. The co-generation approach has already been factored into current EGAT's Power Development Plan. It is estimated that this form of generation will eventually account for 3 to 5 percent of EGAT's total installed capacity.

BOS SCHEME



---- FUNCTION LINE

APRIL 20,1990

An illustrative co-generation project has been proposed to provide both power and steam to Thailand's second petrochemical complex, NPC II. The project has been designed to generate 491 MW, in addition to the steam load required by NPC II which is estimated at 236 tons per hour. With the energy load requirement of NPC II estimated at 101 MW, there would be 390 MW available for sale to EGAT after satisfying NPC II's needs. Construction time for a plant of this size was estimated to take 24 months to complete.

The technology for combined cycle is most attractive in those industrial applications which require both electricity and high temperature steam.

These systems usually combine combustion turbines with heat recovery steam generators and steam turbine generators, with the combustion turbines fired by natural gas. Their advantages include the most economical use of fuel for both purposes, relatively short construction lead time, and flexibility in permitting rapid expansion if required.

Further efficiencies are gained by the ability to easily adjust the operation of these plants in increments of power as dictated by load requirements.

Foreign companies experienced in providing the combined cycle technology that includes industrial process steam production as well as electricity generation, would be in a position to facilitate transfer of sophisticated engineering and management skills to EGAT staff.

(6) Regional Development Another component of the privatization strategy envisages EGAT as a growing customer of electric utilities in other countries in the region.

The immediate candidate for such a relationship would be Lao PDR. Currently, EGAT has purchase (and sale) agreements with two neighboring countries, Lao and Malaysia. The amounts of energy obtained through these relationships is still small, 509 million Kwh, representing only about 1.4 per cent of EGAT's total supply. Most is purchased from Electricite du Laos (EDL), 384 million Kwh, and the rest from the National Electricity Board of the States of Malaya (NEB).

Lao is just now undergoing a substantial reform of its political and economic system. Unlike Thailand, Lao has extensive untapped hydropower potential, far in excess of its anticipated domestic demand for at least the next decade or so.

EGAT could consider extending its relationship with EDL from being merely a customer to possibly provider of engineering and managerial technical assistance. This could possibly be done through management contracts with the private sector.

(7) Sale of existing generating facilities and buying production. A study of the security positions of the various lenders and loan covenants would have to be undertaken to determine whether this is an option for EGAT. The advantage to EGAT could be (i) the raising of cash which may be used to retire debt, (ii) cheaper electricity production costs from the units if they were more efficiently operated by the private sector, and (iii) in the long term introducing competition between generating companies.

Action Plan

The team suggests that EGAT's medium term strategy be to place shares on the market so that it can have continuing access to capital to meet its development needs, and these will doubtless continue well into the next century.

However, in the short term, EGAT should act decisively to identify other opportunities for privatization to enable its most pressing needs to be met. Opening investment in electricity generation to private interest, primarily through BOOT schemes and co-generation, is the most advantageous way to accomplish this.

The changes to the various laws and regulations affecting the company and changes to its license in regard to exclusivity will have to be reviewed. Work also needs to begin on revising the rate structure to one which would provide certainty to investors, Modern formulas such as the "RPI-x" method should be considered. In essence, this formula keeps annual price increases for utility services in line with the increase in the retail price index less a set percentage, providing a stimulus for real-terms cost cutting.

EGAT

(Table A)
Income Statement
Thousands of Baht

	1989	1988	1987	1986	1985
Revenue	42,114,253	37,124,088	33,546,361	30,064,252	28,803,228
(Depreciation and Amortization)	3,132,698	3,131,734	2,934,175	2,714,018	2,199,804
Total Operating Expenses	27,904,773	25,784,810	22,685,140	22,948,069	22,113,982
Operating Income	14,209,460	11,339,278	10,861,221	7,116,183	6.689,246
Other Income (Net)	535,361	350,209	170,285	55,804	98,672
Earnings before Interest and Taxes	14,744,841	11,689,487	11,031,506	7,171,987	6,787,918
Interest	4,321,231	4,620,729	4,205,293	3,827,535	3,202,512
Earnings before taxes	10,423,610	7,068,758	6,826,213	3,344,452	3,585,406
Taxes on earnings*	1,061,000	956,000	600,000	470,000	466,000
Net earnings	9,362,610	6,112,758	6,226,213	2,874,452	3,119,406
Dividends Paid					
Memo: Interest as a Percent of Net Earnings	46.2%	75.6%	67.5%	133.2%	102.7%

*Appropriation to the Ministry of Finance

113.

EGAT

(Table B)
Balance Sheet

	1989	1988	1987	1986	1985
Current Assets:					
Cash and Cash Equivalents	5,456,350	2,388,953	2,019,102	484,108	973,666
Accounts Receivable	7,467,311	7,345,697	6,988,143	6,297,154	5,375,315
Inventories	2,656,529	2,355,670	2,308,329	2,050,908	1,734,015
Total Current Assets	15,580,190	12,090,320	11,315,574	8,832,170	8,082,996
Long Term Assets:					
Fixed Assets, Net	95,507,036	88,236,805	84,537,696	83,149,828	77,912,510
Other LT Assets	11,378,640	10,050,707	8,043,364	5,662,785	4,670,731
Total Assets	122,465,866	110,377,832	103,896,634	97,644,783	90,666,237
Current Liabilities:					
Accounts Payable	6,910,852	5,873,624	5,022,710	4,202,021	5,314,281
Current Portion of LT Loans	5,656,366	5,530,868	5,077,513	4,494,563	3,605,559
Other Current Liabilities	1,159,253	1,182,369	1,136,082	1,190,311	1,278,983
Total current liabilities	13,726,471	12,586,861	11,236,305	9,886,895	10,198,823
Long term debt	62,140,793	61,903,045	63,119,772	63,381,818	51,053,181
Deferred liabilities	246,581	329,796	418,885	511,042	605,668
Total liabilities	76,113,845	74,819,702	74,774,962	73,779,755	61,857,672
Sinking Fund	2,936,869	2,665,759	2,383,139	2,057,047	1,837,423
Stockholders' equity					
Capital stock	13,088,069	12,965,893	12,925,350	12,832,577	12,466,858
Capital expenditure appropriation	32,864,947	27,827,595	23,406,080	20,530,912	18,440,170
Retained Earnings	9,177,532	6,175,621	5,371,560	3,017,090	2,587,790
Deferred foreign exchange adj.	(11,715,396)	(14,076,738)	(14,964,457)	(14,572,598)	(6,523,676)
Total stockholders' equity	43,415,152	32,892,371	26,738,533	21,807,981	26,971,142
Total Liabilities and Equity	122,465,866	110,377,832	103,896,634	97,644,783	90,666,237

EGAT

(Table C)
Operating Performance

	1989	1988	1987	1986	1985
Revenue	42,114,253	37,124,088	33,546,361	30,064,252	28,803,228
Percent Change	13.4%	10.7%	11.6%	4.4%	9.2%
Operating Income	14,209,480	11,339,278	10,861,221	7,116,183	6,689,246
Percent Change	25.3%	4.4%	52.6%	6.4%	2.8%
Operating Margin	33.7%	30.5%	32.4%	23.7%	23.2%
EBIT	14,744,841	11,689,487	11,031,506	7,171,987	6,787,918
Percent Change	26.1%	6.0%	53.8%	5.7%	678.1%
EBIT Margin	35.0%	31.5%	32.9%	23.9%	23.6%
Pre-Tax Income	10,423,610	7,068,758	6,826,213	3,344,452	3,585,406
Pretax Margin	24.8%	19.0%	20.3%	11.1%	12.4%
Tax	1,061,000	956,000	600,000	470,000	466,000
Tax Rate	10.2%	13.5%	8.8%	14.1%	13.0%
Net Income	9,362,610	6,112,758	6,226,213	2,874,452	3,119,406
Percent Change	53.2%	-1.8%	116.6%	-7.9%	-38.8%
After Tax Margin	22.2%	16.5%	18.6%	9.6%	10.8%

EGAT

(Table G)
Return on Investment Analysis

	1989	1988	1987	1986	1985
1. Return on Average Equity	24.5%	20.5%	25.7%	11.8%	10.5%
Disaggregation of return on equity:					
a. EBIT Margin	35.0%	31.5%	32.9%	23.9%	23.6%
b. Asset Turnover	0.36	0.35	0.33	0.32	0.33
c. Interest Burden	3.7%	4.3%	4.2%	4.1%	3.7%
d. Financial leverage (average assets to equity)	3.05	3.59	4.15	3.86	2.92
e. Tax retention rate	89.8%	86.5%	91.2%	85.9%	87.0%
Return on Average Equity [((axb)-c)xdxe]	24.5%	20.5%	25.7%	11.8%	10.5%
2. Return on Average Total Assets	11.4%	9.4%	10.0%	6.5%	6.8%
3. Return on LT Liabilities and Equity	13.2%	10.9%	11.5%	7.6%	7.9%
4. Equity Growth Rate	24.5%	20.5%	25.7%	11.8%	10.5%

Telephone Organization of Thailand

Executive Summary

Recommendations for Privatization

The Telephone Organization of Thailand (TOT) is currently pursuing a number of privatization strategies. These include:

A. Establishing joint ventures with private sector firms to provide specialized services
B. Contracting out services with private companies to provide necessary inputs
C. Allowing groups to build, transfer, and operate telephone lines

However, we recommend that the Comptroller General's Office and the Royal Thai Government consider the following additional privatization measures:

A. Charter TOT as a corporation,
B. Sell shares of TOT,
C. Examine several organizational options including:
   - A merger of TOT and CAT,
   - Increase the number of companies providing local telephone services, and
   - Contract out operations of regional or product related telephone services.

Opportunity for Share Offering

The TOT could be a good candidate in the future, but it must be restructured as a corporation before a share offering can be pursued. Factors favoring privatization include: 1) competent, knowledgeable management, 2) a steady, predictable revenue stream, 3) a monopoly on most forms of local telephone transmissions, 4) high margins, 5) substantial pent-up demand for products, and 6) the growing importance of telephone lines for data transmission in the developing economy of Thailand.

The primary benefits to the Royal Thai Government of conducting a share issue are the following:

A. Increase the amount of capital invested in the telecommunications sector without burdening the Government
B. Demonstrate the potential and popularity of share issues by the Government from its State Owned Enterprise portfolio
C. Create a transparent transaction (all can see and understand the sale)

The TOT under its current organizational structure has been unable to use its monopoly position and revenue advantages to meet the substantial demands of the market. Privatization would allow TOT to make decisions more quickly, enable it to raise more capital for investment, and give it flexibility in attracting, retaining, and managing its technical staff.

Obstacles to privatization include: 1) potential union opposition based upon inadequate knowledge of the benefits, 2) possible resistance of Management to the discipline of the marketplace, and 3) the necessity to restructure as a corporation. There are no managerial, business, or economic reasons against privatization.

The arguments against privatization seem to center on two policy questions--who should control telecommunications and what does the Government owe the unions. Opponents argue that no private individual or group should be allowed to control telecommunications. Second, the unions are opposed therefore we should not privatize. In the first case, safeguards can be built into the share issue to prevent this. In the second case, a communications program is in order.

Privatization of one sort will happen in any case as the TOT faces a need to upgrade existing equipment and to improve its compensation system to avoid losing its technical staff to the private sector. Further, assuming a cost of Baht 50,000 per new line and a penetration rate of 20 lines per hundred persons, it must invest Baht 650 billion (current dollars) in the next 25 years to meet current pent-up and future demand for telephone services. Should the TOT fail to privatize or at least free itself from many of its current capital and labor constraints, it will find itself increasingly unable to maintain services, let alone meet unmet demand. As telecommunications services are critical for a growing economy, and indeed any economy in the modern world, Thailand would suffer as a result.

A share issue in the future could offer the RTG the best method of assisting the TOT to meet this demand while offering several significant benefits as well. These include: A) a significant boost in equity capital, B) mobilization of both domestic and international debt and equity capital, C) greater flexibility in restructuring the delivery of telephone services in Thailand.

Potential value of a share issue to bolster the capital of the TOT could exceed Baht 75 billion. With a 1.0 to 1.0 debt to equity ratio, the TOT could raise a total of Baht 141 billion in the next five to ten years to meet existing and projected demand. Even with expanded earnings, this will still be insufficient to meet total demand over the period. Either TOT or an expanded telecommunications industry will need large infusions of capital on a regular basis.

118

Legal and Regulatory Issues

The current legal and regulatory structure hampers TOT's ability to develop long range plans, to attract and retain technical staff, to upgrade computer hardware and software, and to finance significant infrastructure investments. The decision-making and review process within the RTG slows down planning and implementation efforts. In particular, the review process for computers has hampered the firm's ability to acquire and install much needed systems. Wages and salaries are established by the MOF and are insufficient to attract and retain engineering and specialized technical staff. Finally, the current structure of TOT combined with RTG restrictions on foreign and local borrowing of the SOEs leave it with few options other than privatization for raising the large sums of capital required.

The structure of the rate setting organization and the procedure for reviewing and modifying rates will be very important in establishing the long-term viability of a private TOT in the market.

Management and Labor Issues

Management appears to be competent but, perhaps, not overly aggressive in addressing the opportunities and challenges of the TOT. The TOT has taken a number of privatization steps and has explored a number of creative options to enable it to meet market demands. The TOT will suffer an increasingly rapid loss in key technical and managerial personnel unless it is able to gain more flexibility in its compensation system. Engineers and technical staff are in short supply in Thailand, both are critical to TOT's ability to deliver and expand services.

Unfortunately, the salary structures and restrictions on labor mobility place the TOT at a competitive disadvantage in terms of both structuring its work force and arranging attractive compensation and incentive packages. The TOT can be expected to lose much of its key technical staff over the next three years as the Charoen Pokphand Project will need to recruit skilled staff and the only local sources are TOT and CAT.

The method of announcing privatization without adequate preparation and softening the ground for the message appears to have generated some unusual resistance among the various unions. The unions fear loss of job security. In the case of TOT, these may be a misconception; since privatization would bring in additional funds to expand job opportunities and salaries. Further, even if TOT is over staffed at present, the resulting expansion of services should absorb this labor in the near future. The result would be higher compensation and built-in productivity gains during the coming years without any major or drastic steps on the part of management.

Key Action Steps Required

1. Charter the TOT as a corporation
2. Obtain approval of the MOTC to review privatization options
3. Examine the following options:
   - A. TOT and CAT - separate monopolies
   - B. TOT and CAT - a merged monopoly
   - C. Competing companies in local telecommunications
   - D. Competing companies in foreign communications
   - E. Build, transfer, own Joint Ventures on a regional or product basis
4. Consult with management and the unions regarding job security and share ownership issues
5. Design the share issue package to include employee shares, local shares, and foreign shares
6. Negotiate transition issues with the Unions
7. Establish the regulatory framework
8. Structure a public relations campaign with the public
9. Conduct a wide-spread share issue, following on the experience of the CP/BT issue.

FINDINGS

1. OVERVIEW

A. The Telephone Organization of Thailand

The Telephone Organization of Thailand (TOT) is a special authority established under the Telephone Organization Act B.E. 2497 in 1954. It is not a corporation. It was originally established to handle local telephone communications with the Bangkok Metropolitan area. This was later expanded to handle telephone communications within Thailand. International telephone services and certain local communications services such as cellular telephones are handled by another state owned enterprise, the Communications Authority of Thailand (CAT).

B. Markets

The TOT has a near monopoly on telephone lines within Bangkok. Telephone lines and domestic wire communications may only be established by the TOT or in certain, limited areas under the authority of the CAT. It does not have a monopoly on cellular or certain forms of non-wire communications. The CAT does compete more freely in these areas. The CAT obtains substantial benefits from the capital investments in lines made by the TOT. TOT builds lines and telephone hookups which are the used by customers to access CAT's international services.

Major products provided by the TOT include basic telephone service, some special software services on telephones (call waiting, call forwarding, etc.) and cellular mobile telephones. The TOT is currently installing and planning for an Integrated Service Digital Network (ISDN).

The major competitors of the TOT are substituting products that do not require access to the TOT's monopoly. These include certain radio frequencies and delivered communications services such as the letters, telegrams, and courier services. These are relatively important in areas that the TOT has yet to serve.

The TOT is a large organization. In 1989, it generated over Baht 13 billion in annual revenues. Profits after tax and interest exceeded Baht 4.9 billion and have increased dramatically in the last five years. Among the SOE's , the TOT ranks fifth in assets, third in equity, seventh in revenues, but third in profits.

Capital requirements for the TOT are extremely high. It is responsible for the terminals, wires , and switching units that make up a ground based telephone system.

121

In 1989, the TOT had the following infrastructure in place:

TABLE 1: OPERATIONS - 1989

	Bangkok	Provinces	Total
Exchanges	72	276	348
Capacity			
Lines	1,011,498	481,940	1,493,438
Cellular mobile			39,361
Main telephone stations			
Regular telephones	792,203	365,811	1,158,014
Cellular mobile			20,936
Employees			18,243
Lines per employee			84.05
Telephone stations per employee			64.62

At the same time, these facilities and lines are quite inadequate to meet the pent-up demand of the Thai economy. There is currently an unmet demand (actual requests for lines that have yet to be fulfilled) of 800,000 lines. In the next 25 years, Thailand will need to add 13 to 18 million lines to achieve a penetration rate of 20 to 30 lines per hundred persons. Service can be problematic and there is a high cost to business and the government from the overloaded lines at present. Statistics on successful calls indicate that less than 25% of telephone calls or facsimile transmissions are successful on the first attempt.

In a major development, the TOT has obtained approval for a Baht 150 billion contract with the Charoen Pokphand/British Telecommunications Group (CP/BT). The CP/BT Group will finance, build, transfer, and operate three million additional telephones lines in Thailand over the next 25 years. The private consortium will raise debt and equity capital from Thailand and abroad to finance the venture.

Despite the magnitude of the project, reported to be the second largest private investment in the world (the Chunnel project linking England and France is the first), Thailand will still fall short of needed demand for telephone lines. Currently, penetration of telephone lines in Thailand is just two per 100 households.

D. Human Resources

The TOT has 18,186 employees (1989). Employment growth over the last five years has been moderate, less than __ percent a year. The slowdown in employment growth combined with an increase in lines, has resulted in a growing rate of productivity. See Table K, Miscellaneous Comparisons, for more information.

Management in the TOT seems competent and technically knowledgeable, but not overly aggressive in meeting the challenges and opportunities in the telecommunications field in Thailand. The firm has well-trained staff and a large technical component. Changes in operating performance favor the last five years indicate increasing productivity, better cost control, and revenue enhancement. For example, in the last five years management has increased the number of stations per employee from 33.7 (1984) to 64.2, earnings before interest and taxes (EBIT) margins from 39 percent to 59 percent, and revenues from Baht 5.2 billion to Baht 13.2 billion.

At the same time, the number of lines installed each year has actually declined over the last three years from 259,661 in 1985 to 107,758 in 1989. This despite the tremendous backlogs of unmet demand as we have noted earlier. For these reasons, management has been given low marks regarding its ability to manage the organization.

Managers, engineers, and certain technical staff earn less at TOT than they could receive in the private sector. Further, they are unable to participate in profit-sharing or stock option programs as they could were TOT a public company. Whether TOT does well or whether it meets consumer demand does not affect management compensation and thus reduces the incentive they might have to perform compared to the private sector. Further, the managers have reasonably good benefit packages and greater job security which insulates them from errors in judgement. Financial pressures on the TOT managers are minimal given the healthy market for their products and their good margins. TOT will be profitable whether or not they expand; indeed, it will be more profitable if they do not. Thus, weak or basically competent managers are protected by the present system; strong managers are not rewarded adequately compared to their private sector counterparts.

Labor is represented within the TOT by unions that represent almost all workers except the senior managers. The unions are generally opposed to privatization of the TOT unless there is no alternative. They were somewhat more flexible regarding joint ventures as long as the TOT eventually owned the facilities. Management indicated that the unions believe that privatization would affect their job security and, therefore, the unions are opposed. This appears to be due to a lack of understanding by the unions as to the relative benefits of going private.

E. TOT's Strategy and Plans

The TOT strategy is not clear. Essentially, it appears that it expects to maintain its monopoly position in the local telecommunications market and either borrow from the government or establish joint ventures to meet market demand. Discussion of a merger of the TOT and CAT indicated that the TOT would favor a merger of the two organizations. TOT sees that the telecommunications side of the CAT has a strong revenue stream--Baht 8.1 billion, a 47 percent EBIT margin, and significant synergies with its current system. The TOT is no lover of competition and would like to see CAT blocked from competing in certain telephone markets that TOT considers to be its domain.

The TOT plans to expand the number of lines from 1.6 million to 15 to 20 million over the next 25 years. The penetration rate would rise from two percent to 21 - 28 percent over this period.

F. Legal and Regulatory Environment

The TOT is heavily regulated in its markets. THE MOTC sets the prices for TOT's services, the MOF sets the salary scales of its workers and staff, the National Computer Coordinating Committee reviews its computer procurement, large procurement must go through the Department of the Budget, and all debt and borrowing must be approved by Comptroller General's Office. While these regulations may be appropriate for the Government to control its expenditures, they slow and frustrate the efforts of the TOT to meet the rapidly growing and changing needs of the market.

In its favor, the TOT has a monopoly on most forms of local telecommunications. The rates established for these services are generous as the TOT has an operating margin of 59.2 percent.

124

At the same time, telephone services in Thailand are split between domestic and international. The CAT maintains a monopoly on overseas telephone calls. The TOT builds all trunk lines which are used by customers to access the international communication facilities of the CAT. Although the TOT charges the CAT more for this access than it charges for local calls, the CAT has the better part of the deal. It benefits from the capital investments made by the TOT and captures most of the profits from the very highly priced overseas transmission. For example, in the coming 3.0 million line expansion, the CAT will receive a tremendous gift of additional customers, calls, and profits without investing any funds in marketing or capital infrastructure. These additional profits could have been used by the TOT to finance domestic expansion of its network.

In most countries, long distance rates are used to subsidize the less profitable expansions of domestic communication. It is fair to say that domestic expansion has been slowed by the skewing of revenue in CAT's favor.

An earlier team of consultant proposed that TOT and CAT merge into one company. This recommendation would offer significant economic benefits to the RTG. Specifically, it could significantly increase the funds available for reinvestment, speed the rate of expansion of the telecommunications sector, and lower the overall costs of expansion to the RTG and its citizens.

Just as the MOTC established the TOT as a separate entity in order to better enable it to meet the demands of the market some 36 years ago, now it is time to mate the structure more flexible through privatization to enable it to meet the challenges of the coming decades.

To summarize, the TOT's ability to set prices, to establish wages and salaries, to control costs, to expand product lines, to invest in capital equipment, and to diversify are regulated by a number of ministries within the RTG. These regulations burden the TOT with additional costs of doing business, slow down ability to make decisions, limit the amount of capital it can invest, and artificially inflate its costs. As the market is supply constrained, the net effect is to hinder growth and development in Thailand.

2. FINANCIAL HISTORY 1985 - 1989

A. Revenue and Profitability

The TOT has significantly expanded sales in the last five years. As can be seen in Table A, Income Statement, total revenues have increased by 164 percent from Baht 5 billion to Baht 13.2 billion.

125

The bulk of these revenues have from basic telephone services. As operating expenses increased by a slower amount, EBIT increased dramatically during this period. EBIT grew from Baht 2.5 billion to Baht 8.2 billion, an increase of 228 percent. These numbers would be superb were it not for the high growth rate of the Thai Economy and the problem of unmet demand.

B. Assets and Liabilities

The balance sheet of the TOT has improved dramatically over the last five years. As can be seen in Table B, Balance Sheet, long term assets have almost doubled from Baht 20 billion in 1985 to Baht 38.3 billion in 1989. Current assets and cash increased only 22.2 percent from Baht 6.3 billion to Baht 7.7 billion. While long term liabilities increased from Baht 19 billion to Baht 33.6 billion over the period, shareholder's equity has more than doubled from Baht 5.9 billion to Baht 12.9 billion.

Table E, Cash Flow Analysis, shows that during the five year period, the TOT invested over Baht 25.5 billion in fixed assets for its operations. This is substantial, but it pales in comparison to the Baht 150 billion that will be invested by the CP/BT Group over the next seven years.

The TOT has substantial physical assets in the form of lines, access rights, and real estate. Its primary asset, however, and one that is not recognized on the balance sheet is its virtual monopoly on local telecommunications in Thailand. This gives it tremendous revenue stability, an ability to handle higher debt to equity ratios, and an ability to command a premium in the capital market were it to go to a share issue.

C. Financial Analysis

Closer examination of the TOT's finances indicates that TOT generates substantial amounts of cash which can be reinvested in expansion. As each additional line is installed its operating costs per line decline and its margins increase. This is because of technology improvements and an absorption of excess labor within the company.

As can be seen in Table E, Cash Flow Analysis, net cash from operations increased from Baht 331 million in 1985 to Baht 6.6 billion in 1989. Table G shows that Operating margins jumped from 39 percent in 1985 to 59.2 percent by 1989.

General analysis of most liquidity ratios shows that TOT has improved its performance significantly since 1985. Table F , Short Term Liquidity Analysis, shows that working capital was managed much more effectively during this period. Collection periods dropped from 91 days to 68, inventory stocks were cut back to 47 days versus 167 in 1985. Finally, TOT cut 143 days off the time it took to turn its investment into cash--down from 259 days in 1985 to 116 days by 1990.

The driving cause for this improvement was the need to free up cash for reinvestment in fixed assets. Essentially, management began using its capital more efficiently and was able to internally finance a greater number of line expansions. Still, self-financing only went so far and the TOT continued to borrow externally.

Despite an increase in long-term debt during the period of Baht 11 billion, the TOT showed significant improvement in its debt to equity ratio. As Table H, Capital Structure and Long-Term Solvency Ratios, shows TOT lowered its debt to equity ratio from 3.32 to 2.61 during the period. Because of its high margins, earnings to interest expense was a healthy 2.45 in 1989 versus a weak .05 in 1985.

Given the steadiness of earnings and revenue growth and the high margins, TOT can manage a fair amount of leverage on its balance sheet. This is important to remember as TOT must invest heavily to meet unmet demand, repay debt, and , if privatized, pay dividends.

D. Preliminary Estimates of Valuation

The following section describes the potential value of the TOT to prospective investors based on various methods of valuation. The figures are rudimentary and would require substantially greater analysis than this report can go into. Nonetheless, the figures give a range of values that can be considered.

The book value of the TOT, the net value of its assets less its liabilities, is Baht 12.882 billion. This indicates the minimum price the RTG would entertain in issue shares to the public because of the political difficulty of doing so, despite market conditions. This is the "bench mark" value.

As shown in Table J, Return on Investment Analysis, given a price to earnings ratio of 15, the TOT would command a value of Baht 74 billion. With a debt to equity ratio of 1 to 1, the TOT could potentially raise Baht 141 billion were it completely privatized. This would cover the Baht 150 billion that the CP/BT group plans to raise, but it still will be enough to develop all the lines required for the coming 25 years.

The TOT has tremendous potential as a profit-making, publicly traded company. It may have additional value that can be realized through the capital markets. First, the price earnings model has not factored in the significant expansion of revenues expected in the coming 25 years. The TOT may be able to sell at a higher than

121

15 to one P/E. Either because of an improvement in the market as a whole or as recognition of its growth potential and its ability to better manage costs under private sector management and regulations. So, investors may be willing to pay substantially more than the Baht 75 billion that we have assumed due to their expectations of large and steadily increasing profits.

Second, given the monopoly position of the TOT, its steady earnings stream, and it high margins, it could raise perhaps more debt capital. The one-to-one debt to equity ratio, may be too conservative, given the TOT's ability to manage its earnings. Perhaps, in time, the TOT could further leverage its equity to 1.5 or 2.0 to 1.

This upside potential, which is quite substantial, needs to be balanced by investor perceptions of management capability to manage such a large expansion in business as well as the political and currency risks associated with investing in Thailand. For foreign investors, the TOT/CAT merger would overcome some of the concerns related to foreign currency due to CAT's ability to earn foreign exchange.

3. STATUS OF PRIVATIZATION ACTIVITIES

A. Actions Taken to Date

The TOT has undertaken a number of privatization actions during the last five years. these include: contracting out non-essential services such as security and cleaning services to the private sector. TOT has also engaged in joint ventures with private companies to provide specialized services such as paging and cellular telephone.

B. Activities under Consideration

The TOT has developed a method of increasing telephone lines by having private consortiums build, transfer, and operate additional telephone lines. Currently, it is working on a three million line project with the CP/BT Group. In addition, it is considering setting up specialized subsidiaries to handle specialized technical problems such as computer services which require more flexibility and personnel compensation than the TOT can manage under its present regulatory framework.

III. PRIVATIZATION OPTIONS AND STRATEGY

In addition to share issues, the TOT has a number of options that it can pursue. Organizationally, as mentioned above, it can contract out services to other groups rather than performing the

123

service itself. There is room here for additional specialized telecommunications services.

The TOT could also consider joint-ventures in which it established minority share positions in a company to provide certain services. The private partner would finance the investment and lease the products to TOT. This might be leasing of lines built by another group, leasing of computers and specialized hardware, and the like.

In terms of policy options, the RTG could eliminate the monopoly status of the TOT by giving franchise rights on a regional or service basis to other companies. For example, a franchise could be granted to develop to take over existing operations in a province and to add services there. The USA for example has a number of regional telephone companies to handle local communications as well as several, private long-distance carriers.

Financially, the TOT could do a partial or full share issue as discussed or sell a portion of the TOT to a telephone consortium in a private placement. A foreign partner could be very attractive both for the capital it would bring to the TOT but also for its technical and management expertise. The TOT will need assistance in managing the necessary expansion of its operations.

The team believes that a share issue along with some increase in the number of telecommunications service providers provides the best combination of benefits and safeguards for the RTG.

The RTG can structure the offer to insure that the TOT is not controlled by any local or foreign block, raise substantial sums of capital for reinvestment, and distribute the ownership of the TOT to the citizens of Thailand. This would take the form of a broad-based public share offering with restrictions on percentage of total shares that could be owned or controlled by any one group or individual. The broad-based approach, involving several hundred thousand shareholders, would be one way to broaden the capital market, raise substantial equity capital, and distribute ownership among the citizens of Thailand.

The addition of other companies into the market allows for the mobilization and dedication of additional capital and management teams in the telecommunications sector. This might take the form of regional telephone companies, franchises to manage telephone lines or specialized services, multiple long-distance carriers, and the like. Finally, a combination of the telecommunications portion of CAT and TOT, or allowing TOT to joint venture with another long-distance carrier, could make a more valuable company that would be able to finance a greater proportion of Thailand's needs.

129

2. CRITICAL RISKS AND PROBLEMS OF PRIVATIZATION

There are risks to privatization. For our purposes, we can categorize the risks as follows: business, human, regulatory, competitive, and financial.

Privatization will not add substantial business risk to the TOT. Indeed it will most likely lower the risks. This is because the TOT can be more responsive to the market given the lower number of restrictions. Increasingly, competition and service in business is becoming "time-based." The ability to deliver service, solve a problem, or enter a market quickly should be improved.

There is a risk on the human resources side of the picture. Unskilled and semi-skilled labor may find that it will need to become more productive to maintain its wage premiums vis-a-vis the private sector. This is partially solved by the increase in fixed assets that can be financed with the additional capital. Labor will be more productive in most cases and compensation packages can be maintained. This will probably not hold true for such unskilled labor positions such as janitors, messengers, etc.

There is a regulatory risk. The regulatory authority that needs to be established and its flexibility in reviewing rates will be important to insuring the TOT's continued profitability and ability to attract capital. As TOT's average costs continue to decline given its increases in productivity, the issue is not so much of obtaining rate increases as it is of preventing rate cuts.

Competitive risks for the TOT remain minimal in any case, assuming that the TOT maintains its monopoly position over local telecommunications. The RTG, however, might wish to consider the benefits of promoting competition in this sector on a regional or product basis as a means of spurring additional investment and development. In that event, while the upside potential of the TOT might be restricted, the security of its earnings might still be protected. The net benefit would be to increase the capital and resources devoted to the sector.

Finally, there is a financial risk of privatization. The TOT would not be able to fall back on government loans and so would absorb more financial risk. A depression might slow down the TOT and its ability to finance expansion of its lines. Even so, few business or households would be expected to eliminate their use of telephone services during hard times and even if they did, the unmet demand would absorb any lines that would become available. A depression might even increase revenues as persons would substitute less expensive telephone calls for travel. Financial risks appear to be minimal.

130

3. PRIVATIZATIONRECOMMENDATIONS

1. The TOT should be reorganized as a corporation in preparation for a share issue.

2. The RTG should develop a communications program to discuss privatization with the management and unions of the TOT as a means of generating their support.

3. The RTG should conduct a share issue of the TOT at its earliest opportunity.

4. After the share issue, the TOT should leverage its equity with debt instruments, possibly convertible bonds.

5. The RTG should consider opening up sections of the local telephone market on a regional or product basis.

Suggested Financing

Securities Offered:	Common stock equivalent to 10 percent of TOT shares
Price:	Baht 25 to 100 per share
Discounts:	Employees and management: up to $18 million at 25% discount (18,000 times $1,000)
	Low-income citizens: 20 percent.

IV. ACTION PLAN

The action plan described below borrows heavily from the one described in Thailand Telecommunications: A Strategy for Privatization, The Center for Privatization, April 1990. The following timetable assumes that the simplest strategy, privatizing TOT, will be chosen. For a schedule that deals with a merged TOT/CAT and a large, minority share position by a foreign company, please refer to the above report.

Indicative Timetable

Month

1 Cabinet considers overall RTG privatization policy

2 Overall RTG privatization policy announced.

Cabinet considers telecommunications privatization proposals.

3 Strategy for telecommunications privatization announced.

Legal and accounting work begins in respect of:

- Incorporation of TOT under the Public Company Act (1978)
- Regulatory system

(Note - studies related to these should be undertaken even prior to a government decision to proceed, so that the legal conclusion can be brought about with the least delay)

Asset valuations begin.

Public relations activities begin.

Development plan, assuming adequate capital availability, for the next five years, finalized.

4 Ongoing legal and accounting work, asset valuation exercise, publicity and preparation of prospectus.

Board expanded to include local private sector member.

New auditor appointed.

Completion of prospectus.

5 Meet with concerned parties, manage publicity.

132

Work on share offer begins.

6 Plan for public share offer within six months announced.

10 Employee share scheme announced.

12 Shares offered locally and abroad.
(After, government retains about 75 %)

18 Shares offered locally and abroad.
(After, government retains about 50 %)

24 Debt instruments offered.

Thereafter

Company goes to the market from time to time for additional capital for expansion.

122

Table A: Income Statement

Telephone Organization of Thailand

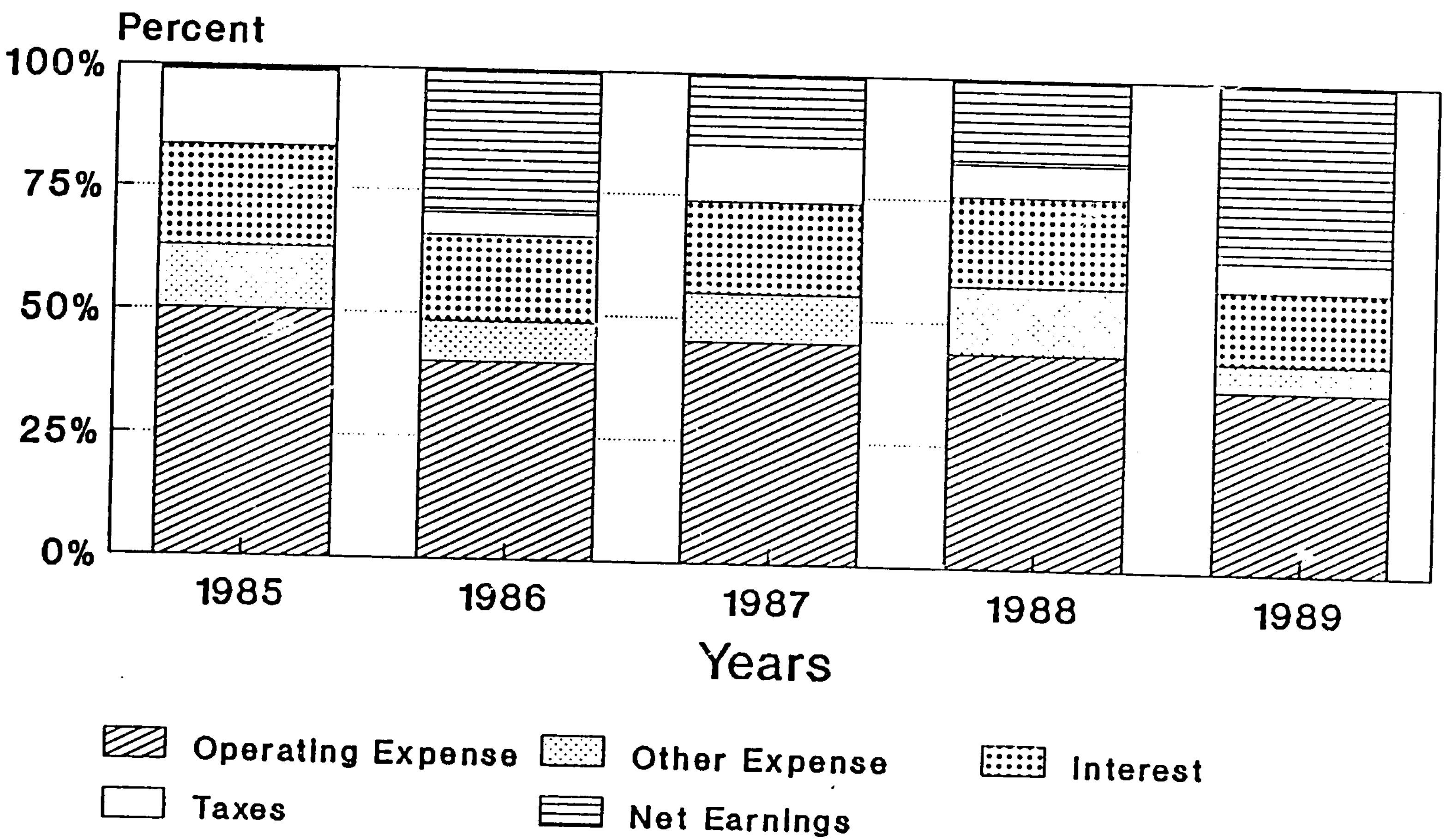
(In thousands of baht)

	1989	1988	1987	1986	1985
Revenue from Telephone Service	13,206,218	11,038,602	9,406,503	7,828,027	5,216,537
(Depreciation and Amortization)	1,911,742	2,078,376	1,714,215	971,017	687,283
Total Operating Expenses	5,030,129	4,919,936	4,305,276	3,250,350	2,756,802
Operating Income	8,176,089	6,118,666	5,101,227	4,577,677	2,459,735
Other Income	389,977	252,239	146,855	277,256	288,453
Other Expense	750,780	1,566,287	931,607	666,027	711,370
Earnings before Interest and Taxes	7,815,286	4,804,618	4,316,475	4,188,906	2,036,818
Interest	2,027,555	2,076,948	1,812,182	1,425,721	1,127,148
Earnings before taxes	5,787,731	2,727,670	2,504,293	2,763,185	909,670
Taxes on earnings*	818,500	751,300	1,105,300	370,000	850,000
Net earnings	4,969,231	1,976,370	1,398,993	2,393,185	59,670
Dividends Paid					
Memo: Interest as a Percent of Net Earnings	40.8%	105.1%	129.5%	59.6%	1889.0%

Note: * Remittance to the Treasury

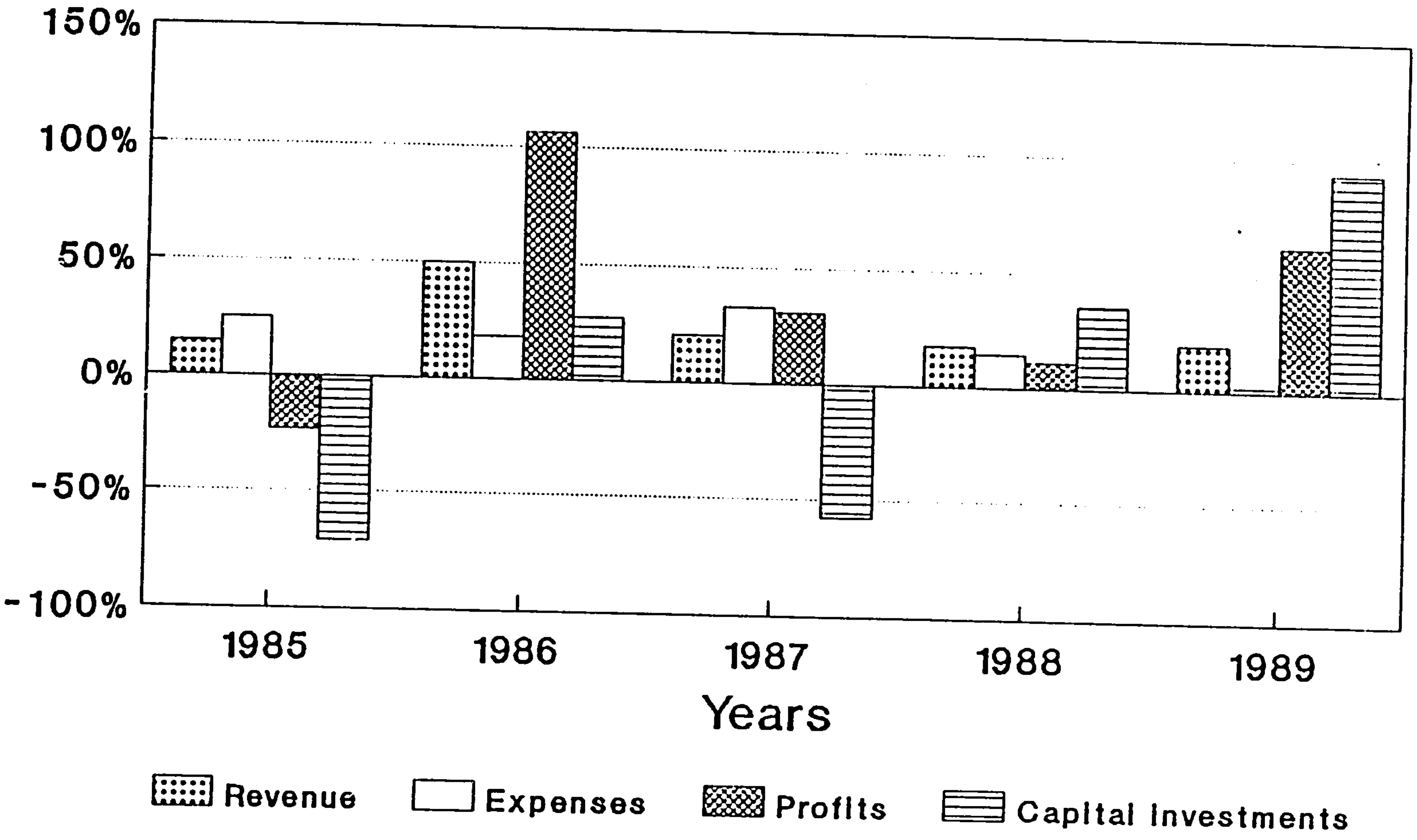
Telephone Organization (TOT)

Operating Margins



135

Telephone Organization (TOT)
Annual Percentage Changes



138.

Table B: Balance Sheet

Telephone Organization of Thailand

(in thousands of baht)

	1989	1988	1987	1986	1985
Current Assets:					
Cash and Cash Equivalents	2,977,749	1,181,846	544,906	1,058,548	2,411,071
Receivables	2,526,458	2,217,838	1,977,213	1,782,972	1,324,156
Inventories	1,757,494	1,588,053	1,481,742	2,101,100	2,429,215
Prepaid Expenses		0	0	0	0
Other Current Assets	444,078	294,983	222,279	215,693	112,209
Total Current Assets	7,705,779	5,282,720	4,226,140	5,158,313	6,276,651
Long Term Assets:					
Fixed Assets, Net	38,333,532	31,908,193	28,596,506	26,154,068	20,400,511
Investments		0	506	506	506
Other LT Assets	4,334,129	2,966,561	1,712,766	1,383,405	1,216,762
Total Long Term Assets	42,667,661	34,874,754	30,309,778	27,537,979	21,617,779
Total Assets	50,373,440	40,157,474	34,535,918	32,696,292	27,894,430
Current Liabilities:					
Accounts and Notes Payable	892,814	710,155	529,700	1,081,549	963,145
Current Portion of LT Loans	1,890,804	1,735,343	1,401,256	1,480,421	1,156,565
Other Current Liabilities	1,087,820	886,085	719,760	539,673	477,727
Total current liabilities	3,871,438	3,331,583	2,650,716	3,101,643	2,597,437
Long Term Liabilities:					
Long Term Debt	27,896,510	25,315,333	23,015,097	20,727,661	16,895,653
Other Long Term Liabilities	5,723,329	4,451,585	3,701,165	3,086,226	2,541,859
Deferred Income Taxes		0			
Total Long Term Liabilities	33,619,839	29,766,918	26,716,262	23,813,887	19,437,512
Total Liabilities	37,491,277	33,098,501	29,366,978	26,915,530	22,034,949
Stockholders' Equity					
Capital Stock	807,648	748,703	695,583	628,471	586,174
Retained Earnings	16,425,705	11,800,277	10,114,414	9,017,019	6,762,999
Deferred Loss of Foreign Exchange	(4,351,190)	(5,490,007)	(5,641,057)	(3,864,728)	(1,489,692)
Total Stockholders' Equity	12,882,163	7,058,973	5,168,940	5,780,762	5,859,481
Total Liabilities and Equity	50,373,440	40,157,474	34,535,918	32,696,292	27,894,430

Table C: Operating Performance

Telephone Organization of Thailand

(in thousands of baht)

	1989	1988	1987	1986	1985
Revenue	13,206,218	11,038,602	9,406,503	7,828,027	5,216,537
Percent Change	19.6%	17.4%	20.2%	50.1%	14.2%
Operating Income	8,176,089	6,118,666	5,101,227	4,577,677	2,459,735
Percent Change	33.6%	19.9%	11.4%	86.1%	4.4%
Operating Margin	61.9%	55.4%	54.2%	58.5%	47.2%
EBIT	7,815,286	4,804,618	4,316,475	4,188,906	2,036,818
Percent Change	62.7%	11.3%	3.0%	105.7%	-23.7%
EBIT Margin	59.2%	43.5%	45.9%	53.5%	39.0%
Pre-Tax Income	5,787,731	2,727,670	2,504,293	2,763,185	909,670
Pretax Margin	43.8%	24.7%	26.6%	35.3%	17.4%
Tax	818,500	751,300	1,105,300	370,000	850,000
Tax Rate	14.1%	27.5%	44.1%	13.4%	93.4%
Net Income	4,969,231	1,976,370	1,398,993	2,393,185	59,670
Percent Change	151.4%	41.3%	-41.5%	3910.7%	-95.8%
After Tax Margin	37.6%	17.9%	14.9%	30.6%	1.1%

Table D: Valuation

Telephone Organization of Thailand

(in baht)

	1989	1988	1987	1986	1985
Average Shares Outstanding*	100,000,000	100,000,000	100,000,000	100,000,000	100,000,000
Sales per share (SPS)	132	110	94	78	52
Percent change in SPS	19.6%	17.4%	20.2%	50.1%	NA
Earnings per share (EPS)	50	20	14	24	1
Percent change in EPS	151.4%	41.3%	-41.5%	3910.7%	NA
Cash Flow from Operations per Share (CFOPS)	66	40	39	37	3
Percent change in CFOPS	64.2%	3.5%	7.0%	1000.8%	NA
Dividends per share (adjusted)	0.00	0.00	0.00	0.00	0.00
Book Value per Share (BVPS)	129	71	52	58	59
Percent Change in BVPS	82.5%	36.6%	-10.6%	-1.3%	NA

* Hypothetical. TOT is not a corporation and has no shares at present.

Table E: Cash Flow Analysis

Telephone Organization of Thailand

(in thousands of baht)

	1989	1988	1987	1986	1985
Cash Provided by Operations:					
Net Income	4,969,231	1,976,370	1,398,993	2,393,185	59,670
Depreciation and Amortization	1,911,742	2,078,376	1,714,215	971,017	687,283
Increase in Deferred taxes	0	0	0	0	0
Changes in Working Capital:					
(Increase) decrease in A/R	(308,620)	(240,625)	(194,241)	(458,816)	116,736
(Increase) decrease in Inventory	(169,441)	(106,311)	619,358	328,115	(523,694)
(Increase) dec. in Oth Cur Assets	(149,095)	(72,704)	(6,586)	(103,484)	(14,080)
(Decrease) increase in Payables	182,659	240,625	194,241	458,816	(116,736)
(Decrease) inc. in Other Cur. Liab.	201,735	166,325	180,087	61,946	122,480
Net Cash Provided by Operations	6,638,211	4,042,056	3,906,067	3,650,779	331,659
Cash (Used in) Investing Activities:					
Increase in Net Fixed Assets	(6,425,339)	(3,311,687)	(2,442,438)	(5,753,557)	(4,540,610)
Increase in Investments	0	506	0	0	2,494
Increase in Other LT Assets	(1,367,568)	(1,253,795)	(329,361)	(166,643)	162,424
Net Cash (used in) Investing	(7,792,907)	(4,564,976)	(2,771,799)	(5,920,200)	(4,375,692)
Cash Flows from Financing					
Increase in LT Debt	2,425,716	1,966,149	2,366,601	3,508,152	5,206,085
Payment of Dividends	0	0	0	0	0
Net cash flow from Financing	2,425,716	1,963,149	2,366,601	3,508,152	5,206,085
Net increase (decrease) in Cash	1,271,020	1,443,229	3,500,869	1,238,731	1,162,052
Memo:					
Cash PBO as Percent of Net Income	133.6%	204.5%	279.2%	152.5%	555.8%

Table F: Short Term Liquidity Analysis

Telephone Organization of Thailand

	Descriptions	Units	1989	1988	1987	1986
1.	Current Ratio	Ratio	1.99	1.59	1.59	1.66
2.	Acid-Test Ratio	Ratio	1.42	1.02	0.95	0.92
3.	Accounts Receivable Turnover	Times	5.57	5.26	5.00	5.04
4.	Inventory Turnover	Times	7.89	7.19	5.25	3.46
5.	Collection Period for Ending A/R	Days	68.87	72.33	75.67	82.00
6.	Days to Sell Ending Inventory	Days	47.91	51.79	56.71	96.63
7.	Conversion Period	Days	116.78	124.12	132.38	178.62
8.	Cash to Current Assets	Percent	38.6%	22.4%	12.9%	20.5%
9.	Cash to Current Liabilities	Percent	76.9%	35.5%	20.6%	34.1%
10.	Working Capital	Baht	3,834,341	1,951,137	1,575,424	2,056,670
11.	Cash Provided by Operations to Current Liabilities	Percent	171.5%	121.3%	147.4%	117.7%

Table G: Return on Investment Analysis

Telephone Organization of Thailand

		1989	1988	1987	1986	1985
1.	Return on Average Equity *	49.84%	32.33%	25.55%	41.12%	0.90%
	a. EBIT Margin	59.18%	43.53%	45.89%	53.51%	39.05%
	b. Asset Turnover	0.29	0.30	0.28	0.26	0.21
	c. Interest Burden	4.48%	5.56%	5.39%	4.71%	4.51%
	d. Financial leverage *	4.54	6.11	6.14	5.21	3.79
	e. Tax retention rate	85.86%	72.46%	55.86%	86.61%	6.56%
2.	Return on Average Total Assets	14.82%	9.32%	7.17%	11.98%	0.53%
3.	Return on LT Liabilities and Equity	16.11%	10.13%	7.84%	13.22%	0.59%
4.	Equity Growth Rate *	49.84%	32.33%	25.55%	41.12%	0.90%

NOTES:

1.	Return on Average Equity = [((axb)-c)xdxe]	49.8%	32.3%	25.6%	41.1%	0.9%

d. = Average Assets to Equity

4. = Return on Equity - Dividend Payout Rate

Table H: Capital Structure and Long-Term Solvency Ratios

Telephone Organization of Thailand

		1989	1988	1987	1986	1985
1.	Total Debt to Equity	2.91	4.69	5.68	4.66	3.76
2.	Total Debt to Total Debt plus Equity	0.74	0.82	0.85	0.82	0.79
3.	Long Term Debt to Equity	2.61	4.22	5.17	4.12	3.32
4.	Total Equity to Total Debt	0.34	0.21	0.18	0.21	0.27
5.	Fixed Assets to Equity	2.98	4.52	5.53	4.52	3.48
6.	Current Liabilities to Total Debt	0.10	0.10	0.09	0.12	0.12
7.	Ratio of Earnings to Interest Expense	2.45	0.95	0.77	1.68	0.05
8.	Cash from Operations to Interest Exp.	3.27	1.95	2.16	2.56	0.29

Table I: Asset Utilization Ratios

Telephone Organization of Thailand

		1989	1988	1987	1986	198
1.	Sales to Cash and Equivalents	4.43	9.34	17.26	7.40	2.1
2.	Sales to Receivables	5.23	4.98	4.76	4.39	3.9
3.	Sales to Inventories	7.51	6.95	6.35	3.73	2.1
4.	Sales to Working Capital	3.44	5.66	5.97	3.81	1.4
5.	Sales to Fixed Assets	0.34	0.35	0.33	0.30	0.2
6.	Sales to Other Assets	3.05	3.72	5.49	5.66	4.2
7.	Sales to Total Assets	0.26	0.27	0.27	0.24	0.1
8.	Sales to Short-Term Liabilities	3.41	3.31	3.55	2.52	2.0

Table J: Value of Share Offering

Telephone Organization of Thailand

Percent of Company Offered:

P/E Multiple	Share Price (baht)	5.0%	7.5%	10.0%	20.0%	100.0%
		(in thousands of baht)				
10	497	2,484,616	3,726,923	4,969,231	9,938,462	49,692,310
15	745	3,726,923	5,590,385	7,453,847	14,907,693	74,538,465
20	994	4,969,231	7,453,847	9,938,462	19,876,924	99,384,620
25	1,242	6,211,539	9,317,308	12,423,078	24,846,155	124,230,775
30	1,491	7,453,847	11,180,770	14,907,693	29,815,386	149,076,930
	($US)	(in thousands of $US)				
10	$19.88	$99,385	$149,077	$198,769	$397,538	$1,987,692
15	$29.82	$149,077	$223,615	$298,154	$596,308	$2,981,539
20	$39.75	$198,769	$298,154	$397,538	$795,077	$3,975,385
25	$49.69	$248,462	$372,692	$496,923	$993,846	$4,969,231
30	$59.63	$298,154	$447,231	$596,308	$1,192,615	$5,963,077

Table K: Miscellaneous Comparisons

Telephone Organization of Thailand

Employee Productivity	1989	1988	1987	1986	1985
1. Number of employees	18,253	17,956	17,746	17,399	16,926
2. Revenue per employee (baht)	723,509	614,758	530,063	449,912	308,197
3. Earnings per employee (baht)	272,242	110,067	78,834	137,547	3,525
4. Assets per employee (baht)	2,759,735	2,236,438	1,946,124	1,879,205	1,648,023
5. Shareholder Equity/employee (baht)	705,756	393,126	291,274	332,247	346,182
6. Lines	1,493,438	1,385,680	1,251,102	1,008,009	830,480
7. Stations	1,158,014	1,005,872	901,622	798,912	626,498
8. Lines installed	107,758	134,578	243,093	177,529	259,661
9. Lines per employee	81.82	77.17	70.50	57.93	49.07
10. Lines per employee	63.44	56.02	50.81	45.92	37.01
Growth at Current Prices					
1. Gross National Product	19.24%	18.90%	12.98%	7.56%	3.62%
2. Transport and Communications	15.56%	14.85%	8.78%	9.35%	NA
TOT Growth Rates					
1. Revenues	19.6%	17.4%	20.2%	50.1%	14.2%
2. Lines	7.78%	10.76%	24.12%	21.38%	45.49%
Relative Growth of Revenues					
1. To GNP	2.05%	-8.20%	55.35%	562.19%	292.68%
2. To Transport & Communications Sector	26.22%	16.80%	129.61%	435.59%	NA
Relative Growth of Lines					
1. To GNP	-59.58%	-43.09%	85.79%	182.76%	1156.61%

THAI PLYWOOD COMPANY

Summary.

The study team recommends that the RTG consider a public sale of shares in Thai Plywood Company (TPC), a 100 percent state owned enterprise (SOE) since inception in 1952. Part of the offering would be used to finance approximately Baht 900 million expansion of the company's hardboard production. The proposed sale of 51 - 60 percent of this profitable company would be part of the Government's growing reliance on the private sector to play a more important role in the financing, management and ownership of SOEs.

The company's plans are to expand its hardboard capacity by 50 percent. An internal feasibility study now underway indicates that the cost of this expansion would be approximately 900 million baht, or about $US 35 million. The expansion is expected to raise revenues by an estimated 30 percent.

One of the medium sized SOEs, Thai Plywood continually operates at full capacity making hardboard, regular and marine plywood and flush doors. It produces 1.5 million sheets of plywood, 60,000 tons of hardboard, and 120,000 flush doors annually.

Hardboard production is the fastest growing and most profitable line of business. It supplies 70 percent of Thailand's hardboard, and exports this product to the USA, Europe and other countries.

The management of TPC is looking at different financing alternatives to expand this line, including the possibility of share issue to raise new capital. Team interviews with the union indicated a possible interest in a share issue depending on the nature of the employee share scheme and adequate provision for a continuation of the good management of the company and job security. Unlike Thai International or EGAT, the team does not recommend that the privatization be done in a broad - based populist mode. An offering would have to be several times this size to be large enough to justify a widespread campaign to promote the stock.

A share sale to raise the required capital could be sold to institutions and traditional investors. Such investors would need to be persuaded through the prospectus and road shows that Thai Plywood's expansion plans are indeed feasible, and that their dominance in the market is not derived from any advantages it might have as an SOE.

The share sale is proposed to be accompanied by three new worker benefits. The first new benefit is a stock purchase plan for employees. The plan would sell approximately 4 - 7 percent of the new stock to workers at about a 10 percent discount. It would also include an interest free loan for workers to pay for their stock over three years. The second new benefit is a job guarantee program. Under this proposal, workers over 40 years of age on December 31, 1990 would be guaranteed their jobs at current wage, salary and benefit levels until retirement. Younger workers would have the guarantee as long as the company remains in business.

The third new benefit would be an expansion of TPC's current education benefit program which, at present, equals approximately 2.2 percent of annual wage and salary payroll.

TPC's management and union are now considering the stock offering proposal outlined by the study team.

The Company.

Thai Plywood's financial performance ranks consistently in the middle of the 61 SOE's. In 1989 it was 25th in equity, 26th in pre - tax profits, 29th in assets, and 30th in revenues. It ranks 26th in terms of employment. It continually operates at full capacity making hardboard, regular and marine plywood and flush doors. It supplies 70 percent of Thailand's hardboard, it exports its world class hardboard to USA, Germany, Belgium, the Netherlands, Malaysia, Indonesia, Hong Kong, Japan and Taiwan. It also sells 10 percent of its total production to its own government through independent dealers throughout the country.

TPC is the only wood manufacturer in Thailand that has incurred the initial expense and maintained the quality control to manufacture with a "Certification of National Quality Standard" This standard provides important brand recognition in Thailand and helps RTG's purchasers to buy its products without complex requirements to justify the quality. The best of its three grades of plywood and flush doors are the best in the country.

Raw materials are obtained in nearby countries now, while tree farms are being developed in Thailand. Forest cutting was banned indefinitely in Thailand, even on tree farms, in 1989. Now, independent Thai traders obtain plentiful supplies of logs from lush tropical forests in nearby countries of Malaysia, Burma and Papua New Guinea. TPC buys imported logs from these traders, and resells some of them; such resales generated 5 percent of gross revenues in 1984 and 11 percent in 1988 and 1989. Supplies seem adequate for the next few years, but ecological concern could close certain sources of logs in later years.

Hardboard production, the fastest growing and most profitable

143

portion of TPC's business, can be supplied from the expanding tree farms in Thailand. Hardboard uses small diameter trees three to four years old. Plentiful supplies of these trees are now available externally. They are also available from tree farms in Thailand now, but can't be cut until the cutting ban is modified, at least for tree farms. The government is expected to continue to own a substantial portion of TPC's stock and so it will have a clear interest in ensuring supplies of logs.

Thai Plywood's history of cooperative relations between labor and management have resulted in capacity production of its three products for the last four years. Capacity is 60,000 tons of hardboard, 1.5 million sheets of plywood, and 120,000 flush doors. Approximately 35 percent of the hardboard is exported. Small quantities of flush doors are being exported to Japan for the first time this year.

Net earnings has improved steadily from a negative Baht 35 million in 1985 due to the recession, to Baht 92.6 million in 1989, as noted in the summary of past financial performance contained in the exhibits at the end of this report. Reference to Exhibit I indicates that net earnings are estimated to reach Baht 115.2 million in 1990, or Baht 1,440 a share. Controlled prices of plywood were raised in 1986 and 1987. These two price increases plus steady inventories in 1986 -87 produced record cash flow and earnings per share during those years.

Earnings declined 60 percent and cash flow precipitously in 1988 due to a dramatic 16 percent increase in expenses coupled with only a 4 percent increase in revenues. The much higher operating expenses resulted from TPC's accelerated timber harvesting efforts and inventory build-up in 1988. These efforts were designed to take advantage of the RTG granting of an unusually large number of timber cutting concessions just before banning timber cutting indefinitely in 1989. Since the timber cutting ban, TPC has maintained a much greater inventory of logs and other raw materials to insure against shortages. TPC has virtually no debt. The long term debt of Baht 17.29 million is less than one percent of its equity.

The company plans are to expand its hardboard capacity by 200 percent. The expansion will probably raise sales revenues a similar amount on hardboard, its highest margin (above 18.5 percent) product, and also its major export product. Two competitors in Thailand produce hardboard, but the market is large enough for the output of all three companies. The other two companies are closer to forest supplies, but have a lower quality product that is not exported.

Exhibit I

Thai Plywood Estimates, 1990

	(Baht '000)
1. Total Sales	1074.00
2. Other Income	16.00
3. Operating Costs	870.00
	-------
4. Total Gross Profit	220.00
5. Depreciation	28.00
	-------
6. Income from Operations	192.00
7. Pension (Fully funded)	0.00
8. Interest	12.00
9. Income before Taxes	180.00
10. (Provision) for Income Tax (35 rate)	64.80
	--------
11. Net income (loss)	115.20
12. Dividend	12.00
Earning per Share of Stock (80,000)	1.44

TPC does not deliver any of its products. Instead, customers pick the wood products up at the factory. This practice reduces the complexity of TPC's business, and consequently is considered an advantage.

Increased hardboard production will benefit the company in three ways. First, its profit margin is the highest the company has. Second, the process is difficult for competitors to duplicate due to the very superior quality of Thai Plywood's product, so the company probably can continue to dominate the market. Third, the process uses small trees that grow to useful sizes in two to four years, so supplies should remain plentiful.

Legal and Regulatory Restrictions.

The Ministry of Commerce sets the price for all plywood sold in Thailand. TPC is probably more disadvantaged by price controls than the other 25 producers of plywood in the country because the top grade of its three grades of plywood is the best in the country. This top grade of plywood is probably the most expensive to produce and would bring the highest price in a free market. Currently, the top grade is 10 percent of TPC's plywood production and sells for Baht 181 per 4X8 sheet. The middle grade of plywood is 70 percent of TPC's production and sells for Baht 179 per sheet. The lowest grade sells at Baht 175 per sheet.

TPC management estimates that the market price of its number one grade of plywood would be approximately 20 percent higher without price controls. The Ministry of Commerce reviews producers' costs of production periodically and uses them as a basis for changing prices. Its last agreement with producers was made on November 19, 1990 for 90 days.

The hardboard and flush doors have no price controls nor any other market restrictions imposed on them.

Workforce and Unionization.

Workforce.

TPC's workforce has declined from 1706 workers in 1984 to 1512 employees in 1990. The reductions have occurred through normal attrition, and were permitted to allow the company to become more competitive. The payroll classification and union/non-union status of these workers is summarized in Exhibit II.

Workers work a five and a half day, 44 hour work week. The factory is open all year, so production occurs 286 days per year.

151

Exhibit II

Payroll Classification and
Union Status of Workers

Worker Payroll Category	Union	Non-Union	Total
Salaried & Monthly	130	352	482
Daily	10	59	69
Hourly	809	152	961
Total	949	563	1512

Union Representation.

Labor is represented by one union in Thai Plywood. The union was formed in 1976, and joined the International Federation of Building and Construction Workers in 1980. Union and management have a continuous history of cooperative relations. TPC workers receive the standard salary and benefit package provided to all workers in the State Owned Enterprises. This package is determined by the Comptroller General's Office of the Ministry of Finance.

Union Criteria for Privatization.

The union is willing to consider joint ventures or share sales. Workers realize that an expansion of hardboard production would benefit the company greatly, and that the RTG has tightly controlled limits on all SOE borrowing. Hence, the TPC workforce seems to understand that some form of privatization is necessary to obtain the financing for the expansion. A joint venture is being considered with a potential Thai partner. The union representatives are willing to consider a stock offering provided that foreign interests and local political groups are not able to gain control of the company through stock purchases.

TPC's union and management are now considering the stock offering proposal prepared by the study team. As mentioned above, the proposal suggests selling at least 50 percent of TPC's equity to raise the capital needed for the expansion, for the employee loans to purchase some of the new stock, and for working capital. The proposal is discussed in detail subsequently in this report.

The Stock Issue. (Illustrative and Currently Under Management and Union Review at Thai Plywood)

The hardboard expansion would be financed with the capital raised from this stock issue. The government has a ceiling on all SOE foreign borrowing so TPC must seek other financing alternatives. A joint venture partner interested in financing the hardboard expansion, but management is willing to consider raising the Baht 800 - 1000 million needed for the plant expansion through a stock offering.

For the stock offering the study team recommends sale of 51 - 60 percent to the public and the sale of stock to Thai Plywood's workers. The Stock Purchase Plan for the equity allocated to Thai Plywood employees would be sold at a discount. The Plan provides each worker the opportunity to own the shares as illustrated in Exhibit III.

A stock issuance of this scale is sufficient to raise the capital needed for the hardboard expansion, but the company would still remain a public enterprise. If the RTG wishes to become a minority stockholder still more stock could be sold. The job guarantee program proposed below to accompany the stock offer is needed only if even more stock is sold so that the RTG does becomes a minority stockholder. Therefore, a combined share issue (creation of new shares) and offer (sale of existing stock) could be attempted.

A sale of 35 - 50 percent of the stock at a PER of 10 - 15 would provide gross receipts of Baht 800 - 1000 million. Offering expenses would reduce this gross revenue by three to five percent. In addition, a loan for employee stock purchases would reduce the gross revenue by the principal of the loan for these purchases plus the value of free shares proposed to be given to workers (see D.1. Stock Loans, below). These cost would amount to approximately another baht 100 million.

These costs plus the need for additional working capital and for TPC to become self managing comprise the rationale for the sale of 51 - 60 percent of the stock. Moreover, the addition of the new worker benefits, particularly the stock purchase plan for workers and the jobs guarantee program are necessary only if the government sells more than 50 percent of the stock.

Employee Stock Purchase Plan. (Illustrative)

Shares in the Plan are available to full - time permanent employees ("eligible Employees") of Thai Plywood Corporation who received wages or salary payments for the pay period ending December 31, 1990. Each qualifying employee regardless of seniority or years of service would be entitled to acquire up to 350 shares on a preferential basis through the Plan.

The terms of the offer are summarized in Exhibit III. For ease of accounting, each worker must take all shares in a lower numbered category before taking them in a higher numbered Category. For example, an employee must take all free shares offered in Category 1 before being eligible for Category 2 shares, and all Category 2 shares before being eligible for Category 3 shares.

Exhibit III

Thai Plywood Employee Stock Purchase Plan (Illustrative)

Category of Shares	Free Shares Minimum Purchase & Multiple of Purchase	Price to Thai Plywood Workers
1. 5	5	Free (Valued at B 1,000)
2. 45	5	2.5 Shares free for each 5 shares purchased at Offer Price Maximum of 15 free shares (Valued at B 3,000)
3. 150 Discounted Shares	10	10% Discount on Offering Price (Valued at B 3,000)
4. 150 Priority Shares	10	Offer Price
----------		
350 Shares		

Stock Loans.

Interest free loans will be available from TPC for each eligible worker to obtain his/her 350 shares at a total cost to each eligible worker of approximately 10 percent less than the initial offering price. The total cost of the stock for each worker is provisionally estimated to be Baht 63,000, or Baht 7,000 less than the initial offering price. The loans are suggested to be interest free and repaid through salary deductions over a five year period. The total value of the principal of the loans for the 1,512 eligible workers will be approximately Baht 100 million.

Workers will not be allowed to sell their shares on the open market until their loans for the shares are paid in full. If TPC funds the cost of these loans as suggested above, gross proceeds from the stock offering will be reduced by the loan amount plus the value of the free shares.

155

Unclaimed Shares.

Plan shares other than Priority shares not taken by eligible employees within one month after the initial offering will be offered to all eligible employees at a 5 percent discount. The Priority shares will be sold at the share price, but if their price on the SET has increased more than 20 percent then, plus a premium of 5 percent. No eligible employee may take more than 300 of the non - priority shares and 300 of the Priority shares each seven days after the date of the initial offering.

Job Guarantee.

The current workforce of eligible workers 40 years of age and older would be guaranteed their jobs and current levels of wages, salaries and other benefits until they retire at age 60, quit or leave TPC for some other reason if the RTG sells a majority interest in the company. Younger workers will have the same guarantee as long as TPC continues to be in business. If TPC ceases operation, however, this guarantee to these younger workers will cease.

Skills Enhancement Fund.

An education and training fund will be established to upgrade worker skills and productivity if the RTG sells a majority interest in the company. It will pay the cost of lost time from work, tuition, the cost of course books and other materials including the cost of computer rentals during the calendar period of formal courses if computer access is needed for job - related courses. It will also provide per diem expenses for courses away from home. The fund will be financed by a company contribution equal to 7.5 percent of annual wage and salary payroll. The current level of TPC's education program is 2.2 percent of payroll and the bonuses for workers and members of the board of director were 9.8 and 0.6 percent of wage and salary payroll in 1989.

The cost of the education and training fund seems reasonable since it could have a significant impact on productivity. Moreover, the slow decline in overall employment is continuing to reduce overall payroll costs. Employment declined at 2 percent per year during the period 1984-89 as the total benefit package for workers rose at a modest 4.2 percent.

Each worker will be expected to pay 20 percent of the tuition cost of any course attended and work one full day of overtime for every five full - time days of lost work due to education and training. All other costs will be reimbursed. The fund will be administered by a joint union - management team that will formulate an annual education and training plan. At least one - third of the workforce will take a formal course each year, and

156

every four years each worker will take at least one formal course lasting at least a week. Each worker's education and training activities during the year will be recorded in company records, and both the worker and supervisor will evaluate the impact of the training on work performance at the end of each year.

Public Promotion Campaign.

A stock offering of the proposed size could be easily sold to institutions and traditional investors without the need for special promotion campaigns. An offering would have to be several times this size to be large enough to justify a widespread campaign to promote the stock.

Next Steps.

Further analysis is needed of Thai Plywood's on - going feasibility study of the possible plant expansion for hardboard production. Of particular importance are the components of the feasibility study that involve:

* Market analysis of the future supply and demand for hardboard;

* Estimating costs of the expansion, and the technical productivity benefits of use of the equipment of different manufacturers;

* Analysis of the physical productivity per machine and per line of production for existing facilities, and the financial profitability of each line of production;

* Final agreement of management, the union and the Ministry of Finance on the terms of the stock offer, including the employee stock purchase plan, job guarantees for workers, and the education and training program;

* Cabinet considers the TPC privatization plan;

* Preparation of final cost requirements for the hardboard expansion and the other aspects of the offering;

* Overall privatization policy announced;

* Legal and accounting work begins to:

    - Prepare for the issue of new shares, and

    - value the assets;

* Public relations activities begin;

* Preparation of a business plan for the next five years;

* Expansion of the board of directors to include private sector members;

* Appointment of a transfer agent and new auditor;

* Completion of tender documents;

* Auditor's report prepared;

* Government tenders its shares in TPC to the transfer agent;

* Announcement of the plan for the share offer;

* Announcement of the employee share scheme;

* Preparation of the prospectus and other offering documents and securing the necessary institutional arrangements to execute the stock offering.

* Public relations work begins;

* Shares are offered locally and abroad;

158

Table A: Income Statement

Thai Plywood Co.,Ltd.

(in millions of baht)

	1989	1988	1987	1986	198
Revenue	917.040	884.240	849.730	687.640	625.00
(Depreciation and Amortization)	22.460	20.830	21.220	22.850	24.44
Total Operating Expenses	754.740	742.480	642.020	641.920	618.80
Operating Income	139.840	120.930	186.490	22.870	-18.240
Other Income	21.130	13.790	19.070	18.960	13.910
Other Expense	0.000	0.000	0.000	0.000	0.000
Earnings before Interest & Taxes	160.970	134.720	205.560	41.830	-4.330
Interest	16.580	12.530	9.660	20.870	30.330
Earnings before taxes	144.390	122.190	195.900	20.960	-34.660
Taxes on Earnings*	51.820	45.180	70.280	3.140	0.000
Net earnings	92.570	77.010	125.620	17.820	-34.660
Divdnds Ernd (Paid Frstry Ind Org.)	12.000	12.000	12.000	5.000	
Memo: Interest as a Percent of Net Ear	0.179	0.163	0.077	1.171	-0.875

Note: * Remittance to the Treasury

Table B: Balance Sheet

Thai Plywood Co.,Ltd.

(in millions of baht)

	1989	1988	1987	1986	1985
Current Assets:					
Cash and Cash Equivalents	12.140	10.790	58.980	43.400	4.620
Receivables	202.040	193.580	135.140	160.020	129.860
Inventories	241.760	266.940	106.470	106.430	157.820
Prepaid Expenses	23.210	11.900	15.080	13.830	8.490
Other Current Assets	71.740	56.680	58.740	65.280	62.080
Total Current Assets	550.890	539.890	374.410	388.960	362.870
Long Term Assets:					
Fixed Assets, Net	295.110	296.810	290.110	308.080	330.090
Investments	0.000	0.000	0.000	0.000	0.000
Other LT Assets & Plantations	125.020	119.450	111.760	101.070	93.380
Total Assets	971.020	956.150	776.280	798.110	786.340
Current Liabilities:					
Accounts and Notes Payable	35.610	122.840	61.940	215.470	215.520
Current Portion of LT Loans	0.000	0.000	0.000	0.000	0.000
Other Current Liabilities	185.410	153.880	83.090	68.010	98.790
Total current liabilities	221.020	276.720	145.030	283.480	314.310
Long term liabilities:					
Long term debt	0.000	0.000	0.000	0.000	0.000
Other long term liabilities	17.290	15.300	12.480	8.380	6.320
Deferred income taxes	0.000	0.000	0.000	0.000	0.000
Total long term liabilities	17.290	15.300	12.480	8.380	6.320
Total liabilities	238.310	292.020	157.510	291.860	320.630
Stockholders' equity					
Capital stock (par Baht 1,000)	80.000	80.000	80.000	80.000	80.000
Retained Earnings, Reserves	20	20	20	20	20
Retained Earnings, Non - Reserves	632.71	564.13	518.77	406.25	388.43
Retained Earnings, Total	652.710	584.130	538.770	426.250	408.430
Deferred loss of foreign exchange	0.000	0.000	0.000	0.000	-22.720
Total stockholders' equity	732.710	664.130	618.770	506.250	465.710
Total Liabilities and Equity	971.020	956.150	776.280	798.110	786.340
	0.000	0.000	0.000	0.000	0.000

Table C: Operating Performance

Thai Plywood Co.,Ltd.

(in millions of baht)

	1989	1988	1987	1986	1985
Revenue	917	884	850	688	625
Percent Change	3.7%	4.1%	23.6%	10.0%	-14.8%
Operating Income	140	121	186	23	-18
Percent Change	15.6%	-35.2%	715.4%	-225.4%	-140.5%
Operating Margin	15.2%	13.7%	21.9%	3.3%	-2.9%
EBIT	161	135	206	42	-4
Percent Change	19.5%	-34.5%	391.4%	-1066.1%	-108.0%
EBIT Margin	17.6%	15.2%	24.2%	6.1%	-0.7%
Pre-Tax Income	144	122	196	21	-35
Pretax Margin	15.7%	13.8%	23.1%	3.0%	-5.5%
Tax	52	45	70	3	0
Tax Rate	35.9%	37.0%	35.9%	15.0%	0.0%
Net Income	93	77	126	18	-35
Percent Change	20.2%	-38.7%	604.9%	-151.4%	-388.2%
After Tax Margin	10.1%	8.7%	14.8%	2.6%	-5.5%

161

Table D: Valuation

Thai Plywood Co.,Ltd.

(in baht)

	1989	1988	1987	1986	1
Average Shares Outstanding	80,000	80,000	80,000	80,000	80,(
Sales per share (SPS)	11463.00	11053.00	10621.6	8595.50	7812
Percent change in SPS	3.7%	4.1%	23.6%	10.0%	
Earnings per share (EPS)	1157.12	962.63	1570.25	222.75	-433.
Percent change in EPS	20.2%	-38.7%	604.9%	-151.4%	I
Cash Flow from Operations per share (	621.00	167.50	2089.63	659.25	144.
Percent change in CFOPS	270.7%	-92.0%	217.0%	356.6%	r
Dividends per share (adjusted)	150.00	150.00	150.00	62.50	0.
Book Value per Share (BVPS)	9158.88	8301.63	7734.63	6328.13	5821.
Percent Change in BVPS	10.3%	7.3%	22.2%	8.7%	N

Summary and Recommendation

The team's overall conclusion is that even though several measures may be taken to improve BMTA performance over the short term, given its cost structure and other contraints, it is extremely unlikely that BMTA will ever be able to offer bus service that is equal in both profitability and quality to that of the private sector. The ultimate goal of the government should be to convert BMTA from a bus operating organization to a bus regulatory authority.

If the experience of U.S. municipalities is any guide, only through contracting out bus services does the Government have any hope of breaking the cycle of costs perpetually outpacing revenues that BMTA has experienced since it was founded.

The problem is that with nearly 23,000 employees, BMTA is an extremely large organization and could not be dismantled overnight. A combination of dilapidated fixed assets and history of losing money make it doubtful that any syndicate of investors would want it.

A more practical approach is to divest BMTA routes (and personnel) over a period of no more than seven years, and more ideally, five or six. Eighty percent of BMTA employees have been with the company since it was founded and over 90 percent are in the union. On the positive side, this implies that a large segment may be approaching retirement and the rate of attrition may increase soon. An early retirement program could serve to expedite this. In order to avoid violent union opposition, the BMTA union must be brought into this restructuring process from the very beginning.

In fact, in order to make divestiture attractive, it is in the Government's interest to ensure that a majority of employees are assured of having a place in the private companies which take over the routes. For those employees who do migrate to the private companies, the change in pay scales will be another sticky issue. One possible alternative is to offer mangement and employees the option of buying or taking over both routes and assets.

In the likely event that the proposed divestiture becomes politicized, the Government should take steps to ensure that the public is in on its side. For example, a series of interviews with the Comptroller General and other public figures could be scheduled which would be designed to lay out the Government's position. Ideally, these interviews would reveal the facts of BMTA's poor performance as well as clarify that divestment is in the public interest, since it would both improve bus service and permanently stem the flow of red ink at BMTA. A more specific plan for how the Government might best obtain the cooperation of the union in the divestiture process is worthy of more detailed study, but several initial suggestions are included here. In any case, a reasonable target would be to aim for shedding at least 10 to 20 percent of the 119 BMTA routes each year.

Because the recommended divestiture schedule for BMTA is relatively long, there are several shorter term measures that BMTA should undertake to improve its performance over the next one to three years. In this regard, some of the team's other findings and recommendations are as follows :

Since 1984, BMTA's operating loss has actually fallen, yet because of interest costs, large losses have continued. BMTA management achieved this mainly by wringing out much of the blatant inefficiency at the company over the last six years. As such, future savings would have to come through cutting staff, freezing raises, reducing bus maintenance costs or shedding unprofitable buses.

Unless a substantial number of blue buses are retired, the 1991 bus lease will not allow BMTA to achieve an operating profit in the absence of a fare increase. Retiring the buses could be justified fairly easily, since some 80 percent of the BMTA fleet is over 10 years old. In fact, there is an opportunity today to begin retiring 1,063 money losing blue buses which are above and beyond those that will be replaced by the 1991 lease.

Reintroduce automated fare collectors into buses. Possibly the use of tokens would make this practical but that should be investigated by a team of transportation experts. Since 40 percent of BMTA's workforce (or roughly 8,700 persons) is comprised of conductors, the potential cost savings of releasing them is quite large, on the order of 500 million baht per year. Natural attrition could account for a considerable portion of this downsizing, since nearly 1,300 employees leave the company each year, the vast majority because they are fired.

As suggested recently by the Working Committee on BMTA, raising fares by 1 baht, at least on the blue buses, will help stem the flow of red ink in both the BMTA and private fleets. This is mainly for the sake of the private sector fleet which is currently not allowed to run red buses and is beginning to lose money. In fact, the minibus fleets have not paid their concessions to BMTA since January and currently owe them 40 million baht ($US1.6 million). Allowing private sector companies to run red buses is advisable since it would promote competition.

Another priority is to increase revenue from both advertising and concessions. Now it is extremely low (roughly 5 percent of total revenues) and can probably be increased. With regard to concessions, BMTA could tie an increase in fares to a substantial increase (at least 30 percent) in the concession fees that the private fleets pay to BMTA. Since most of the BMTA fleet is so dilapidated, increasing advertising revenues may only be practical on the new buses due to arrive in 1991.

Background

In Bangkok, the level of quality provided and responsiveness of the BMTA to popular demand leave much to be desired. Although it has an enormous daily ridership, its fare structure is probably lower than that of any other major metropolis in the world. The vehicle fleet is shabby, conspicuously older and more run down than typical private vehicles or most taxis. Chronic overcrowding in the buses suggests that most routes are badly underserved.

Historically, private service delivery before BMTA's creation was provided by many small competing, family-owned services. Unregulated, their operation was characterized by cut-throat competition. The initial plan of the government in 1975 was to establish a public-private joint venture with the government having the controlling interest. This plan was never put into effect because the Government fell. The new cabinet decided to establish a state enterprise instead.

BMTA was then created in 1976 by the nationalization of several dozen private bus companies. The Company falls under the jurisdiction of the Ministry of Communications but is jointly supervised by the Department of Transportation, the Ministry of Finance, the Budget Bureau and the NESDB. A recent government committee report points out that in addition to the various government regulations BMTA is subject to, the presence of this joint supervision represents an added obstacle to rapid decision making.

Since BMTA was never adequately capitalized, it has been unable to establish an adequate system of garages and depots to maintain and dispatch its fleet. From the outset, it has had neither the managerial nor financial capacity to operate properly, suffering especially from a lack of working capital. Lacking land and buildings of its own, it has had to rent space and contract out much of its maintenance. Those practices continue to contribute to its high costs.

Throughout most of its existence, protracted delays in procurement of new buses and half-way measures to deal with its other investment needs has further weakened BMTA. BMTA requires periodic subsidies. After years of operating losses, BMTA's total liabilities were 9.8 billion baht at the end of 1989. Its total assets were only about 800 million baht, leaving it with a negative net worth of 9 billion baht ($US360 million). BMTA owes about 3 billion baht ($US120 million) to PTT for fuel.

In the late 1970's and early 1980's, some improved management systems were installed and substantial fleet expansion was undertaken. This resulted in a significant upgrading of service at the time. Since then, however, the government's policy has been to keep BMTA's fare structure low, making it difficult for BMTA to cover its costs. Presently, it cannot provide the amount of service demanded by its riders, and with 80 percent of its fleet more than 10 years old, a substantial proportion of buses are long overdue for being scrapped.

While demand for service has been increasing at a rate exceeding 5 percent per year, BMTA's capacity to provide service has declined. In the past, BMTA has suppressed demand by reducing from 80,000 to 60,000 the number of trips dispatched per day. Apparently it considers itself a part of the problem rather than a solution to Bangkok's congestion. A recent study indicated that BMTA may only have about half the number of serviceable vehicles needed to meet its current demand. As a stop-gap measure, BMTA has leased some vehicles from Hino, Fuso, and Mitsubishi.

Although several consultants' reports have identified BMTA's under-capitalization and other managerial problems, and have suggested different solutions, the consensus of all the studies is that bus service is far and away the most cost-effective and technically feasible mass transport option for the Bangkok area (compared to rail systems or private cars). Nonetheless, the government has never mobilized sufficient interest to seriously address and resolve the problem.

Privatization Measures to Date

BMTA has already provided concessions on two-thirds of the total number of routes to private fleet operators. BMTA officials acknowledge that the routes selected for private operation were either money losers or otherwise unattractive for BMTA to continue operating themselves. Thus it is not surprising that the concession operators find it difficult to achieve sustained profitable operations. Incidentally, according to an owner of the former White bus line, one of the main reasons for their success to date is that they pay their personnel substantially less than the generous wage and benefit package BMTA is obliged to provide.

Since the concession routes were not awarded as a result of public bidding, the leasing arrangements have been criticized as lacking transparency, and being allocated in a confused and bureaucratic way, which suggests favoritism. Certain routes are operated jointly with private companies, while others are subcontracted to private companies. Not surprisingly, the leasing out of any additional routes is reportedly opposed by the BMTA unions.

Analysis of Operations

What makes BMTA interesting is the controversy surrounding who or what is responsible for its current poor condition and how it got that way. Clarifying these issues holds some keys to proposing viable short term and long term options for the bus system in Bangkok. Since BMTA seems certain to go ahead with leasing 2,840 new buses in 1991, the financial impact of that large contract will be reviewed in order to determine its impact on BMTA finances.

BMTA currently operates 4,903 buses on 119 routes. The private sector jointly operates 1,296 blue buses and 239 air conditioned buses with the BMTA. A separate, privately-operated fleet of nearly 4,869 mini-buses is also in operation. Both fleets pay concession fees to BMTA. Altogether, this total of 11,269 buses makes Bangkok's one of the largest municipal bus fleets in the world.

Table 1: Total Bus Fleet Size

Bus Type	BMTA Fleet	Private Fleet	Concession
Blue	3504 (72%)	1296	150 bt/day/bus (AVG)
Red	900 (18%)	0	0
A/C	499 (10%)	239	
Soi Minis	0	2729	500 bt/year/bus
Minibuses	0	2140	65 bt/day/bus
Total	4903 buses	6404 buses	

Source: BMTA
Note: 5 to 6% of BMTA fleet is under repair at any one time and therefore out of service.

Table 2: BMTA Fleet Condition

Type	Fleet Age (Years) 3yr	10yr	13yr	>14yr
Blue		1199	1940	365
Red	900			
A/C	100	180		219
Total buses	1000	1379	1940	584

Source: BMTA

Table 3: Bus Route Allocation

Routes	BMTA	Private Sector
Red & Blue	108	34
Air Cond.	11	8
Minibus	0	174
Total routes	119	216

Source: BMTA, as of April 1990

Some 3,903 BMTA buses are more than ten years old. Their normal economic life is seven years. There are at least two main reasons the BMTA fleet has reached this sorry state.

The first falls under Article 11 of the Royal Decree governing BMTA which states that the government will only offer financial assistance to BMTA if its income is less than its operational expense. In other words, the Government effectively provides relief after the fact to BMTA, rather than providing funds for capital investment. The second reason is found in the lease arrangements themselves which make it financially attractive for BMTA to hold on to buses for nearly twice their economic life.

BMTA typically undertakes seven year leases with its major suppliers: Hino, Isuzu, Daewoo, Mercedes Benz and Volvo. Maintenance and rent are part and parcel of the lease, and maintenance costs increase each year during the term of the lease. It is charged on a per bus basis and there is no relationship between it and the number of times a particular bus is in the garage. At the end of the lease period, BMTA has an option to extend the arrangment, at which point, the rental fee drops markedly. In the 10th year, BMTA generally takes ownership of the buses but maintenance goes up. Below is a sample lease for the 900 Red buses brought into the fleet 3 yrs ago.

Table 4: 1988 Hino/Isuzu Red Bus Lease
Cost Per Bus Per Day

Year	88	89	90	91	92	93	94	95E	96E	97E
Rent	590 baht/yr							220	220	0
Maint	394	554	688	634	769	785	796	796	796	880
Total	984	1144	1278	1224	1359	1375	1386	1016	1016	880

Source: BMTA and MOF
Estimates are those of author
Unit: baht/bus/day

--Number of buses leased: 500
--Bus size: 10 meters
--This schedule represents an averaging of the Hino & Isuzu leases.
--Of the nine bidders for the full lease contract, three were chosen, Daewoo, Hino and Isuzu.
--The purchase price for a new bus is 936,700 baht($US37,468). At end of 7 years, BMTA can buy the buses for 95,000 bt ($US 3,800).

BMTA's total outlay/bus over 7 years for one of these buses is 31,937,500 baht or about 456,250 ($US18,250) baht per year. Over ten years it is 4,256,630 baht or $US170,265. By the tenth year the maintenance fee is at a maximum of 880 bt/bus/day but the rental fee (providing it follows the pattern of previous leases) falls to zero, thereby reducing the total outlay by some 20% between year one and year ten.

The positive side of BMTA's aged fleet is that there are 1,063 buses which are not scheduled for replacement under the 1991 lease that should be replaced immediately. BMTA is therefore at a perfect juncture for passing the routes associated with those buses over to private sector.

Operating Performance

BMTA operating performance is a history of revenues perpetually chasing expenses--and never catching up. To be sure, the situation has improved in recent years, with operating losses dropping about 80 percent from 733 million baht in '84 to a projected loss of 139 million baht in 1990. That may be scant consolation to the Government, but the management of BMTA deserves a certain amount of credit for implementing effective cost control measures over several years. The downside of this in terms of further improving operations is that BMTA management has already "wrung out" most of the cost excesses that are effectively under its control. Another noteworthy point concerning the BMTA income statement is that "Other income," which mainly consists of concessions and advertising, is only a tiny percentage (6%) of total revenue. Perhaps something could be done about this.

Table 5: BMTA Income Statement

Year	84	86	88	89	90E
Fleet rev	2,986	3,017	3,103	3,599	3,837
Other inc	79	125	295	246	253
Total rev	3,064	3,143	3,398	3,845	4,091
Operating Expense	3,797	3,666	3,595	4,126	4,230
EBIT	(733)	(524)	(197)	(281)	(139)
Op loss margin				7.3%	
Interest	507	602	570	583	575
Net loss	(1240)	(1126)	(767)	(863)	(714)

Source: BMTA & MOF
Unit: Millions baht

--The Net loss for 1990 will no doubt increase as a result of recent oil increases.
--Other income includes: Concessions and fines from the private bus fleet, advertising revenues and a miscellaneous category.

In one way the bus business is very simple. Revenues are nearly all in cash and extremely predictable, so the first priority from operating point of view is to collect more per each bus than is spent.

BMTA seems to have looked at this carefully and readily provided a model showing that it profits on both A/C buses and red buses, but loses money on blue buses. What is obvious from this model is that while it costs more per day to operate both red and air conditioned buses, their higher fares more than make up for the difference.

The implication is clear: given the current fare structure, the quickest way to improve operating performance at BMTA is to do something about the blue buses. The three options available for doing so are also clear, namely: raise fares, lower operating costs/bus or eliminate the money-losing blue buses entirely.

Table 6: 1989 Daily Operating Performance Model by Bus Type

Bus Type(Fare)	Rev/day	Cost/day	Profit (loss)	Post oil Adjustment
Blue (2)	1980	2285	(305)	(505)
Red (3)	3300	2775	525	325
A/C (5-15)	4100	3500	600	400

Source: BMTA
Unit: Baht

--Cost/day: includes everything but interest, ie, salaries, fuel, maintenance and depreciation (which is nearly negligible). If interest is included, cost/bus is 500 bt more per day.
--A/C fare: 5bt for first 8km up to maximum of 15 baht.
--Post oil adjustment: According to BMTA, after the Iraq oil crisis, bus fuel went up 200 bt ($US 8) per day per bus.

Is this model reasonable? Well, almost. Extrapolating from it yields a 2.6 percent loss margin on fleet revenue for 1989, about one third of the actual 7.3 percent loss margin on total revenue found in the income statement. The model, it seems, understates costs somewhat--probably across the board for all three bus types. Nevertheless, it is useful to the extent that it captures the revenue and cost proportions among the three types of buses.

Table 7: Fleet Weighted Operating Performance per day

Bus Type	Number Buses	Fleet weight	Weighted Profit	Post oil Increase
Blue	3504	72.5%	(221)	(366.1)
Red	900	18.3%	96.1	59.5
A/C	499	10.2%	61.2	40.8
Total:	4903	Avg loss/day:	(63.7)	(265.8)

Source: BMTA
Unit: baht

Impact of the 1991 Bus Lease

The model in Tables 5 and 6 may be used to analyze the 1991 lease BMTA recently signed for 2,840 buses. Two thousand of these buses are red while 840 are air conditioned. The first group will arrive in June 1991 and the remainder, over the course of the subsequent thirteen months. As they arrive, old blue buses will be retired. The lease is very similar to the Hino/Isuzu red bus lease described above, except that the rental fee will be 200 baht more per day for each bus. Incidentally, if this is so, it seems unreasonable that the lease cost per bus will be 1000 baht ($US40) per day, as was recently reported in the newspaper. If it is that low, then BMTA should be commended for negotiating an extremely attractive deal. A more likely figure would be about 1,400 baht ($US56)/day. That aside, the new lease is basically a thinly disguised fare increase since its main effect will be to replace 2 baht fare blue buses with 3 baht fare and variable fare buses. Assuming the overall fleet size does not change, this alone should increase fleet revenue per day by about 30 percent to some 4,929 million baht by 1992. The question is, in the absence of either a fleetwide or even just a blue bus-only fare increase, will it be enough for BMTA to achieve at least an operating profit?

Table 8: Projected Fleet Revenue per Day after New Lease

	1989		1992E	
	No.Buses	Rev/day	No.Buses	Rev/day
A/C	499	2,046	840	2,046
Blue	3504	6,938	1504	1,307
Red	900	2,970	2900	12,342
Total	4903	11,954	4903	15,695

Source: BMTA
Unit: Millions baht

171

The answer is not completely clear, given uncertainties in the price of oil, the real cost per day of the new lease, and how other costs will change between now and 1992. But assuming that ridership load/bus does not increase on the BMTA fleet and operating expenses between 1989 and 1992 increase at the same rate as they did between 1986 and 1989 (namely, a total of 22 percent) then 1992 operating expenses should be about 5,033 million baht, for an operating loss of 104 million baht. Subtracting interest, which is regularly 580 million baht each year, the projected net loss for 1992 would amount to 680 million baht or roughly $US27 million. Revenues, in other words, will still be chasing expenses and sustained increase in the price of oil will only exacerbate this loss.

Cost analysis

The major structural problem for BMTA in terms of controlling costs in the future is that the three items over which it has least direct control comprise over 90 percent of its operating budget. These are compensation, maintenance and fuel.

Compensation is dictated by government policy and not predicated on company performance. And that policy currently calls for salary increases averaging 6.5 percent per year. High maintenance costs are the result of unfavorable long term lease agreements and a lack of investment capital with which to invest in buying its own buses and maintenance facilities. Fuel price is by definition out of BMTA's control. The increasing predominance of these items both in relative and absolute terms in the BMTA budget is unmistakable:

Table 9: Major Expense Items of BMTA

	1990E	PCT	1984	PCT
Compensation*	2	(43%)	1.3	(34%)
Maintenance	1.5	(29%)	.9	(24%)
Fuel	1	(20%)	.8	(21%)
Total	4.5	(91%)	3	(79%)

*Includes salary and fringe.
Source: BMTA
Unit: Billion baht

It is on this issue that the long term case for privatization at BMTA really hinges, since there is little doubt that barring the obvious political implications, fares could be raised enough for BMTA to temporarily break even. In this regard, the experience of the United States is instructive. As Oliver Letwin notes in Privatising the World, before U.S. municipalities began turning to competitive contracting, inflation adjusted costs for bus transportation rose at just under 17 percent between 1940 and 1955 and by over 50 percent between 1970 and 1983. Surveys by the American Bus Association and others show that after privatization, cost savings averaging 30 percent and sometimes as high as 60 percent were achieved.

BMTA Staff

If BMTA services are to be privatized then the key question is what is to be done about BMTA's enormous staff and formidable union. The facts are as follows:

According to BMTA, 80 percent of its staff have been with the company since it was founded 14 years ago and 90 percent are members of the union. As shown below, the number of employees at BMTA has remained nearly constant at around 22,000 for the last several years. In other words, some 18,000 of BMTA's employees are entrenched in the sense that they have made a career of working for BMTA. It is this rather large group that will tend to resist any significant restructuring of BMTA. After all, under the current regime, their compensation packages have increased more than 50 percent on average over just six years. The same probably cannot be said for private sector bus companies and BMTA employees undoubtedly know this.

Table 10: Number of Employees

Year	84	85	86	87	88	89	90
No. Emp.	22	22.4	22.2	19.9	20.7	22.7	22.7

Source: MOF
Unit: Thousands

On the other hand, while the majority of employees remain with the firm, the other 20%, or roughly 4,500 employees, are prone to high turnover, with about one hundred of them being fired per month for corruption, absenteeism or rudeness to customers. Another seventy staff members retire every year. That means nearly 1,300 employees leave the company annually. Therefore, if BMTA were to institute a hiring freeze immediately, it should theoretically be able to reduce its workforce by as much as 11 percent over two years through attrition alone.

Another way to reduce staff and possibly improve service would be through automation. Almost 40 percent of BMTA's staff are conductors which means a large share of BMTA's compensation budget (about 500 million baht)could be saved through automating fare collection. This technique was tried before by BMTA and failed, apparently because drivers could not make change fast enough. Perhaps the use of tokens would work. They certainly do in numerous other countries. Given the savings possible through reducing BMTA's conductor staff, re-examining automated fare collection should be given the highest priority and is probably worthy of a follow-on study.

Table 11: 1989 BMTA Staff Composition

	Percent	Number of Persons
Mechanics	2.7%	
Accounting/Clerical	12.2%	2,770
Schedulers	3.5%	
Other	2.6%	
Drivers	36%	8,180
Conductors	38.6%	8,750
Inspectors	3.6%	817
Total	100%	22,700

Source: MOF

A Strategy for Restructuring BMTA

The strategy suggested here is to privatize BMTA by progressively contracting out its routes over a period of five to seven years. A major attraction of this approach is its simplicity, in that BMTA need only continue and speed up what it has already been doing. Experience in other, admittedly smaller cities in Thailand, notably Chiang Mai, suggests that the private sector is quite capable of providing urban bus service on a profitable basis in Thailand. The responsibility of the government in this case is to set the policies so that market forces can be permitted to come into play.

The first step is to decide on a sequence of contracting out routes that would enable the transition to take place promptly and with a minimum disruption in service. This might entail bundling packages of routes that combine high-traffic, assured money-makers, together with some less patronized routes which must be continued for social reasons. The key condition for a successful the bidding process is transparency.

The contracting-out process should start slowly over the first year, then proceed more rapidly as the private sector mobilizes itself to assume more of the routes. It is important to invite new entrants into the market. For example, current BMTA employees who are already experienced in the transportation business, could be assisted to do the equivalent of management buy-outs. Economically viable buses, workshop equipment and spare parts could be sold either at actual value or at a discount to BMTA managers and employees who set up the new companies.

During this transition period, BMTA would pass through phases during which it would convert from being principally an operator, to becoming a leased route manager and quality control supervisor. At the end of divestment process, BMTA would have become the regulatory authority that should be modeled along the lines of an independent regulatory commission. This commission would have full authority to award (and cancel, in the case of egregious malfeasance or non-performance) all route concessions and fare structures.

BMTA

(Table A)
Income Statement
Thousands of Baht

	1989	1988	1987	1986	1985
Revenue	3,598,688	3,102,502	3,059,936	3,017,362	3,342,375
(Depreciation and Amortization)	22,275	19,675	14,900	48,120	132,710
Total Operating Expenses	4,125,533	3,595,077	3,558,411	3,666,469	3,965,450
Operating Income	(526,845)	(492,575)	(498,475)	(649,107)	(623,075)
Other Income (Net)	246,167	295,095	156,963	125,355	105,336
Earnings before Interest and Taxes	(280,678)	(197,480)	(341,512)	(523,752)	(517,739)
Interest	582,685	569,793	571,389	602,279	588,287
Earnings before taxes	(863,363)	(767,273)	(912,901)	(1,126,031)	(1,106,026)
Taxes on earnings					
Net earnings	(863,363)	(767,273)	(912,901)	(1,126,031)	(1,106,026)

BMTA

(Table B)

Balance Sheet

	1989	1988	1987	1986	1985
Current Assets:					
Cash and Cash Equivalents	108,480	87,440	73,670	83,130	102,070
Accounts Receivable	343,270	0	0	420	23,560
Inventories	68,340	70,490	55,580	72,820	65,700
Prepaid Expenses	0	0	0	0	0
Other Current Assets	39,570	18,700	10,370	4,010	292,350
Total Current Assets	559,660	176,630	139,620	160,380	483,680
Long Term Assets:					
Fixed Assets, Net	207,130	214,680	220,900	154,100	192,460
Investments	19,780	304,560	285,880	281,380	7,880
Other LT Assets					
Total Assets	786,570	695,870	646,400	595,860	684,020
Current Liabilities:					
Accounts Payable	0	1,211,040	1,052,150	748,560	604,630
Notes Payable	0	0	206,990	184,840	162,650
Current Portion of LT Loans					
Other Current Liabilities	3,452,520	1,484,530	1,217,840	997,380	998,390
Total current liabilities	3,452,520	2,695,570	2,476,980	1,930,780	1,765,670
Long term debt	6,266,900	6,097,610	5,526,230	5,031,450	4,235,850
Other long term liabilities	72,740	99,420	89,430	169,670	98,760
Total liabilities	9,792,160	8,892,600	8,092,640	7,131,900	6,100,280
Stockholders' equity					
Capital stock					
Retained Earnings					
Total stockholders' equity	(9,005,590)	(8,196,730)	(7,446,240)	(6,536,040)	(5,416,260)
Total Liabilities and Equity	786,570	695,870	646,400	595,860	684,020

Chapter 5

PRIVATIZATION: LEGAL AND INSTITUTIONAL ISSUES

The potential for involving the private sector in the SOEs in Thailand is excellent from a technical point of view. Most SOEs are financially attractive for private sector investment. The Thai stock market and securities industry is sophisticated, there is a strong domestic and foreign demand for shares, and the economy is dynamic. Several SOE are world class companies, such as Thai International and EGAT.

However, the results to date have been disappointing. Since 1981 there have been approximately 13 enterprises "privatized": five by liquidation, five by joint venture, two by divestiture, and one partial privatization by share sale (Krung Thai Bank.) The two divestitures were of small, money losing SOEs. The sale of a minority interest of Krung Thai shares was undersubscribed. The assets of SOEs privatized since 1984 represent less than 1 percent of total SOE assets.

The SOEs have contracted out a number of services, such as security and maintenance. However, this form of privatization, though a useful tool, does not have the power to achieve the fundamental shift in the roles played by the public and private sector in the financing, ownership and management of SOEs, which is required for the economy to continue to grow.

Why have the results been so disappointing? The main problems encountered in Thailand are similar to those found in other countries at this early stage in a privatization program:

- The absence of clear, well-defined objectives and a strategy.
- The importance of privatization to the growth of the economy and livelihood of the citizens has not been adequately communicated to the unions, SOE management, government officials and the private sector. In other countries, once the objectives and benefits have been explained, unions and others have been tended to support privatization.
- Privatization in this environment has been undermined by a lack of organization and an abundance of overlapping government agencies.
- Some legal and technical obstacles, outlined below, would have to be overcome before privatization by broad-based share sale could be undertaken.

These significant constraints notwithstanding, the involvement of the private sector in the SOEs, especially for EGAT and TOT, is simply too important to Thailand's development to allow the present inertia to continue. The measures to overcome these constraints are also similar to ones that have worked elsewhere.

This section reviews the advantages of a privatization law, and makes recommendations on the institutional structure for implementing privatization.

The Legal Framework for Privatization in Thailand.

Based on our analysis of the current political and legal environment in Thailand, the team concluded that **a law is required to provide the proper framework for a privatization program to get started and to be successful.**

We considered the known legal obstacles to privatization and whether the solution could be simpler than the passage of legislation. If there were no legal impediments to privatization, there would generally be no need for a specific law to authorize privatizations. However, in some circumstances even if there are no legal obstructions, government may still deem it wise to legislate aspects of privatization for political purposes or to demonstrate resoluteness to a variety of audiences.

The Thai government has prepared a draft Privatization Act whose principal features include:

- A listing of all the SOEs that are slated to be privatized;
- Establishment of procedure for converting SOEs into limited companies authorized to float shares, and
- Setting up the organization, structure and authority for a Committee for Privatization of State Enterprises, to be established by the Prime Minister.

In this section we also provide comments on this draft law under consideration and provide our recommendations in terms of the drafting instructions that could be issued.

Legal Obstacles. This section does not deal with laws or regulations which might reduce the attractiveness of enterprises to investors generally, if the same rules apply to the private sector. Here the team has only sought to identify things which must be done in order for privatization to proceed a all.

The main obstacle is the need for reincorporating SOE's under the Civil and Commercial Codes in order to permit private investment. Many SOE's are incorporated under special statutes which prescribe rules by which the juristic person must operate and these rules can only be changed by another law. The rules set out who can own the

179

enterprise and prescribe the positions of persons who must be directors and who among them must be chairman in some cases.

Other obstacles are remediable by law also, but these are operational, rather than fundamental, like the one identified above. Operational obstacles would include:

- o The need for directors to sign every share certificate.
- o The need to stamp large volumes of share certificates for stamp duty purpose when a large share offer is done.

Non-legal reasons why a law might be beneficial. The lack of consensus at high political levels concerning privatization has paralyzed the process and is leading to spontaneous efforts which are not subject to needed quality control so as to ensure that the Government is not discredited. This is discussed below under "Authority to sell shares on the SET."

At the moment some SOE's are proposing "privatization" schemes which on analysis appear to be, in substance, loan schemes which must be presented as something else in order to avoid the government limits.

For there to be quality control, there should be objectives for privatization. A privatization bill when put on the table of Parliament, would focus attention on the subject in a constructive manner and require a debate about the issues.

So far in Thailand the only groups that have declared themselves in opposition to privatization are unions and certain ministers. With few exceptions, there is no ideological opposition or claims that the economy will be hurt by privatization.

But more of this same opposition will emerge, however, and it would be wise for government to preempt their arguments by moving from defensiveness to claiming the technical and moral high-ground before opponents do so. In Appendix I to this section, we review some the arguments put forward by opponents to privatization and how they may be dealt with.

Passing a law on privatization would be widely publicized and should be looked upon as an opportunity to showcase its benefits. The lack of published objectives gives opponents the opportunity to invent objectives and then tear them down.

Comment on Draft Law.

The team was presented with a document entitled "(Draft) Privatization Act" which is under consideration by the government (Appendix II).

The concept of the law appears to have originated in the Fiscal Policy Unit of the Ministry of Finance, with assistance in the drafting process is being received from the Juridical Council (which normally only commences drafting after receipt of a Cabinet Instruction).

Our comments are:

Reincorporation procedure. Although a law would be needed to effect the transfer of an operation from its own incorporating statute to the Civil and Commercial Codes, this could be done from time to time as necessary without the need for an omnibus law dealing with all or a number of SOE's. If an omnibus power can be obtained, it will of course be desirable to do so.

The need to change the very status of the entity instead of merely allowing private sector ownership of the company continuing under its own existing statute may be a possibility, but investors would not be happy with that. Investors prefer to be under a general law because it reduces the possibility of a government singling them out for adverse treatment in some way at a future date.

Reincorporation must be handled extremely carefully and advice should be sought from the best commercial lawyers in Thailand as to how it should be accomplished. In this regard, the team would like to raise an issue which does not appear to have been dealt with in the draft law.

The corporate body must have unbroken status and there must not be an instant when the operation is between two statutes, otherwise there could be a host of legal problems. For example, insurance coverage may not apply during the fatal instant of lack of status, nor may creditors have security, nor may there be limited liability in that instant.

Nor should the undertaking be covered by two statutes at any moment, because arguments as to which took precedence during such a time might arise.

The existing Royal Act or Government Order under which the enterprises were incorporated must not be repealed until the new corporate status is in place but the existing statute must cease to have effect simultaneously with the reincorporation. However, incorporation under another statute cannot take place unless the existing statute permits it to happen.

Therefore it may be necessary to first amend rather than repeal the existing incorporation statutes (whether through an omnibus law or a series of separate but similar laws), to permit Government at its will and pleasure to cause the entire undertaking to be incorporated under the Civil and Commercial Code under a designated set of memorandum and articles which would have to be set out in the old act as part of the amendment.

Upon an enterprise being incorporated under the Civil and Commercial Code, (at a time subsequent to the amendment which is convenient), the old act will, by the terms of the amendment, cease to have effect and then it may be repealed at some convenient time.

This provision could be an entire law in itself, which need not restricted just to the area of privatization. It could be a law which better enables SOE's to act as commercial enterprises, both by removing restrictions and privileges bestowed by the incorporating statute and providing the board of directors with more flexibility concerning the raising of capital from time to time.

Eligibility rather than inevitability should be the tone of the law.
The draft article 4 states "The following State Enterprises are to be privatized". We suggest that this be made less specific and worded to the effect that all enterprises which have been already or which are in future incorporated under special legislation will be eligible to be reincorporated by virtue of the powers conferred under this new Act. Not only does this give government more flexibility, it avoids naming the companies, and this would avoid provoking vested interests.

The suggested rewording also avoids a statement that the enterprises "are to be privatized", which again may have been provocative and is also inappropriate (the most that could be said in legislation is that they are eligible, otherwise those charged with implementing privatization may in eternal breach of the law for not having privatized some of the enterprises).

Revision of corporate powers, privileges and obligations. Although under the order of procedures outlined above the first memoranda and articles of the companies under the new legislation can be broadly mandated under the Act (e.g., the memoranda and articles must confer the same powers in dealing with third parties as exists but all obligations in terms of the composition of the Board of Directors and all monopoly powers or privileges must not find their way into the new incorporating documents), this would not preclude later changes which can be brought about in the usual way by Special Resolutions at General Meetings. Thus the draft Article 5 can still be accomplished.

Revaluation of assets should be done prior to reincorporation. Under the Revenue Code, a company is taxable on any increment resulting from a revaluation. The tax authorities have been known to seek to attack where companies have undervalued assets, and any undervaluation would be particularly noticeable at the time of a public share offer. It is also desirable for the fixed assets to be revalued in order for the company to claim realistic depreciation for tax purposes.

In reference to the draft Article 8, we would strongly suggest that, prior to reincorporation, the assets of the enterprise be valued and the valuation recorded in the books of the enterprise. If this is not done then, at the time of privatization, any revaluation will result in a large tax liability which might serve to reduce the proceeds of sale of equity by a greater amount than the tax charge or weaken the company to the point where it is not an attractive candidate for privatization.

Debt guarantees. While it is essential and in any case unavoidable that debts already guaranteed by Government continue to enjoy the guarantees, the team sees no compelling reason for the Government to guarantee other debts. We believe this could be counter-productive, especially if upon privatization the new owners do not honor the debts. There are also complex definitional problems involved. For example, a trade creditor may claim that he had not been paid in respect of a specific set of invoices which are under the automatic guarantee, claiming that all payments were in respect of other invoices. Government could thus be exposed to this sort of liability forever and would be unable to quantify the exposure.

Authority to sell shares on the SET. We strongly advise against granting such power to the Boards of the SOE's. It is true that by only granting blanket approval for this particular mode of privatization there is some better assurance of transparency, but the risk is still taken that the methods used will not further the popularity of the privatization program and may actually discredit it and expose Government to liability.

An example where full advantage may not have been taken to popularize privatization is the pending issue of shares by Thai International. In this case the Comptroller General had to intervene to ensure that in part the shares would be offered widely to individual Thais. New share issues should also be clearly under the oversight and under the control of the Committee for the Privatization of State Enterprises which is proposed in the draft law.

The Committee for the Privatization of State Enterprises. The team believes that the composition of the Committee and its terms of reference are well constructed. However, its precise reporting relationship is not clear as it is merely stated that it will make recommendations to "Government": It is not clear from the draft law which person or position will have the authority to execute the sale of Government assets. We suggest that the Committee submit its recommendations to the Minister of Finance who shall be obliged to pass these on to Cabinet. After Cabinet approval, the Minister can then see to the completion of the transaction.

\87

Our reason for recommending this reporting relationship that the Ministry of Finance "owns" the shares of the State Enterprises and it should therefore have the most significant voice in the process. The Ministry of Finance ought to be more impartial concerning privatization than sector ministries or the boards of directors of the enterprises but they, of course, should never be made to feel that they are being by-passed and should be consulted and persuaded.

The team considered whether the Committee should instead report to the Prime Minister. In some countries with successful privatization programs, the head of government has taken on the role of "champion" of privatization. It would of course be ideal if the prime minister of a country takes on such a role as it provides greater authority and indicates that there is a high degree of consensus.

In such circumstances, however, the submissions in respect of individual enterprises can still be made by the ministry which is technically the most logical. In at least one of the other countries, the prime minister was also the minister of finance which was very convenient and led to a program that could proceed smoothly.

<u>Definition of privatization</u>. In order to ensure that there is the widest choice in transaction structures to accomplish privatization, it would be helpful if there were to be a definition of privatization in the law. A suggested definition is:

> "The word privatize or derivatives thereof means the selling, letting, transferring, dissolution, liquidation, divestment or disposal by any other means of enterprises or of all or significant part of the assets or activities of enterprises or of other assets or activities, in whole or in part, which are wholly or partly owned by Government or any part of Government ("Government Assets"), to legal or natural persons other than Government or any part of Government."

<u>Specific authority to use going-concern valuations when warranted in the circumstances.</u> The process of privatization in many countries has suffered from a lack of understanding of the criteria used by investors in making investment decisions.

In general, absent certain expected synergistic benefits which can accrue to the investor or absent the intent on the part of the investor to redeploy the assets to some other use or to sell them off individually, investors will only spend a total amount on an investment, including needed rehabilitation work and working capital, that will enable the projected stream of earnings of the business to yield a reasonable rate of return.

An acceptable rate of return to an investor will be one that he could obtain through the alternate use of his capital, taking into account business and political risks.

More often than not, the economic value of an enterprise will be well below the expectations of governments, which are typically based on book or replacement values.

Unless the law itself sanctions the use of economic values, Thailand's program could become bogged down or controversial.

The words "when warranted in the circumstances" should serve to restrain any tendency to use economic values for expediency alone, since there are other legitimate methods which should be used in certain circumstances. A full discussion on valuation techniques is set out in Appendix V.

Review of institutional procedures. The Auditor General should have the right to enquire at any time into the processes being followed within the institutional framework to effect privatizations and be given access to all information and records which he believes to be pertinent. He could report to parliament on an ad-hoc basis.

Even if the Auditor General already has this power, its specific inclusion in the law will give comfort to those who might read this law in isolation and are not be aware of the general powers of that office.

Committee recommendations. Wisely, no across the board quantitative conditions are laid down. However, the Committee is expected to make recommendations in each case as to the level of residual shares to be held by government, the level of employee participation and the minimum price.

We would only caution that in the case of a public offer, many of these decisions should be taken at the last possible moment, considering the changes that can occur in market conditions.

As a result the team advises that the recommendations be more conceptual than definitive, for example:

> "Employees and smaller applicants are to be given priority over larger applications at the time of the public offer, with employees being able to purchase at a discount and on terms."
>
> "There will also be a low enough minimum application amount which is economical and there will be widespread publicity to attract as many applicants as possible, with there being as many distribution points as possible to facilitate applicants."

18

"There will be inducements for small shareholders to retain their shares for a period."

Precedence of this law over others. At the moment the draft law does not indicate the powers under which the law is being promulgated, but it is probably an automatic feature which will be incorporated by the legal draftsmen. Just to be sure that it is not missed we would also mention that another standard feature which might be particularly important in this instance would be some words to the effect that "notwithstanding anything contained in any prior enactment concerning the matters dealt with in this law, the provisions of this law will apply".

Inclusion of Objectives in the Law. As pointed out above, if a law is needed, a law provides an opportunity to publicize the objectives of privatization. It will also give readers of the law comfort that Government is not proceeding recklessly toward privatization and that the policy is born from serious consideration.

The eligibility of enterprises for privatization under the law should be subject to the proviso that the privatization can be initiated by the Cabinet following consideration of the recommendations of the Committee provided that Cabinet is satisfied that one or more of the following objectives are likely to be met:

Facilitating economic growth without sacrificing hard-earned stability.

Improving the efficiency and competitiveness of the economy.

Assisting in the development of the capital market and the democratization of ownership.

Freeing resources which may be used to address the social agenda.

In addition, it would do no harm to include a set of tests which must be passed by each privatization before approval will be given to initiate the process. It would do no harm because these tests will be applied subconsciously in any case and in a less focused fashion than would be the case if the tests were not listed.

Apart from the first totally subjective test, they are such that virtually any privatization can be rationalized if Government is of a mind to do so but, of course, the converse is also the case. The publication of the tests, like the publication of the objectives would increase public confidence in the process. The suggested tests are:

- There are not compelling reasons for retaining the activity or entity as a Government function.

- Privatization must not lead to unacceptable disruption in an essential public service.
- Either private sector competition exists or effective regulation of a possible monopoly is possible
- Either the service can be produced and delivered by a private sector group in a more efficient, cost effective manner, or
- Government cannot provide adequate capital for the provision of the service at the level demanded without risking national economic stability.

Establishing a Technical Unit. The Committee will also need facilities to develop recommendations. A privatization transaction is different from transactions between two private sector parties and the Committee should be able to have on call advice on the subject of privatization itself.

A technical unit should be established in the office of the Comptroller General, where there is already a considerable body of knowledge about the State Enterprises and some analytical skills that can be further developed.

The objective of the technical unit will be to present the Committee for the Privatization of State Enterprises with recommendations as to how the privatization of approved enterprises may be achieved in accordance with policy objectives. Among these would be that privatization proceed in such a way that risk is properly transferred to the private sector and the maximum proceeds are obtained. The technical unit would also see to the completion of the transactions.

The technical unit would be a core group which would be supplemented as required by outside specialists. The technical unit itself can be a contract assignment which would work with persons in the Ministry, providing on the job and other training.

Similar arrangements have been established in other countries and have worked well. Appendix III sets out the steps that would be undertaken in privatizations other than by means of a large widespread share offer and Appendix IV deals with the considerations and mechanics of a large share offer in the context of privatization.

Training for the Technical Unit. It is important for several members of the technical unit become more familiar with capital markets, particularly the process of bringing companies to the market. It will be important that the staff be familiar with the different financing possibilities and vehicles both locally and internationally. They will also need more exposure to

181

negotiations, the criteria by which investors make decisions, and commercial and contract law. Three types of training will be useful in this respect, and are outlined in Appendix VII.

Public Awareness. One important assignment for the technical unit to organize through universities or specialist firms would be a campaign to increase the public's awareness of the benefits of privatization and the techniques employed and success achieved in other countries.

A series of seminars, such as "Why Privatize," "How to Privatize," "Financial Markets Development," "The Benefits of Share Ownership," and "Employee-Management Leveraged Buyouts," need to be developed in coordination with the technical unit. They would be targeted for the critical groups, such as government officials, union leaders and rank and file, SOE management, and the private sector. A sample outline is given in Appendix VI.

These series of seminars would not only contribute to the public awareness campaign, but would also help define objectives, develop strategies, and reinforce the will to privatize.

Further, key private sector groups such as the Thai Chamber of Commerce and the Thai Federation of Industries need to become active and articulate supporters of privatization.

APPENDIX I

OPPOSING ARGUMENTS TO PRIVATIZATION IN THAILAND

Press reports which we have seen do not suggest that there is an anti-privatization propaganda campaign and the only opposition is transparently in the self-interest of those voicing it.

The closest that the team has seen to something which resembles ideological arguments is an unpublished document that came to the teams attention. The arguments contained in that document are set out below, together with what we believe are ways to effectively rebut them.

ARGUMENT: "Parties to benefit from privatization are those who have a share in the investment and management of the state enterprises which include a small number of domestic and international investors. The public is not getting any real benefit even though the government has promoted the sale of state enterprises' shares in the stock market to lessen the discrepancy. The Securities Exchange of Thailand is still a long way from being a real mechanism to provide benefits to the society at large since only a limited group of individuals have the financial means to engage in trading activities. It will take the SET at least 80 years before it can develop itself to be accessible and beneficial to all."

RESPONSE: The best possible response would be to put the lie to the above by actually doing a widespread public share offer which deliberately seeks to attract the largest possible number of small applicants.

ARGUMENT: "Government's claim that state enterprises constitute a burden on the government as a result of the tremendous need for state funding, is not true. Only 14 of the 65 state enterprises received some support fundings to the extent of 2,298 million (only 1% of the national budget) in 1987. Since the state enterprises make 8,000 to 10,000 million, they are quite capable of sustaining themselves."

RESPONSE: The figures given for support do not include loan guarantees given in respect of the enterprises, nor do they take into account the unmet needs for capital which have resulted in a deterioration of the infrastructure.

ARGUMENT: "After privatization the people will suffer in the long run. Prices will go up and there will be a monopoly of production since the business sector is driven by the profit motive alone in contrast to state enterprises whose operation is guided by the need to serve the people the best they can."

RESPONSE: These allegations are contradicted by the facts. In country after country the evidence shows that consumers benefit if the private sector rather than the state fulfills the role of production. The trend following privatization is to more competition rather than to more monopolostic practices. The consumer gets more value for money and more choice.

ARGUMENT: "State enterprises' employees will not have job security, welfare benefits and other privileges which will either be cut down or abrogated totally. Furthermore, the chance that they will be laid off is also very high."

RESPONSE: In many countries, governments have reduced the ranks of the civil service and state owned enterprises for reasons that had nothing to do with privatization because there were no privatization programs in those countries. Employment opportunities are actually enhanced through privatization and this will be especially so in Thailand given that the only source of new capital to enable enterprises now owned by the state to expand to meet the demand for services is the private sector. If government were to expand state enterprises through deficit spending, borrowing, taxation or increased charges for services, the economy would be destabalized and employment would contract. A privatized enterprise would no longer be constrained by government pay scales and pay levels in the private sector are generally higher.

ARGUMENT: "For the past 30 years, the government has been unable to reduce the gap between the rich and the poor or implement a better income distribution scheme. The poor are becoming poorer while the rich are becoming richer. State enterprises constitute a mechanism used by the government to bring about a better income distribution and a more equitable society and thus need to be maintained."

RESPONSE: Why should anyone wish to maintain a system which, as you rightly say, has failed?

ARGUMENT: "Privatization is the easy way out for a government and is tantamount to the offering of the national assets to the private sector and politicians who will get a lot of benefits as a result."

RESPONSE: The private sector will be required to pay an economic price for any asset being acquired. Politicians actually stand to lose influence if enterprises under their portfolios are moved to the private sector.

ARGUMENT: "There is no economic, social or political system in Thailand that will support the privatization scheme and assure benefits to all. The existing stock market, for example, is neither stable enough nor beneficial to the society as a whole. The banking as well as the financial system which is responsible for the various types of economic transactions are monopolized by a few families. The country also lacks a real social welfare system, a responsible political party system and a true democracy. The existing political parties are only interested in making gains for themselves. Thailand is not England or the U.S. which can support and maintain a well-functioning liberal capitalist system."

RESPONSE: Whatever ills may exist, privatization cannot be the cause as there has been virtually no privatization. South Korea is not England or the U.S., yet 8 million of its citizens bought shares in the recent share sale of Kepco, the electric utility. Perhaps the only way to democratize ownership is through a privatization program which has this as an objective, as private sector share offers do not deliberately try to attract large numbers of ordinary people to invest, but privatizations do try to do this.

ARGUMENT: "The government has never given particular attention to the consequences of privatization but is concerned largely with the income to be generated from the sale of state enterprises. In the long run, the government will lose a significant amount of income turned over yearly by the state enterprises and will need to resort to other means such as higher taxation rates. It is unlikely that the government will be able to obtain income from taxation in a higher or similar amount as obtained previously from state enterprises. The

191

government bureaucracy is not strong enough to tackle the task and when the people are faced with increasing tax burden they will suffer.

RESPONSE: When the government sells an asset, the proceeds can be used to retire debt thus relieving the budget of the debt service burden. The tax revenues from the enterprise will continue, only now the taxes will be paid by the private sector instead of the government paying taxes to itself. The evidence is that enterprises that are privatized do improve profitability and generate increased tax revenues.

ARGUMENT: "There is no guarantee that private sector run operations will always be successful. Many failures have resulted in the past. In the end it is the people and salaried workers who will suffer."

RESPONSE: Investors lose their money when a business fails. The loss of an investor's money is permanent - a worker's loss of employment need not be permanent. The risks which need to be taken by investors is the very reason why private sector activities tend to be more rationally conceived and well run than state enterprises.

ARGUMENT: "Privatization is a scheme aimed at destroying the growth of the labor unions in Thailand. State enterprises' labor unions which are much stronger than their counterpart in the private sector, will be weakened the moment when the private sector takes over the state enterprises' operations."

RESPONSE: It is ridiculous to suggest that privatization is a scheme aimed at destroying the growth of labor unions in Thailand. The objectives of privatization are:

- To permit economic growth without sacrificing hard-earned stability.
- To improve the efficiency and competitiveness of the economy.
- To develop the capital market and democratize ownership.
- Freeing resources which may be used to address the social agenda.

For the sake of completeness, some of the traditional arguments used in other countries against privatization and the classic responses are set out below:

ARGUMENT:	"This is like consuming capital"
RESPONSE:	Borrowing to finance the budget is like consuming capital. Proceeds from privatization can be used to reduce borrowing.
ARGUMENT:	"In this situation we lose control of a strategic asset"
RESPONSE:	A government with powers of regulation does not lose control.
ARGUMENT:	"But this is a natural monopoly"
RESPONSE:	Since when does the consumer need less protection from a government monopoly than a private one?
ARGUMENT:	"This is selling the family silver, then the china will go.."
RESPONSE:	Nonsense! It is taking out of the dungeon and putting it up on the table where it belongs!
ARGUMENT:	"In this situation we can't privatize"
RESPONSE:	Do not confuse "can't" with "won't".

APPENDIX II

(DRAFT)

PRIVATIZATION ACT

Article 1 : The Act is "The Privatization Act".

Article 2 : This Act will be in effect the day after its proclamation in the Royal Gazette.

Article 3 : "Limited Company" in this Act refers to limited companies established in accordance to the civil and commercial codes and used to be state enterprises.

Article 4 : The following state enterprises are to be privatized.

(a) State enterprises established by Royal Acts :

(1) Sports Organization of Thailand

(2) Tourism Authority of Thailand

(3) Port Authority of Thailand

(4) Airport Authority of Thailand

(5) Industrial Estate Authority of thailand

(6) Metropolitan Water Works Authority

(7) Provincial Water Works Authority

(8) Petroleum Authority of Thailand

(9) Electricity Generating Authority of Thailand

(10) Metropolitan Electricity Authority

(11) Provincial Electricity Authority

(12) State Railway of Thailand

(13) Communications Authority of Thailand

(14) Bank for Agriculture and Agricultural Cooperatives

(15) Government savings Bank

(16) Government Housing Bank

(17) Thailand Institute of Scientific and Technological Research

(13) Rubber Replanting Aid Fund

(19) Bureau of Government Lottery

(20) Telephone Organization of Thailand

(21) Government Pharmaceutical Organization of Thailand

(22) Fish Marketing Organization

(b) State Enterprises established by the Revolutionary Council Order :

(1) National Housing Authority

(2) Expressway and Rapid Transit Authority of Thailand

(3) Institute of Technology and Vocational Education

(c) State Enterprises established by Royal Decree :

(1) Glass Organization

(2) Bangkok Mass Transit Authority

19

(3) Public Warehouse Organization

(4) Marketing Organization

(5) Marketing Organization for Farmers

(6) Textile Organization

(7) Battery Organization

(8) Preserved Food Organization

(9) Tanning Organization

(10) Express Transportation Organization of Thailand

(11) Dairy Farming Organization of Thailand

(12) Rubber Estate Organization

(13) Zoological Park Organization

(14) Mass Communication Organization of Thailand

(15) Off-shore Mining Organization

(16) Government Cold Storage Organization

(d) State enterprises established by Government Order :

(1) Playing Cards Factory

(2) Sugar Factories Inc.

(3) Thailand Tobacco Monopoly

(4) Police Dept. Printing Press

(5) Dept. of Social Welfare's Centers

(6) Liquor Distillery Organization

into limited companies in accordance to

196

the commercial and civil codes.

To facilitate privatization (clause 1, Article 4), the law governing the establishment of all types of state enterprises will be annulled on the same day that the state enterprises become registered as limited companies.

These limited companies (in clause 2, Article 4) will be supervised by the respected ministers responsible for monitoring certain state enterprises until their status as state enterprises expire according to budgetary law and regulations.

Article 5 : After getting the cabinet approval on privatization (in accordance to clause 1, Article 4), any state enterprise that will change its status into a limited company need to have its standing committee begin the privatization program by preparing the article of association and regulations governing the limited company and submit them to the Committee for the Privatization of State Enterprises for approval.

Article 6 : The name of limited company must follow these guidelines :

(1) Use the old name of the state enterprise but

omit the name of the Department or Ministry that it is affiliated with.

(2) Use the word "company" instead of "institute", "office" or "organization" or the description of activities conducted.

(3) Use the word "company" after the name.

Article 7 : The goals and purposes of the limited company will be similar to that of the state enterprise.

Revisions or additions may be incorporated accordingly.

Article 8 : The total shares of the limited company will correspond to the amount held by the state enterprise as stipulated in Article 4 which has been allocated by the National Budget and the Ministry of Finance. They are to be divided into common shares with equal value. The Ministry of Finance will be the sole shareholder.

Article 9 : The state enterprise committee (in Article 4) will establish and act out as the committee of the limited company during the initial stage of operation unless the cabinet has other choices, or the shareholders' meeting decide otherwise.

Article 10 : When the article of association and regulations governing the limited company are approved by the Committee on the Privatization of State Enterprises, the committee of such enterprise will have to register as a limited company within 7 days after obtaining the approval.

The Registrar need to process the request quickly and grant exemptions from all kinds of duties to those seeking registration as limited companies in accordance to the commercial and civil codes.

Article 11 : The operations, assets, privileges, debt and employees of state enterprises which have registered as limited companies will be transferred according to these guidelines :

(1) Debts incurred by state enterprises (in Article 4) prior to their registration as limited companies will be guaranteed by the Ministry of Finance until the limited companies can repay all their debts.

(2) Employees who transferred to the limited companies will receive similar salaries and benefits as they used to while being in the state enterprises. Privatization of a state enterprise will not effect their employment status.

(3) All the rights to use or rent land belonging to the Royal Crown Property or government property

149

will be transferred to the limited companies.

The limited companies will have to make certain compensation to be decided between the Ministry of Finance and the limited companies. If the two sides are unable to come to agreement, the cabinet will make the final decision on the matter.

Article 12 : The limited companies may undertake any kinds of operations as pursued formerly by the respective state enterprises unless the government decide to revise, change, limit or abrogate such privileges.

The revisions or changes of rights enjoyed by limited companies (in Article 4) will not be permitted if they impinge upon the rights of the people.

The revisions, changes, limitations or abrogations of rights accorded to limited companies (in Article 4) will have to be proclaimed in the Royal Gazette.

Article 13 : During their initial phase of operations, the limited companies may sell their shares in the S.E.T.

Article 14 : In case where the government see the need of limited companies involved in the provision of public utilities to have immovable property in order to carry out their operations, the government may exercise its right of eminent domain. The government may designate any department or ministries deemed appropriate to represent the interest of the limited companies.

The law governing the reclamation of immovable property stipulated that all immovable property affected will become national property. The limited companies may utilize these property but need to compensate the government. The immovable property may also have its ownership transferred to the limited companies with certain conditions that will limit the ability of these limited companies to transfer their property to other parties.

Article 15 : A Committee on the Privatization of State Enterprises has to be set up and should have a chairman plus six committee members.

The committee will be designated by the government with members coming from those with distinguished careers in law, business, finance, management, engineering and economics.

The representative from the Ministry of Finance will be a member of the committee and also serve as its secretary.

Article 16 : The Committee on the Privatization of State Enterprises will have their duties as follows.

201

(a) Offer recommendations to the government on these matters namely :

(1) privatization of certain state enterprises

(2) appraisal of the state enterprises' assets before privatization

(3) the types, volume and values of the shares of limited companies

(4) the shareholding rates, types and volume of the limited companies' shares to be held by the Ministry of Finance

(5) the types, volume and value (lowest) of shares of the limited companies to be distributed to the companies' employees and the conditions governing the resale of these shares to the companies when the employees decide to go elsewhere

(6) the shareholding ratio, types, volume and lowest value of the share to be sold to the public

(7) the shareholding ratio, types, volume and the lowest value of the limited companies' shares to be sold to foreigners

(8) individuals to serve as committee members during the limited companies' initial stage of operation

(9) revisions, changes, limitations or

abrogations of rights stipulated in Article 12

(10) reclaiming certain immovable property in Article 14

(11) other matters which the cabinet or the prime minister require advice

(b) Approve the article of association and the regulations of the limited companies.

(c) Supervise the state enterprises to operate in accordance to this Royal Act.

In determining the value of the assets (2), the Committee on the Privatization of State Enterprises may either designate or hire the service of anyone who will be responsible for the appraisal.

Setting the value of shares (6), (7) may be accomplished by a bidding process or by designating or hiring the service of someone who will offer a suggested price for consideration.

Expenses for the appraisal of the assets of the state enterprises (second and third clause) will come from the income of such state enterprises. In cases where state enterprises lack sufficient funds for such undertaking, the Ministry of Finance will provide an advance which will be later repaid by the state enterprises in the amount that include interests at rates established by commercial banks for savings account.

After establishing the types, volume, par value and trading value for the shares together with related comments on the matter, these considerations will have to be submitted to the government for final approval. Once the package is approved, it must be forwarded in order to be published in the Royal Gazette on condition that the information will not be detrimental to the interests of the government.

Article 17 : The chairperson and members of the Committee on the Privatization of State Enterprises must have the following qualifications :

(1) Thai citizenship

(2) never filed for bankruptcy

(3) not a committee member or employee of state enterprises

(4) never been imprisoned

(5) not a political appointee

(6) not a committee member or working member of a political party

Article 18 : The terms for the chairperson or the members of the Committee on the Privatization of State Enterprises will be 4 years.

After completing the term, if there is no new appointment or nominees, the chairperson or committee members whose term have expired will be allowed to retain their posts until new appointees take over.

The chairperson or member of the committee on the privatization of state enterprises whose terms have expired may be reappointed but cannot serve more than two consecutive terms.

Article 19 : Aside from the conditions in Article 18, the chairperson or members of the committee on the privatization of state enterprises may have their assignments terminated by :

(1) death

(2) resignation

(3) dismissal by the Cabinet

(4) imprisonment

(5) the lack of qualifications set out in Article 17

When the chairperson or members of the Committee on the Privatization of State Enterprises have their assignments terminated (due to circumstances in clause 1), the cabinet may designate a replacement who will serve the remaining years of the person who was replaced.

Article 20 : The chairperson of the Committee on the

Privatization of State Enterprises will call the meeting.

For a meeting to take place, there must be a quorum of more than half the committee membership.

The chairperson will chair the meeting. In his absence, the committee members must nominate a person to chair the meeting.

Final decisions will be determined by a simple majority.

Each member will have one vote. In case of a tie, the chairperson will cast the final decision.

Article 21 : In circumstances when the chairperson is unable to carry out his duty, the members and the secretary of the committee will call the meeting in order to elect a member to carry out the duty of the chairperson.

Article 22 : In carrying its duties as stipulated by this Royal Act, the committee has the power to appoint special sub-committees as it deemed necessary or call upon anyone to come forth with certain facts, explanations or opinions vital to the workings of the committee.

The sub-committee will operate according to the procedures established in Article 20.

Article 23 : The Committee on the Privatization of State Enterprises and the sub-committee will receive

206

APPENDIX III

METHODOLOGY OF THE PRIVATIZATION UNIT FOR PRIVATIZATION OTHER THAN BY SHARE OFFER

A. OBJECTIVES OF TECHNICAL UNIT

To present the Committee for the Privatization of State Enterprises with recommendations as to how the privatization of approved enterprises may be achieved in accordance with policy objectives in such a way that risk is transferred to the private sector and the maximum proceeds are obtainable, and to see to the completion of the transactions.

In order to be in a position to make such recommendations, the Technical Assistance Team must ensure it is feasible to have all legal constraints removed, that the proposed structure of the transaction results in the shifting of risk and that the present value of the transaction is maximized.

The maximization of the value of the transaction will be achieved through attempts to solicit a large number of competitive offers from applicants who are judged able to complete the transaction on the agreed terms, and through effective negotiations with applicants. To negotiate effectively, the team must have, among other things, sufficient knowledge of the operations of the entity and the industry, and be aware of synergistic benefits which could accrue to each applicant.

B. THE WORK OF THE TECHNICAL ASSISTANCE TEAM

The work of the team will be to gather information about the enterprise, identify practical means to overcome barriers to completing a transaction, value the enterprise, recommend an appropriate modality, prepare and publicize a briefing document for investors, screen applications, negotiate with applicants and other parties and then present recommendations. When approval is received, the team will oversee the completion of legal work and the handover of the enterprise.

C. VALUATIONS

Valuations will be done on several different bases, some of which will be contracted out to appraisers. The Technical Assistance Team will have the skills to perform going-concern valuations and, in each applicable case, such a valuation will be performed.

To determine a going-concern valuation, the focus will be to determine that amount which an investor can pay Government of Thailand for an enterprise or for a set of assets, skills and goodwill, taking into account all other costs faced by the investor including the need for rehabilitation work. The amount which an investor can spend in total

-101

will be no more than will enable an adequate rate of return to be earned from future operations. The Technical Team will therefore prepare financial projections to determine the maintainable earnings of the enterprise under various assumptions. The extent to which any of the above information is provided to applicants or reserved for negotiations will depend upon individual circumstances. There is also the possibility of damage claims if projections released by the seller are not achieved.

Usually, applicants will be asked to provide their own projections of post-privatization operations, ostensibly to give comfort to government as to the capabilities of the operator. However, these projections are also extremely useful in negotiations especially if the negotiators have gained extensive knowledge of the enterprise and its business through the preparation of internal forecasts.

D. COMPOSITION OF THE TECHNICAL TEAM

Manager

There will be a full-time **Manager** on site who will report to the Chief Executive (hopefully the C.E. will be the Comptroller General).

In addition to having experience in the management of contracts, the Manager will have a broad range of experience in investment banking and transaction development, in presentations to potential investors and government officials and possess strong negotiating skills.

Privatization Adviser

The Privatization Adviser will advise the Chief Executive as to the preferred modality of the privatization of individual enterprises and present alternatives. He will set out the procedures to be followed by the Technical Team for each entity approved for privatization, which will include the generic procedures and specific procedures relating to the enterprise. He will also determine the skills needed for the completion of the tasks.

The Privatization Adviser will visit Bangkok when necessary to review the work of the teams, plan for work to be done in respect of additional enterprises and advise on the conduct of negotiations. He will hold seminars and workshops with technical staff to explain the objectives and methodology relating to the tasks.

In addition to his visits to Bangkok, which except in the case of public share offers would be for 2 week periods within every six weeks, the Privatization Adviser will be available for telephone and fax consultation whilst not in Bangkok. In the event that there is a public share offer, his presence will be needed for extended periods in Bangkok, with less involvement being necessary following the first such transaction.

Ideally, the Privatization Adviser will have been responsible for the

208

planning of a successful privatization programme and himself have actually conceived of and been in charge of the completion of all aspects of privatization transactions including public relations and advertising. He will have extensive experience of being in an advisory and executive capacity at the highest levels of government in developing countries. His professional qualification and experience will be in finance and he will be an experienced negotiator.

Legal Adviser

In view of the multiple privatizations being worked on by the unit at any given time, there should be a full-time commercial attorney who is qualified to practice in Thailand to be the **Legal Adviser** to the Technical Team. His work objectives will be set by the Chief Executive.

Financial Analysts/Accountants

Since the program will be of long duration, a core of experienced financial analysts and/or qualified accountants will be needed to gather information about the enterprises and compile projections of the potential of the enterprises.

These persons must all be capable of utilising word-processing and spreadsheet packages. The initial core will be recruited after the selection of the first few candidates for privatization and they will be organised into **enterprise teams** with a leader or assigned individually to deal with enterprises, depending on the complexity.

Ad-hoc short-term consultants

Part of the efforts of the enterprise teams will require **ad-hoc consultants**. These will include industry specialists, marketing experts and appraisers and will be engaged by the Chief Executive.

In the case of a large scale public share offer, there will also be a need for consultants or firms providing public relations services, advertising and publicity, auditors, outside attorneys, opinion survey takers and persons to design computer systems and to process applications from the public.

E. STEPS IN A TYPICAL "ONE-ON-ONE" PRIVATIZATION TRANSACTION

The information to be made available to applicants "the briefing document" should include, if applicable:

.Summary information

-Nature of the business

284

-The offer for sale
Full description of the securities, lease or contract being offered and the criteria upon which applicants will be judged for selection

-Historical financial highlights

.History

-When and how incorporated

-Licences, incentives or other concessions granted during its history and present applicability

-Expansion projects

-Acquisition by Government

.Business

-Products

-Markets

-Competitive forces

-Suppliers

-Method of selling

-Productive capacity and present utilisation

-Condition of equipment and degree of obsolescence (relate obsolescence to competitive forces)

-Working capital adequacy of the enterprise to continue present level of operations

.Future prospects

.Management and employees

-Names, positions, academic qualifications, progress through the company (for top management)

-Number of other employees, unionization, training programmes

.Information about and relationship with major shareholders; aspects of shareholders' agreements

.Indebtedness (if a share sale)

-Amounts

-Repayment terms

-Interest rates

-Security

-Unremedied or unwaivered events of default and consequential rights of lenders

-Similar terms as above for long-term leases

.Other information (if a share sale)

-Unusual provisions in memorandum and articles plus rights of each class of shares

-Movements in share capital (dates, nominal value and consideration and how paid)

-Contracts by which the company is bound, including loan agreements, construction agreements, service agreements, agreements with senior management staff.

-Employee pension/termination arrangements and state of funding

.Index of documents available for inspection

The Directors should have readily available for inspection by potential investors:

-Memorandum and articles (if a share sale)

-Long term contracts and leases (if a share sale)

-Titles to real estate

-Loan agreements (if a share sale)

-Agreements, authorizations or licences evidencing entitlement to protection from competition, tax incentives or exchange control concessions

-Latest audited accounts

-The asset valuation reports

A "dossier" should be established for each enterprise. Each dossier should include:

.The briefing document (per above) approved by the Directors

.The approved negotiating parameters

- Applications received
- The evaluations of the applications
- A record of all negotiating sessions and other contacts with applicants including telephone conversations
- The documents referred to in the briefing document under "documents for inspection".

To get to this point, the work method should be as follows:

1) Obtain memorandum and articles or special incorporating statute. (Lawyer)
2) Obtain copies of all important agreements including loan agreements, encumbrances of assets, leases, confiscation orders, construction contracts in progress, union agreements, licences, authorisation for protection from competition including imports, authorisation for incentives and special legislation applicable to the industry. (Lawyer)
3) In conjunction with the enterprise's own attorneys, summarise important or unusual features and exposure to litigation in respect of any of the above for the enterprise or the business operation, distinguishing between the two. (Lawyer)
4) Obtain financial statements for the latest year. (Accountant)
5) In conjunction with senior management of the enterprise, comment on operating history, capacity utilisation, problems facing the company and the industry, relevant events subsequent to the latest accounts. (Accountant)
6) Define preliminary data requirements for preparation of financial forecast. (Accountant)
7) Prepare preliminary SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) for enterprise. (Enterprise Team Leader)
8) Assemble file of the above using standard index corresponding to the step numbers above. (Accountant)
9) Submit to Manager for review. (Enterprise Team Leader)
10) Follow up review points raised. (Enterprise Team Leader)
11) Submit entire file to Privatization Advisor. (Manager)
12) Review file and finalise data requirements for financial

22

forecast. <u>(Privatization Advisor)</u>

13) Obtain data requirements. <u>(Accountant, Lawyer, Industry Specialist and Valuator)</u>

14) Submit to Manager for review. <u>(Enterprise Team Leader)</u>

15) Follow up review points raised. <u>(Relevant persons)</u>

16) Submit entire file to Privatization Advisor. <u>(Manager)</u>

17) Approve preparation of financial forecast. <u>(Privatization Advisor)</u>

18) Prepare computerised financial forecast and submit entire file and forecasting diskette to Privatization Advisor. <u>(Accountant)</u>

19) Make final selection of recommended divestiture option and negotiating parameters. Submit to Chief Executive. <u>(Privatization Advisor)</u>

21) Approve divestiture modality and negotiating parameters <u>(Directors)</u>

20) Prepare briefing document and obtain Directors approval. <u>(Chief Executive/Privatization Advisor)</u>

22) Advertise specific entity

23) Accumulate applications <u>(Enterprise Team Leader)</u>

24) Submit applications, promptly as they arrive, to Privatization Adviser for advice as to clarifications to be requested from applicants, then reply to applicants promptly in writing. Manager kept fully briefed.

25) Negotiate with applicants <u>(Manager and/or Privatization Adviser, Government of Thailand representatives)</u>

26) Summarise final offers and recommend, to Chief Executive, applicants in order of preference. <u>(Privatization Advisor)</u>

27) Approve privatization. <u>(Cabinet via Directors)</u>

28) Prepare final legal documents. <u>(Lawyer through outside commercial attorneys and Attorney General)</u>

29) Sign agreements.

30) Oversee the taking of inventory and giving possession <u>(Chief Executive)</u>

31) Publicize result.

23

APPENDIX IV

METHODOLOGY OF THE PRIVATIZATION UNIT FOR A PUBLIC SHARE OFFER

A. PUBLIC RELATIONS PRIOR TO THE SALE

The public debate about privatization will not reach full intensity until a firm plan for the first major widespread privatization is announced. Usually, as in the case of Thai International or Krung Thai Bank, this is for a large enterprise which is to be sold by a nationwide share offer, and it is interest to many members of the public.

To a large extent the opposing arguments will be focussed on the Enterprise itself. Strong rhetoric will be brought to bear against privatization and allegations will be made with great force. Indeed, in the case of the 1989 share issue of Krung Thai, bad publicity was received which called into doubt the financial state of health of the Bank. This time, if that problem is solved, the issue will be more conceptual, for example, why privatize a profitable SOE? This can be effectively neutralized.

It would be preferable to use government's own public relations machinery (information agency) as far as possible for many reasons, but a private agency can also be effective.

To begin with, it should be explained how the privatization fits into the overall policy.

The elements of the planned PR programme should include presentations to influential journalists, editors and columnists and to special interest groups, particularly the military, unions and other mass organisations and academics. The programme should include the elements outlined below:

Briefing kits

Preparation of a briefing kit for key columnists and editors, politicians and civil servants. The kit for the politicians will include certain items not available to others, eg. a sampling of opposition arguments of why the Enterprise should not be privatized and how to refute, or better still preempt, such arguments.

"Road shows"

A team representing government, the Enterprise, the attorneys and a stockbroker should hold meetings all over the country with influential and grass roots organisations, even citizens at large, in public fora. The public relations agency should prepare a release after each meeting, preferably with photographs. Word-of-mouth is the most credible publicity and can result even if the rural meetings are poorly attended - the fact that a team took the trouble to visit will be widely known.

(i) Employees

Employees should be addressed in logical groups at various locations, even if the union is not supportive. Every single employee personally should have the opportunity to be at one such meeting. The employee share scheme can be explained in outline (pricing will be done at the last minute only, but the size of the discounts can be revealed) along with the "big picture" of the privatization effort. As long as an employee group is the first to be addressed and the meeting receives wide publicity, it is not necessary to wait until all employee groups have been addressed before carrying road shows to non-employee groups, and it is better that these be done concurrently.

The point can be made that when government's holding becomes below 50%, the government pay strictures will no longer apply.

Enhanced opportunities for career advancement should be explained as a result of the privatization.

(Despite union opposition in other countries, typically over 90% of the employees of the Enterprise being privatized apply for shares. Union leadership then runs the risk of being perceived as being out of touch with the membership or trying to stand in the way of their members' receiving benefits).

(ii) Private sector groups

The first outside organisation which should be addressed is the Chamber of Commerce and the private sector organisations as it is certain that expressions of strong support can be obtained and used in a press release. It is important to extract and publish as many supportive statements as possible quickly, so the first groups to whom the message should be taken are those most likely to be supportive.

This support should be sought whether or not there has been public criticism of the strategy at that time. The object is to as far as possible preempt criticism and not be on the defensive.

Other important organisations from whom an expression of support would be most helpful would include academics, farmer's organisations or associations, religious leaders, cooperatives, teachers, nurses and perhaps even public fora hosted by any of these or similar groups.

(iii) The military

It will be particularly important to explain the privatization plan to the military, considering its interest in so many aspects of policy in Thailand.

(iv) The unions

A meeting with leaders of the union movement as a whole (not just the unions for workers of the Enterprise or the state sector, but all unions) would also be desirable. Union support can be achieved if the workers of the Enterprise are given attractive concessions, and if it is suggested to the unions that they should approach employers to provide share purchase schemes in respect of the privatization.

Unions also find restriction on ownership features attractive ideologically and assuring them of the effectiveness of such restrictions is important.

It can be claimed that if each of the members of all the unions in Thailand applied for even a small number of shares, the country's union movement could have a major collective stake in the Enterprise. Union leaders should be asked to suggest ways in which their members can be facilitated in making applications to achieve such an objective. This places them in a quandary which will lead them to put forward ideas - then they will have given tacit support which the PR agency will put into a release.

Getting the unions to agree to distribute pamphlets and prospectuses, while not essential to the financial success of an share offer, would also be a visible demonstration of support which will deflate populist opposition. Even if at the meeting they do not explicitly agree to distribute these, large numbers of Q&A pamphlets should be left in the room.

B. ISSUES TO BE RESOLVED

(i) Concessions to employees

Often the percentage of the shares which it is possible to reserve for employees, given their ability to purchase on a realistic basis, is disappointing to policymakers. In rare cases it is possible to arrange for 100% ownership by employees immediately after privatization. Usually, the resort to artificial means, to ensure that employees own a very large share of the Enterprise, spell disaster -therefore it is important to be careful in setting a realistic level for employee participation.

Desirably in a public offer, a number of free shares should be made available to all employees as this will lead to a high percentage participation by employees in the sale. This, when announced during the offer, provides impetus.

A number of heavily discounted shares (say at a 50% discount) can also be available. Within a limit additional more lightly discounted (by, say, 10%) shares should be made available and other fully priced shares on a priority basis. (Priority means that despite any oversubscription they would still be able to get reserved shares.)

For the first round of applications the overall limit should be the same for each and every employee regardless of seniority or length of service, but the limit should be set at a level above the means of most employees. An easy payment plan should be established with interest expense being borne by the Enterprise or government.

To the extent not taken up in the first round of applications, shares could then be accessed by other employees on a lightly discounted basis, thus giving more affluent employees a chance to buy proportionate to their ability whilst still preserving an egalitarian character to the scheme by virtue of the equal first round entitlement.

Employees who purchase discounted shares or shares in respect of which the easy payment plan is used, should not be permitted to sell them on the open market for, say, a 2-year period, so that selling pressure on the market does not arise. However there can be an internal market for employees during the restricted period.

(ii) Minimum application

The minimum application should be set at a low enough amount to enable very high numbers of people to participate in the offer, which is yet high enough as to amply cover the cost of processing the applications.

(iii) Allocation procedures

Apart from employees, applications will come from vast numbers of small applicants, larger individual savers, speculators and financial institutions, in increasing size. The prospectus will give the issuer/offeror the right to allocate shares in such a manner as would give preference to small applications from individuals. The allocation should not be left to brokers and selling agents as was done with the last Krung Thai share issue, it is up to the seller of the shares (Government must decide through the lead underwriter who performs the issuing office function).

(iv) Tax waivers and other concessions

Waivers of various taxes may be sought to simplify the process of privatization and to reduce the amount of work that will need to be done by the issuing office. For example, the a stamp duty on shares transferred of will result in no incremental government revenue as the recipient and payer would be government arms (if government was selling part of its shareholding) but the delay that would be caused in the issuance of the shares to hundreds of thousands of applicants might be intolerable because of the physical capacity of the stamp office to process the documents or for the issuing office to affix postage stamps as an alternative. These waivers need to be approved at an early date as there is usually a Gazetting requirement.

(v) Waive need for directors' signatures on share certificates

A way must be found to avoid the need for the directors to have to manually sign all the share certificates, as this would be impossible. Signatures could be preprinted on certificates instead.

(vi) Need for underwriting

Even if capital is thought to be available, it would be wise to have the sale underwritten in view of the possibility that the application list will have to be held open for a relatively long period to accommodate unsophisticated, small investors. During such a period any number of types of calamities may occur which may affect the success of the sale.

(vii) Costs

The following types of costs will arise and should be budgeted:

publicity
advertising
legal fees
accounting/auditing fees
underwriting
commissions
investment banker fees
lead broker fees
printing costs
issuing office expenses
computer programming
data entry
computer processing
search for multiple applications

If the share sale were to consist in whole or in part of an offer (as opposed to a new issue) there would be some conflicts between the government (which owns the Enterprise shares) and the Enterprise itself. Both government and the enterprise's directors would have responsibility for the prospectus. Two sets of attorneys would have to be used and their roles well defined prior to the start of meetings of the prospectus committee. The responsibility for the fees in respect of any special audit and the auditors' participation in the prospectus would have to be agreed as would also who is to bear the cost of advertising of different types.

(viii) Valuation

It is recommended that the delegation of the final determination of the price per share should be left to one high level official or Cabinet member, as that decision must be taken within a very short time frame just prior to the agreement with the underwriters.

(ix) Residual shares

It must be resolved whether there is a need on the part of the investors for government to undertake not to vote any residual shares nor to dispose of any residual shares for a stated period and then only in such a fashion as not disrupt the market.

C. PUBLIC RELATIONS DURING THE SALE

Throughout the sale, an air of competence and confidence must prevail. There should be a special logo for the sale and a "hotline" should be set up to answer queries.

(i) Commence image building of the Enterprise

The advertising programme should have two distinct aspects, raising the profile of the Enterprise itself and providing information about the share offer.

The Enterprise will naturally wish to use its own agency in connection with the image-building advertising, and should pay for those costs.

Opinion polls should be used liberally during all phases to determine public reaction.

(ii) Plan news stories concerning the privatization

There should be planned news stories, eg. the announcement of the privatization, who is in charge, the launching of the employee share scheme, the underwriting, the launching of the prospectus, the opening of the list, the extent of employee applications, the attainment of the minimum offer, the last minute rush ("share-fever"), the (hopefully) extent of the oversubscription, the allocation basis, the despatch of the share certificates or allotment letters and refund cheques. The "trick" is to eke out the information slowly so that the number of news articles is as many as possible.

Appearances on television discussion shows and radio call-in programmes by the management of the Enterprise and by the person in charge of the sale also enable the public to feel that they have had an opportunity to discuss the issue.

(iii) Commence publicity on share ownership.

A Question and Answer ("Q&A") sheet explaining shares and share ownership in simple language should be prepared, starting with the question "What is a share?". The Q&A sheets will be distributed in large quantities at meetings with special interest groups, through supermarket checkouts, a newspaper supplement and other means.

D. IMPLEMENTATION

(i) Mobilize prospectus committee, assign responsibilities and commence drafting.

The committee which will consist of the management of the company, the enterprise's legal advisors, the auditors (on an ad-hoc basis) and the legal advisors to the government. A detailed timetable will be agreed and rigorously followed up.

(ii) Carry out negotiations with financial institutions, selling agents, issuing office and registrar and transfer agent. Design systems and procedures and provide training.

In order to have shares available to persons all over Thailand, commercial bank branches should be used as selling agents.

Commission rates and fees must be agreed with the above as must their duties. Training of bank staffers will be necessary and the importance of not unduly influencing potential applicants must be stressed.

In order to avoid the receipt of cash by the issuing office, arrangements may be made with selling agents to cover each cash batch of applications with their own certified cheque. Banks should be requested to give special clearing facilities for the offer. In Thailand use has been made of bank clearing accounts for the acceptance of payments for share applications.

For the first large-scale privatization it is particularly important that the operation is efficient and that all announced deadlines are met.

The issuing office should have a good track record and competent people and computer resources. Since this would be one of the first if not the first of its nature in Thailand, there will be no local experience. It may be necessary to bring in expertise but it is vital that the issuing office be highly capable and every step of the process must be planned. As a rule of thumb, a staff complement of about 1 person per thousand applications is needed, not including data entry.

Great care must be taken to ensure the smooth and accurate processing of applications. Special programmes must be written and the quality of data entry facilities and computer installation personnel must be evaluated.

(iii) Assemble documents for inspection.

The completion of all important agreements must be monitored closely. These would include the licences, incorporation documents and documents evidencing any waivers or concessions made by government to facilitate the privatization. They must be available for inspection by potential investors while the prospectus is "live".

(iv) Obtain Approval of final text of prospectus.

The authorised person under the Commercial Code must approve the prospectus before publication. The SET should also have sight of a near final draft of the prospectus to identify any deficiencies which may cause difficulties in listing the share.

(v) Make decision on price per share.

Advisors will recommend the price of the shares just prior to the final printing of the prospectus. The pricing decision will take into account all of the factors normally used in valuing a commercial enterprise plus those factors relating to the objectives of the privatization as agreed by government and the then state of the market.

(vi) Publicity relating to share offer

The objective of this publicity is to encourage the public to make applications.

The advertising should be done on all media. The government will receive a massive political boost through extensive advertising of the shares and this should be borne in mind if the advertising costs are considered too high.

The information aspect of the advertising should publicize when prospectuses will be available and where, when the application list will be open, suspense-building (SOON...; GET READY...; GET SET....; GO!....; ONLY x DAYS LEFT...).

(vii) Print prospectus.

This will be a large task considering the number of applicants being sought and the short time frame for printing.

(viii) Distribute prospectus.

The mechanics of the distribution of the prospectus will have been planned. The prospectus should also be published in the newspapers. All bank branches and branches of any organisation which has numerous offices should be used to assist in the distribution.

(ix) Open application list.

Arrangements must be made to ensure that the government maximizes the use of funds before refunds are made to unsuccessful or partly successful applicants.

(x) Process applications.

This must be thoroughly planned. Although the list will probably be open for a longer period than would be the case in countries with highly developed capital markets, it can be expected that 75% of the funds and 40-50% of the applications numerically will be received in the last three days. This would be so whether the offer is open for one week or three weeks. Staffing levels at the issuing office should be set with this in mind.

The longer the list is open, the more risk is taken by the seller. Institutions and speculators will be keen to determine whether the issue is going well or badly before making their decision, and will try to gain information by innovative means, more possible if the offer is open for a longer period. However in the case of a first major offer when the target investors are unused to the concept, a relatively long period is needed.

It is vital that information be as tightly controlled as possible and that any statements be made by only one authorised person, as a carelessly worded reply can have adverse repercussions on the success of the offer.

(xi) Close list.

Regardless of the response to the offer, the list should close on schedule and not be held open if the response is poor. If the list were to be held open, the credibility of the closing date of subsequent privatizations would be suspect.

Any publicity will depend upon the results, but should include comments from the political directorate with hints as to the next steps in the privatization programme.

It is also important to state clearly Government's intentions as to any residual shareholding.

In the event that the offer is not wholly successful, it is important to preempt negative press reports by preparing a release before the information leaks. This release can frame the outcome in a positive way ("we were courageous and our courage has paid off"; "the biggest share subscription in the country's history"; "we are sorry that some missed the deadline but they will have a chance to buy in the after-market".

(xii) Audit for multiple applications.

Computerised systems should be used for the review of applications to ensure that those who apply on several different forms are aggregated for the purpose of determining their entitlement under the allocation method announced.

(xiii) Obtain approval of and announce share allocation method.

Computer models exist to assist in the determination of the precise allocation method to achieve the objectives of government.

(xiv) Print and distribute share certificates.

After sufficient time has been allowed for cheques to clear, the share certificates may be printed.

This will have been planned in detail and performed by the issuing office. When the envelopes are being despatched, there should be news photographs with captions so that the public is aware that the issuing office has done its job.

If arrangements can be made to have the certificates delivered to a few hundred points for retrieval by the shareholders instead of to thousands of individual addresses, this could greatly improve efficiency. This can be done if certificates are returned to the selling agents.

(xv) Comply with requirements for listing

The register of shareholders should be delivered to the stock exchange within the prescribed time along with the other documents needed to process the listing application.

(xvi) Announce date on which trading will commence.

The public should be given information as soon as possible

(xvii) Trading starts.

(xviii) First annual general meeting

Both are media events and should be given coverage.

APPENDIX V

WORKING DEFINITION OF VALUATION TERMS FOR THE COMMITTEE ON THE PRIVATIZATION OF STATE ENTERPRISES

Reproduction cost

Definition:

The cost of reproducing a new duplicate property on the basis of current prices with the same or closely similar materials.

Concept:

Presumes the reproduction of the entire property in new condition as a complete unit at one time.

Example of where appropriate:

A building where character and style are essential to its existing value.

Replacement cost

Definition:

The cost of acquiring a property of equal utility.

Concept:

An estimate of the replacement cost takes into consideration how a property would be replaced with modern materials and utilising current technology and design concepts whilst providing the same utility or productive capacity. It is usually less than (but could conceivably be higher than) reproduction cost.

Example:

A crossbar telephone exchange would be replaced with a digital exchange of the same capacity and additional features at lower cost.

Depreciation (as used by Appraisers as opposed to Accountants):

Definition:

A loss in value from all causes including factors of deterioration, functional and/or economic obsolescence.

Concept:

Deterioration is evidenced by wear and tear, decay, dry rot, cracks, encrustation or structural defects.

224

Functional obsolescence may be due to poor plant layout, inadequacy or overadequacy relating to size, style, age, mechanical capacity, etc. It is evidenced by conditions within the property. It may be further subdivided into curable or uncurable obsolescence.

Economic obsolescence is caused by changes external to the property itself, including changes in optimum use, legislative enactments which restrict property rights or income-producing ability and changes in supply-demand relationships.

Liquidation value

The price a property in distress will bring if exposed for sale on the open market under forced or orderly sale conditions.

Orderly liquidation value

Definition:

The price which a property will bring if exposed for sale on the open market with a reasonable time allowed to find a purchaser, both buyer and seller having knowledge of the uses and purposes to which it is adapted and for which it is capable of being used, the seller being compelled to sell and the buyer being willing but not compelled to buy.

Forced liquidation value

Definition:

The price which a property will bring if exposed for immediate sale on the open market, both buyer and seller having knowledge of the uses and purposes to which it is adapted and for which it is capable of being used, the seller being compelled to sell and the buyer being willing but not compelled to buy.

Salvage value

Definition:

The amount realizable upon sale or other disposition of an asset after it is no longer useful to the owner and is to be retired from service.

Book value

Definition:

The capitalised or recorded value of an asset less the depreciation taken for financial reporting purposes.

Depreciation (Accounting use)

Definition:

A charge against earnings for the use of an asset.

Original cost

Definition:

The initial capitalised cost of the item in the hands of the present owner.

Historical cost

The initial capitalised cost of an item to its first user.

Market value (Real Estate)

Definition:

The highest price estimated in terms of money which the property will bring if exposed for sale in the open market allowing a reasonable time to find a purchaser who buys with knowledge of all the uses to which it is adapted and for which it is capable of being used.

Concept:

This is the definition of the American Institute of Real Estate Appraisers. It embodies the concepts for both buyer and seller of willingness, knowledge, equity, but without compulsion. In arriving at an estimate of market value, consideration is given, as applicable, to the summation of land value and the depreciated reproduction cost of the balance of the property; to the cost of replacement with modern facilities less an allowance for depreciation from all causes; the capitalisation of earnings at an appropriate risk factor over the life of the assets; adaptability to other uses; cost of conversion; and other relevant factors.

Market value

Definition:

The amount at which a property (an enterprise) would exchange between a willing buyer and a willing seller, each having a reasonable knowledge of all pertinent facts, neither being under compulsion to buy or sell and with equity to both.

Concept:

This definition is more all inclusive and generic than that previously given for use with real estate. In arriving at an estimate of market value, consideration is given, as applicable, to the summation of the land value and the depreciated reproduction cost of the balance of the property; to the actual sale or asking prices of comparable property; to the cost of replacement with modern facilities less an allowance for depreciation from all causes; the capitalisation of earnings at an appropriate risk factor over the life of the assets; adaptability to other uses; costs of conversion; and other relevant factors.

Value-In-Use

Definition:

The value of assets in use as an integrated part of an operating enterprise with consideration given to age, condition, utility, and the used market insofar as applicable, but without consideration as to whether the earnings justify an investment in the assets at this amount.

Fair rental value

Definition:

The income, in terms of money, which a property will bring if exposed on the open market, with a reasonable time allowed to find a lessee, neither lessor nor lessee being under duress and each having knowledge of the uses and purposes for which the property is suitable.

Subjective value

Definition:

The value to the appreciative owner.

Concept:

It is the amount an item, usually personal in nature, is worth to its owner, generally for emotional reasons.

VALUATION OF A BUSINESS

The value of any business is equal to the present value of its expected future after-tax cash flows. This seemingly basic statement should be kept in mind throughout the entire valuation exercise.

Cash flows take into account spending that must be done in order for a business to achieve the expected cash flows. This is particularly applicable in the context of the privatization programme in Thailand because of the requirement for the rehabilitation of assets and additional working capital before a State-Owned Enterprise can attain its basic potential earning capacity, maintainable on an on-going basis under normal operating conditions ("maintainable earnings").

To the maintainable earnings a multiple is applied. Both quantitative factors and qualitative factors (both positive and negative) should be taken into account in selecting the appropriate earnings multiple.

The following factors should be taken into account in selecting an earnings multiple in the context of Thailand:

External Factors

1. SET and money market conditions (eg. interest rates).
2. Economic conditions (eg. inflation rate, personal disposable income).
3. Political environment (eg. stability of government).
4. Demographic factors.
5. Environmental protection requirements.
6. Existing or pending legislation or regulation applicable to the industry (eg. price or import controls).

Industry Factors

1. Market share of companies in the industry.
2. Industrial relations climate.
3. General outlook for the industry.
4. Ease of entry by competitors.
5. Extent of leveraging.

Internal Factors

1. Trend in earnings and projected growth.

2. Tangible asset backing (used in determining the measure of going-concern risk).

3. Liquidation value (used in determining the measure of absolute risk).

4. Quality of earnings (subjectivity of accounting principles used).

5. Assessment of management and likelihood of their continuance.

6. Existence of interest in investment in the business.

7. Condition of production facilities.

8. Capacity vs. utilisation vs. future product demand.

9. Dependence on customers, suppliers, management contracts, government approvals.

10. Stability of revenues (eg. existence and term of contracts).

11. Financial stability (eg. debt/equity; working capital) and amount of financial and operational leverage.

12. Existence of possible synergistic benefits that could be gained by a potential purchaser.

ILLUSTRATIVE SEMINAR CONTENT AND TIMETABLES	FULL	HALF
OPENING REMARKS AND INTRODUCTIONS	3	3
WHICH GOVERNMENTS ARE SELLING WHAT, TO WHOM AND WITH HOW MUCH SUCCESS?		
Country-by-country status	5	5
Special discussion on		
U.K.	5	5
Jamaica	5	5
Chile	5	5
Sri Lanka	5	5
Turkey	5	5
Thailand	5	5
Ghana	10	10
Eastern Europe	5	5
QUESTIONS	10	10
WHY ARE COUNTRIES PRIVATISING?		
Symptoms of problems	5	5
Global changes	5	5
Typical objectives	7	7
Are we in Phase 2 of the privatisation era?	1	1
Context of structural adjustment	3	3
QUESTIONS	5	5
BREAK	10	10

2.30

HOW COMPREHENSIVE SHOULD THE POLICY FRAMEWORK BE?	2	2
Statement of objectives	10	5
Exclusion of certain asset types	2	5
"Strategic"	5	1
"Natural monopolies"	5	1
Profitable enterprises	10	5
QUESTIONS	10	2
Transaction conditionalities	2	1
Concentrations of ownership	1	1
Sensitive circumstances	5	
How to prevent	5	2
Employee participation	10	5
Special case for real estate	3	1
Sales to foreigners	5	2
QUESTIONS	10	
Institutional framework	2	1
Integrity safeguards	2	1
Approval process	2	1
Grand plans	2	1
Setting up a special legal framework	2	1
The types that have been used	3	1
QUESTIONS	5	5

231

THE MECHANICS OF PRIVATISATION TRANSACTIONS

"Restructuring first" option	2	1
Institutional framework	1	
Integrity objective	1	
One-on-one divestments	1	1
Public offers	5	1
Modalities of one-on-one divestments	5	1
Management contracts	2	1
Operating leases	2	1
Long-term leases	5	1
Sales of a going concern	5	1
Sales of incorporated enterprises	1	1
Rights of occupancy of premises	1	
Violation of loan covenants	1	
Unfunded pension obligations	1	
Minority shareholders	1	
Litigation in progress, pending or threatened	1	
Out of date audited accounts	1	
Sales of individual assets	1	1

LUNCH

Do the books need to be brought up to date?	3	1
Valuation issues and techniques	19	5
Do loss-makers have a value?	1	
QUESTIONS	10	5

The workforce on privatisation day	2	1
End-of-service benefits	5	2
Entrepreneurial loan programs	5	5
Training	2	2
Financing privatisations	5	1
Should government finance?	5	1
Should there be directives to private financial institutions and banks?	5	1
Debt for equity swaps	5	2
Tax and other incentives	2	1
The content of offer documents	15	5
Circulation to applicants	2	1
The exposure period	2	1
Extensions	2	
Screening applications	5	1
QUESTIONS	10	
BREAK	10	
Negotiating privatisation transactions	2	2
How to differentiate investment proposals from sales proposals	5	2
How to prepare	1	
Which information should not be in an offer document?	2	
How to turn the tables	3	1
How far to push	2	

Negotiating teams	2	1
QUESTIONS	10	5
Modalities of public offers	2	1
. Capacity of market	2	1
Percentage to be sold	1	
Status of residual shares	1	
Share issue, share offer, or both?	2	
Role of local financial institutions in developing countries	7	2
Pricing	5	2
Underwriting	5	1
Advertising and publicity	15	8
How to achieve and maintain widespread distribution	5	5
How to foster a good after-market	3	3
Allocation of shares to applicants and Issuing Office function	10	5
QUESTIONS	10	5
Secondary offers	3	
Preemption rights?	3	
Populist mode or private placement?	3	
Tender offers and combination offers	5	
QUESTIONS	5	
COMPLETION OF QUESTIONNAIRES	7	5
CLOSING REMARKS	5	3
	480	240
	8	4

Financing privatisations	
Soliciting and processing applicants	
BREAK	10
THE MECHANICS OF PRIVATISATION TRANSACTIONS (PART III)	114
Negotiating privatisation transactions	
Modalities of public offers	
COMPLETION OF QUESTIONNAIRES	7
CLOSING REMARKS	5

	480
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	8

ILLUSTRATIVE SEMINAR CONTENT AND TIMETABLES

HALF DAY SEMINAR PROGRAM

	Minutes
OPENING REMARKS AND INTRODUCTIONS	3
WHICH GOVERNMENTS ARE SELLING WHAT, TO WHOM AND WITH HOW MUCH SUCCESS?	60
Country-by-country status	
Special discussion on 11 countries	
WHY ARE COUNTRIES PRIVATISING?	26
BREAK	10
HOW COMPREHENSIVE SHOULD THE POLICY FRAMEWORK BE?	44
Statement of objectives	
Exclusion of certain asset types	
Transaction conditionalities	
Institutional framework	
Grand plans	
Setting up a special legal framework	

17

ILLUSTRATIVE SEMINAR CONTENT AND TIMETABLES

FULL DAY SEMINAR PROGRAM

	Minutes
OPENING REMARKS AND INTRODUCTIONS	3
WHICH GOVERNMENTS ARE SELLING WHAT, TO WHOM AND WITH HOW MUCH SUCCESS?	60
Country-by-country status	
Special discussion on 11 countries	
WHY ARE COUNTRIES PRIVATISING?	26
BREAK	10
HOW COMPREHENSIVE SHOULD THE POLICY FRAMEWORK BE?	103
Statement of objectives	
Exclusion of certain asset types	
Transaction conditionalities	
Institutional framework	
Grand plans	
Setting up a special legal framework	
THE MECHANICS OF PRIVATISATION TRANSACTIONS (PART I)	37
"Restructuring first" option	
Institutional framework	
Modalities of one-on-one divestments	
LUNCH	
THE MECHANICS OF PRIVATISATION TRANSACTIONS (PART II)	105
Do the books need to be brought up to date?	
Valuation issues and techniques	
The workforce on privatisation day	

THE MECHANICS OF PRIVATISATION TRANSACTIONS 107
"Restructuring first" option

Institutional framework

Modalities of one-on-one divestments

Do the books need to be brought up to date

Valuation issues and techniques

The workforce on privatisation day

Financing privatisations

Soliciting and processing applicants

Negotiating privatisation transactions

Modalities of public offers

COMPLETION OF QUESTIONNAIRES	5
CLOSING REMARKS	3

	258
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	4.3

231

APPENDIX VII

Outline of Training Program for Technical Unit

Short Term Observation Study Tour:

Program: Two-week programs that would include attendance at a pre-departure Seminar on the basics of capital markets, how they function, how they are policed and regulated by the stock exchanges and the role of the Securities and Exchange Commission. Visit to the United States would include calls at major Wall Street firms such as Merrill Lynch, Kidder-Peabody, Salomon Brothers, First Boston, Morgan-Stanley; visits to the New York Stock exchange and to the Commodity Exchange; explanations of how firms are listed on the Board; trading procedures; visits to institutional investors such as fund managers to show how they approach portfolio investment; and visits to venture capital firms. A visit to Washington, D.C. at the Securities and Exchange Commission would also be useful, as would visits to smaller regional investment and brokerage firms such as Ferris Baker Watts. Team should also visit universities in the Washington area to meet with the deans or professors of the business schools.

Numbers: The maximum number of Comptroller-General's staff should be programmed for this observation study-tour, subject to having groups of manageable size, say six to eight at a time. It would also be very beneficial if at least two from each group were from outside the Ministry of Finance, such as Financial Officers of SOEs. It is recommended that an effort be made to program at least two teams per year x eight per team = 16 participants per year x two years, or a total of 32 participants, including approximately 8 non-Comptroller-General participants.

Another important area that should be targeted for training would be Management Information Systems. In addition to assuring basic proficiency in the use of software such as Lotus and Fox Pro, there should also be training in financial analysis so that staff of the State Enterprise Division know how to present the data they review into format suitable for manipulation with various kinds of PC software

Medium Term Academic Study:

Program: Two to three month's training in financial analysis and performance evaluation of enterprises, possibly during a summer term at a business or graduate school. This would give staff the analytical tools to identify candidates for privatization and suggest ways to improve efficiency in operations.

Numbers: Six candidates should be selected.

Long Term Academic Study:

Program: Two-year Master's in Business Administration (MBA) degree programs, with majors in Finance, at such institutions as the Wharton School, University of Pennsylvania; the Kellogg School, Northwestern University; or similar graduate schools of business.

Numbers: Two candidates for this program should be selected, with additional candidates chosen later subject to available funding.

These could be structured as "privatization scholarships" for those who show the most initiative and work in advancing privatization from within the MOF, and would benefit from advanced training in this area.

The above estimates are of course illustrative, but in the opinion of the team, it is important that a program of training along these lines be initiated to prepare for the expected demands for such skills.

Management Information Systems (MIS) in the Comptroller-General's Department of the Ministry of Finance: Improving the Collection, Analysis, and Use of Information.

Executive Summary of MIS Findings and Recommendations:

Although considerable progress has been made in managing State Owned Enterprise data, the Comptroller-General's Department now has an opportunity to undertake a number of steps to enhance its MIS capabilities in support of Thailand's privatization program.

Past MIS practices were appropriate for collecting and reporting data on the largely static situation of State Owned Enterprises (SOEs). Thus, the Comptroller-General's Department has been able to produce acceptable standardized reports on schedule despite several unsuccessful attempts to develop mini-computer and PC-based data bases. Neither MIS addressed such problems as the lack of standards and procedures to insure data integrity, extensive manual entry and re-entry of data, and the difficulty of conducting ad hoc queries.

Today, the MIS strategy must be redirected to meet the dramatically different needs of monitoring and analyzing the dynamic SOE situation. The Department should begin the process of consolidating independent and unrelated data bases (whether manual or automated) by developing a structured data architecture which will support the increasingly important role of the Comptroller-General's Department in Thailand's privatization program. Although periodic standard reports will still be required, they will be eclipsed by the need for analysis and ad hoc reports on short notice. In turn, the analytical work will require much greater data accuracy, consistency, and accessibility.

Although the MIS staff is highly capable and eager to begin implementing these efforts, they face a number of roadblocks: the need for additional training in financial analysis; the press of other job responsibilities; the lack of an experienced systems analyst to develop and support the MIS; and the lack of a sufficient number of PCs. With the support and encouragement of the senior managers of the Comptroller-General's Department, the MIS staff can undertake a number of initiatives to improve the Department's collection, analysis, and reporting of SOE data.

The team's MIS findings and recommendations (in priority order) include:

1) **The key issue is a need to provide the MIS staff with additional training in financial analysis.** Additional information technology (IT) training can follow once the financial analysis capabilities of the staff have been upgraded. The need for more MIS training is secondary because the analytical needs of the MOF, not information

240

technology (IT), should determine the scope and direction of the State Enterprise MIS. The Division should take advantage of new IT tools as opportunities arise but not let them become the driving force behind any MIS initiative. As the Division's staff become more proficient in financial analysis, they will be in a better position to guide and support the implementation of a more powerful MIS.

2) **After staff training, the second most important issue is to develop a data architecture or information plan for the Department.** A data architecture can be defined as a formal, comprehensive approach to defining the meaning, structure, and inter-relationships of all data used by an organization. Among other characteristics, an information plan also assigns responsibility for collecting, verifying, reporting, and disposing of data. Just as an architect prepares building plans before construction begins, the preparation of an information plan will create a solid basis for the more efficient collection and effective use of SOE data.

3) **An information plan, no matter how well designed, is worthless without improved procedures for collecting and verifying data.** In the past, SOE data was collected, reported, and filed away. Today, significant decisions regarding the SOEs will be based on the Department's data and the MIS staff must make a significant effort to insure the accuracy, reliability, and consistency of the data. Since most of the data is furnished by other government organizations, the MIS staff will need the support of senior MOF management as they work to collect and verify the financial data.

4) **Additional work on redesigning the Division's MIS should be determined by agreements on its function and purpose, not by technical considerations.** Although the present PC base MIS system, written in Foxbase+ functions well, it has a number of deficiencies:

- the lack of documentation makes modifications and maintenance difficult
- the number of fixed reports is limited and ad hoc reports require a knowledge of Foxbase+
- the system is designed for reporting and not for analysis

The current climate of privatization activities in Thailand requires current, accurate data on SOEs so MOF officials can make informed recommendations to their colleagues in other Ministries. The MIS system should be redesigned to insure that data are accurate, comprehensive, timely, and perhaps, most important, readily accessible. As a first step, the privatization study team built a prototype MIS using LOTUS 123 which is described in detail in the Appendix.

5) **As the State Enterprise Division staff becomes more proficient in financial analysis and the MIS becomes more**

critical to the MOF, **the State Enterprise Division will need at least a part-time highly capable MIS support analyst to help maintain and improve the system.** Although the Comptroller-General's Data Processing and Disbursement Execution Division appears to be highly competent, their operational workload appears to be too great to be able to count on for consistent support. Therefore, the State Enterprises Division should budget for a highly qualified, part-time MIS analyst. This person should work under the direction of the MIS staff to implement the changes and enhancements they specify. The Department's MIS staff should also take advantage of offers made by several of the SOEs with sophisticated information programs to provide MIS counsel and advice to the MOF.

6) Although each of the above recommendations will help improve the State Enterprise Division's information management capabilities, **the Division should also implement an outreach program to make sure data gets into the hands of appropriate MOF officials and staff on a regular basis.** By outreach program, we mean that the MIS staff, on their own and without being asked, should routinely prepare and disseminate relevant data, as well as reports and analytical studies, to MOF personnel. This proactive effort will have several effects:
   - MOF staff will have a greater awareness of the data which are available
   - MOF staff will use the MIS to get data rather than waste time searching for data
   - Staff will be more inclined to use the "official" data in their work
   - As less time is devoted to data collection, entry, and verification, more effort can be spent on reporting, analysis, and interpretation
   - Senior MOF managers will have greater confidence in their data and their staff's ability to analyze the data.

7) **If the above recommendations are implemented, the State Enterprise Division will certainly require additional PCs and software--especially Thai word processing and spreadsheet software.** The wider availability of PCs will encourage more individuals to become proficient in financial analysis using spreadsheets. While there is no easy answer to the "brain drain" problem endemic in public sector organizations, the Department could insulate itself somewhat from this problem if it had a number of individuals skilled in the use PC spreadsheets. Thus, as individuals leave, their responsibilities could be turned over to other staff members without an interruption. Today, with only three PCs, most Division employees have no opportunity to become proficient PC users.

Report on MIS Findings and Recommendations

1) **Provide Additional Financial Analysis Training for the staff of the State Enterprises Division**

With additional training in financial analysis for selected members of the 40 person staff, the State Enterprises Division will be better able to take advantage of the increasing power and flexibility of PC based software now available. The training for the three individuals responsible for the MIS should emphasize the practical aspects of collecting and interpreting financial data using PC based tools. There is no need for specific training on data base management systems (DBMS) such as Foxbase+. Since the ability to make use of PC spreadsheet programs such as LOTUS 123 is a virtual necessity for any financial analyst, the training should make extensive use of Lotus.

The training should address conceptual issues relating to data needed to analyze and compare the performance of corporations. For the MIS staff, the purpose of the training is twofold. First, the training will enable them to take the lead in performing more rapid and thorough analyses of SOEs. Second, they will be able to take a more active and informed role in developing and expanding the MIS.

The training should help the MIS specialists (who, in turn would also help other MOF analysts) present and analyze financial data in new and informative ways. The MOF should consider the feasibility of combining academic course work with an on-the-job cooperative program where the individuals would conduct actual analyses of financial data using PC software. In this situation, the MOF staff members would get hands-on experience with methods for collecting, organizing, and analyzing data. If on-the-job training is not practical, the academic work should stress case studies or problems based on real data. The emphasis should be on the creative use of data to solve real world problems.

Another training resource which should be pursued is the use of commercial PC financial analysus programs. As a test case, the privatization team acquired a new program called the Mobley Matrix for the State Enterprises Division. This PC program is a financial planning and analysis tool which is intended as a supplement, not a replacement, for more traditional financial statements and analyses. This particular program, with its graphic reporting capabilities, could be especially useful for comparing the performance of SOEs in the same industry or comparing the performance of SOEs with their private sector counterparts. The MIS staff should experiment with this program and evaluate its utility as a training tool as well as an analytical tool.

During the course of this project, the privatization team and members of the MIS staff visited a number of SOEs to meet with their MIS specialists. This dialogue should be continued since a number of these individuals are highly capable and have been working to overcome MIS problems similar to those of the MOF. The MOF should take advantage of the many offers of assistance expressed during these meetings since the problems facing the MOF are not much different from those in the other organizations.

The MIS staff should also meet with the Data Processing Department of the Securities Exchange of Thailand (SET). They are undertaking a major effort to collect and organize quarterly financial statement data from corporations listed on the SET. Although the scale of this project far exceeds that of the State Enterprise
Division, they could provide a number of useful insights for the MOF staff. Moreover, the SET eventually plans to make this financial information available, for a fee, to commercial and government clients. The MIS staff should investigate the possibility of acquiring this data which could prove extremely useful when comparing SOE performance with that of their private sector competitors.

2) Develop a Data Architecture for the State Enterprises Division

The project team observed gaps and inconsistencies in the data in the Foxbase+ and Lotus 123 data files which comprise the existing MIS. Given enough time and effort, these data problems could be resolved as they are identified. However, we believe these problems reflect a larger systemic problem--the lack of a comprehensive plan to collect, verify, use, and eventually dispose of a growing body of data. In essence, the MOF needs to develop and implement a plan to manage its information resources.

This requirement is not unique to the MOF. For large public and private sector organizations with complex, distributed operations, a coherent data architecture or information plan is becoming a virtual necessity in order to increase control and reduce costs of converting, re-entering, or interfacing incompatible data from different systems.

The development of the current Foxbase+ MIS of the State Enterprise Division is no different from that of most PC based systems regardless of where they were developed. These stand-alone systems are usually developed with a limited purpose (the production of standard reports), the data are collected from a variety of sources but not reconciled, and any existing data standards are disregarded in the interests of implementing the system as quickly as possible.

In the case of the State Enterprise Division, however, the MIS has grown in importance reflecting the higher visibility of privatization activities in Thailand. Given a multitude of sources for data on SOEs, i.e., the SOEs themselves, their respective ministries, and the National Economic and Social Development Board (NESDB), among others, the MOF State Enterprise Division should develop a plan to reconcile and incorporate the data into a single system to support the MOF role in privatization activities.

The privatization team had only enough time to develop a prototype MIS which the MOF can use to begin developing an information plan. The prototype MIS (discussed in section 4 and the appendix) was developed in LOTUS because LOTUS (or another PC based spreadsheet) is the fundamental analytical tool which the analysts use. The data base design of the prototype system consolidates data from the Foxbase+ database and incorporates data from other sources which are necessary to provide a comprehensive picture of the status of SOEs.

This prototype data base is not comprehensive, however, For example it does not include data from SOEs which have been privatized or companies in which the MOF holds a minority position (these data are tracked in separate LOTUS spreadsheets). The prototype does not include operational information which could also be important in evaluating the SOE performance. It contains a single field for total personnel counts--a summary figure which should be derived from an additional data base which would contain detailed personnel counts broken down by MOF criteria. The same situation pertains to capital investment and remittances where summary figures are included in the prototype MIS. Additional work needs to be done to develop a plan to derive these summary figures from detailed data stored in separate data bases.

The financial figures audited by the Auditor General and published in the annual reports, however, should form the solid basis for a data architecture since, unlike personnel counts, there should be little disagreement about the meaning and accuracy of the numbers. Once tne MIS staff is familiar with the prototype MIS, they should begin the critical process of designing the data architecture before they make plans to revise the system itself.

The data architecture must take into account the goals the senior MOF managers set for the MIS. For example, the current MIS is generally adequate to produce standard reports. If the State Enterprise Division is asked to track the performance of SOEs before and after they are privatized, they will need to collect new and different kinds of data. The data architecture should also reflect the timeliness of the data needed by MOF officials.

Since the privatization team recommends that the MOF collect, report, and analyze the financial data on a quarterly basis, the prototype system is designed to store quarterly and annual financial data for each SOE. This recommendation will correct the shortcomings in the current procedures where monthly data is now collected in hard copy from each SOE, but only annual summary data is entered into a spreadsheet. This spreadsheet is entirely separate from the Foxbase+ system which exacerbates the data management problem for the MIS staff.

The problem of coordinating data standards and definitions among government agencies is even more difficult than within a single agency such as the MOF. Nevertheless, these data architecture standards must be developed and enforced within the MOF if the MOF is going to assume an increased role in the privatization process in Thailand.

3) Improved Procedures for collecting and verifying Data

The data architecture, by itself, is only a higher level plan for specifying the sources, definition, and interrelationships of the data. An organization can have a well conceived data architecture but without the procedures in place to insure the quality and timeliness of the data, there will be no benefits. The State Enterprise Division must take more aggressive steps to insure that the data it collects are accurate (reliable and valid), consistent, relevant, and timely.

Although audited data from financial reports can be entered into any system without difficulties, the State Enterprises Division should develop more formal procedures for monitoring the data entry process. The team observed a number of discrepancies between data as reported by the SOEs and as contained in the Foxbase+ MIS and Lotus spreadsheets. There also appeared to be a number of inconsistences in the way data for different years were recorded in the MIS for the same company.

These discrepancies did not appear to be data entry errors. Rather they appeared to reflect different ways in which the analysts interpreted the original SOE financial data. Although we did not have time to investigate these issues in depth, the further development of the prototype MIS will offer the MOF the opportunity to investigate these inconsistencies and improve the data collection process.

The privatization team's hesitation to suggest additional improvements to the data collection process is based on the fact that these improvements may require a reassessment and realignment of position responsibilities within the State Enterprise Division of the MOF. The team did not pursue this issue since it went well beyond the scope of this project into other MOF activities.

Individual analysts are responsible for collecting data from particular SOEs but this task often gets deferred given the priority of other tasks. Compounding the problem is the fact that the MOF has virtually no control over many of the smaller SOEs which often provide late or incomplete data. The normal mode of operation appears to be last minute phone calls or FAXes in search of missing data.

One suggestion to improve the process is to include a field in the data base to record the initials of the analyst responsible for collecting, coding, and entering the figures of that particular SOE. Thus, any questions on these figures and how they were derived can be addressed to the individual analyst.

By keeping all of the critical data in a single data base (rather than in the multiple files now used), the MIS staff can more quickly identify missing or problematic data and take appropriate action. By the same token, collecting quarterly data will also provide forewarning of potential data problems and give the MIS staff enough time to take corrective action. Both the Foxbase+ and the prototype MIS allow the data to be classified according to whether they are audited or estimated. Using the prototype system, the data could be classified and tracked according to additional categories as the MIS staff sees fit.

Any corrective actions to streamline and improve the data process should be based on getting more of the analysts to collect and verify the original data. The MIS staff must not waste time chasing after missing or problematic data. Their role should be to monitor and coordinate the data collection process, provide assistance to other analysts on request, and take responsibility for insuring the integrity of the data base.

The current MIS consists of the Foxbase+ system and several independent LOTUS spreadsheets. This system should be replaced with a PC based system which follows from the recommendations in this report and which can be maintained on a daily basis by the State Enterprise Division with minimal external assistance. System development and significant enhancements can be done by outside consultants under the direction of the MIS staff.

As a first step, the privatization team developed a prototype MIS using LOTUS 123. This system is described and documented in more detail in the Appendix of this report. Despite the short time available, the system is a fully functioning system which can be used now and which can serve as the basis for developing a more fully featured system.

The State Enterprise Division has made two previous attempts to develop an MIS. The first was several years ago using the Burroughs minicomputer in the Ministry of Finance. A series of COBOL programs were written but the system never became operational. The primary function of the system was to produce standard reports.

A second, PC based system was written in Foxbase+ and completed in early 1990. Unfortunately, the State Enterprise Division was left in a difficult position when the analyst who designed and coded the program left in July, 1990, without documenting the system. This Foxbase+ system produced a series of standard reports but ad hoc queries were difficult without a knowledge of Foxbase+. Modifications to the system (to include additional data elements, for example), would require a Foxbase specialist to rewrite the programs.

It is instructive to take note of another abortive attempt to develop an SOE MIS by the National Economic and Social Development Board (NESDB). In an Asian Development Bank sponsored report, "Monitoring and Supervising the Performance of State Enterprises" dated August, 1986, W.D. Scott and Coopers & Lybrand consultants described the main components of a proposed MIS. This system was to be a PC based system and called for 13 input schedules and 23 statistical and financial reports. We determined that this system was never fully implemented and one apparent reason was its inherent complexity.

In trying to understand why these attempts to develop a viable MIS ran into problems, it became obvious that these attempts had been driven by technical considerations and had ignored a number of crucial non-technical factors. It was unrealistic to assume, given current staffing levels, workload, and the "brain drain" problem, that the MOF would be able to support a technically complex system without significant external assistance. Even if they had additional resources, the MOF would have been better advised to encourage the development of financial analysts, not data base specialists.

Another problem with the earlier MIS attempts is that they did not fully anticipate the changing role of the MOF in encouraging and monitoring privatization activities. Thus, while the systems were adequate data repositories, they were never designed to facilitate analyses or ad hoc queries.

The fact that two of these three systems were never implemented highlights the risks of proposing a long term systems development effort without providing some concrete results in the short run. In addition to providing some encouragement to system users and generating support for system proponents, the short-term efforts can generate feedback to guide later development efforts.

A final lesson to be learned is that at the small price of reduced functionality, the overall chances of success for a simpler system appear to be much better than for a complex system. For these reasons, the team developed and installed the prototype system even though it is far from being a fully developed and documented system.

Before developing the prototype system, the privatization team made a concerted effort to identify and acquire an off the shelf system which would meet the needs of the MOF. Given the relatively straight forward summary accounting functions of the system, we believed that the best solution would be to acquire a commercial package or to adapt a system developed by another organization, ideally an SOE. In either case, we believed that the system could have been installed quickly and that the vendor (or original developer) would be available to provide badly needed support to the MOF.

Unfortunately this effort proved fruitless. The Thai language requirement precluded the use of most PC commercial accounting packages. The numerous SOEs we met with did their accounting on a mainframe or minicomputer and had not developed any PC accounting systems. Other alternatives such as the use of commercial Thai language PC based accounting systems did not appear to be cost effective since they were transaction based and did not meet all of the MOF's analytical needs.

Thus, the privatization team developed the prototype system in LOTUS 123 to take advantage of its analytical and ad hoc reporting capabilities. Although this approach will require the MIS staff to develop macros for the canned reports which were the primary output of the earlier minicomputer system and the current Foxbase+ system, we believe this requirement will diminish in the future. While the database capabilities of LOTUS are more limited than Foxbase+ and other PC (DBMS), these capabilities are less important than the spreadsheet capabilities.

The prototype data base is designed to carry five years of data for approximately 60 SOEs. The SOE data for each year will consist of five records (four quarters and the annual data) and the maximum total number of records will be about 1500. Since each record carries about 60 data fields, the system will eventually require a more powerful PC with expanded memory to accommodate the increasing size of the data base. The appendix describes a number of alternative methods by which the prototype MIS can be maintained and enhanced.

The appendix also outlines the minimal requirements of a State Enterprise Division MIS which the prototype system was designed to meet. Since the lack of time precluded a more formal requirements analysis, these requirements should be considered minimal requirements which can be expanded by the MIS staff as they continue these efforts.

The prototype system was written in LOTUS version 2.01 using a Thai version of Lotus. Using a PC with an IRC Thai board, the prototype system displays data (such as the names of the SOEs) in Thai as well as essential system prompts and column headings. The system will also function on a regular PC but the Thai characters will be displayed as gibberish on the screen.

The system consists of two spreadsheets with macros designed to perform specific functions. The first spreadsheet, named "MIS.WK1", is used for data entry, data verification and correction, and to maintain the SOE database. Using this spreadsheet, an analyst can also create a subset of the data according to user specified criteria--individual or groups of SOEs, the year of the data, whether the data is audited or estimated, and the quarter of the data.

The subset of data selected and extracted from the MIS database can then be automatically retrieved by the second spreadsheet, named "RPT.WK1". This spreadsheet calculates summary and ratio figures specified by the MOF and incorporates these figures into a new table. The user can then prepare analyses and reports of these data using normal Lotus functions.

The user also has the capability to carry out multiple queries of the data file which was brought into the second spreadsheet. In this way, the analyst can automatically create the summary records he or she will need for subsequent analyses or reports. In turn, using the full capabilities of Lotus, the analyst can save these summary data in other spreadsheets where, depending on the goal, the analyst can erase extraneous data, add additional calculations or data, restructure the data, and print reports.

The functionality of Lotus, and the fact that all financial analysts need to be proficient in using spreadsheets, were major reasons for developing the prototype in Lotus. Regardless of what DBMS was used to enter, store, and report the SOE data, sooner or later, the data would have to be entered into a spreadsheet. In our discussions with MIS specialists at a number of SOEs, we learned it is a common practice to download accounting data to a Lotus spreadsheet on a PC. Using Lotus, the data can be reorganized, and in some cases, edited, before final reports are prepared. The prototype system is a first attempt to make this process as straightforward and simple as possible.

5) The MIS Staff will need at least the part-time assistance of an MIS specialist

If the recommendations in this report are adopted, the analysts in the State Enterprise Division will make greater demands on the MIS as they become more proficient in using spreadsheets to carry out data analyses. When significant changes in the structure or function of the MIS are contemplated, the consulting services of an experienced systems analyst should be obtained.

At this point, the MIS staff should be prepared to describe the Division's needs and the scope of the required changes. It is imperative that the MIS staff be given responsibility for directing the efforts of the consultant so that they can continue to maintain the system. They must also insure that the proposed changes will support the data standards and the procedures that have been implemented to maintain the integrity of the data. The MIS staff must adopt a critical attitude toward any suggestions by a consultant that a particular software package or system is the only solution. To the extent possible, the MOF should continue to use standard software for which support is readily available in Bangkok.

If the MOF wants to develop a more sophisticated data base (either to replace the prototype system or to feed data to it), they will probably have to hire (and be able to retain) a full-time programmer/analyst who can maintain the data base and prepare fixed format and ad-hoc reports on request. We have reservations about this approach for a number of reasons:

- The MOF will have a hard time attracting and retaining a really skilled data base programmer.
- Much of the work will be cyclical--four (or five) periods of high demand interspersed with slow periods.
- No matter how good the computer specialist is, he/she probably will not be a trained financial analyst and will have to be told what to do by the financial analysts anyway. Will the computer specialist be useful in tracking down and correcting bad financial data, for example?
- As the analytical process becomes more dynamic and fixed reports become less useful, the ability to manipulate the data will become more important.

Thus, we believe that the interests of the State Enterprise Division will be best served in the short term by a relatively simple Lotus system, maintained by the MIS staff, with the part-time assistance of an MIS specialist as needed.

6) **The MIS staff should initiate an Information Outreach Program within the MOF to disseminate SOE data and analyses**

If the MIS staff of the State Enterprise Division is to function as a technical secretariat for the Comptroller-General's Department on privatization matters, a major shift in emphasis will be required. The staff must take the lead in providing information and analytical reports for MOF officials on an ongoing basis. Moreover, once they have resolved many of the data and procedural problems, the MIS staff will be able to devote most of their energies to routinely preparing and distributing relevant SOE information and analyses to appropriate MOF staff members.

This recommendation reflects the increasing importance of the State Enterprise Division and its MIS. In the past, it would have been sufficient to collect accurate data, maintain the data base, and produce reports and analyses on schedule. Today, the MIS staff must take a more proactive role in making their data and analytical services available to key personnel within the MOF.

As the preceding recommendations are implemented, success will be achieved in upgrading staff capabilities, information planning, data collection, and system capabilities. To leverage this success, the Division should institute a formal program to distribute, every two weeks or month, a hard copy report summarizing the current state of SOEs and presenting an analysis of a timely issue. This issue could be a privatization activity which has received a lot of recent press attention or it could be preliminary or final results of analytical work done by the Division. In addition to the formal, periodic reports which are now required, the MIS staff should also compile quarterly status reports on the SOEs which can also include analyses and graphic presentations of significant statistics.

The Petroleum Authority of Thailand (PTT), which was visited by the team and the State Enterprise Division MIS staff, could serve as a model for the proposed outreach effort. The PTT has implemented a sophisticated PC based Executive Information System (EIS) which, on a daily basis, is used to distribute news and oil price information. On a weekly basis, they produce and distribute a report summarizing operational data, petroleum prices, and other relevant information.

Admittedly this system goes well beyond the needs of the MOF. However, the MIS staff should emulate the strategy behind the PTT's EIS which is to provide key personnel with up to date information which they need to do their jobs. The MOF approach can be considerably simpler and more infrequent than the PTT system but it should address the information needs of the key personnel within the MOF.

The MIS staff should discuss this concept with these key individuals to determine the type of information they would like to see. At this point, the MIS staff can prepare and distribute some trial documents and seek feedback on how useful they were. After making whatever changes are necessary in the content, frequency, or format, the MIS staff should assume full responsibility for preparing and distributing these status reports or whatever they are called. Other analysts should be required to make contributions to the publication as a normal part of their job.

This outreach program will have a number of positive effects. MOF staff will have a greater awareness of the data which are available and will be exposed to higher standards for data accuracy and timeliness. In seeking financial data, MOF analysts will turn first to the MIS staff and waste much less time in tracking down, re-entering, and verifying data. In this way, the privatization team believes considerable staff time could be redirected toward more productive activities.

As the State Enterprise Division builds a reputation for accurate and accessible data, MOF analysts as well as senior managers will be more likely to use the "official" numbers in the Divisions's MIS. Furthermore, the MOF will come to depend on the State Enterprise Division to provide insightful data and analyses on short notice. As the MIS services become more important to the senior managers, the MIS operations would be more likely to receive the resources needed to maintain and improve their services.

The Outreach program will emphasize a new dimension of MIS activities within the State Enterprise Division--Service to clients within the MOF and, to a lessor extent, to external clients in other government and private sector offices. At the very least, the Division would be well positioned to play a more active and positive role in the privatization process in Thailand.

7) As the effectiveness of the State Enterprise Division's information program improves, additional PCs and software will be required

At the present time, additional PCs and software would not help solve any of the current information problems with the exception of more PCs which could be used for Thai word processing. However, as the new MIS system evolves and the various data problems are solved, additional PCs should be acquired and used to encourage staff members to upgrade their analytical capability and spreadsheet proficiency.

Apart from Thai word processing, the greatest need of the State Enterprise Division is for spreadsheets. The MOF should probably upgrade to later versions of Lotus when Thai versions become available after first testing them and reviewing the potential costs and benefits.

In terms of hardware, the MOF should procure IBM compatible PCs. Although 80286 based PCs are adequate for word processing, the MOF will need 80386 based 25 MZ, or 80386SX based systems if they make serious use of the prototype system and expand the use of Lotus. Before making any acquisition, the MIS staff should seek advice from experienced IT specialists in other ministries or SOEs. Every attempt should be made to acquire hardware and software which meets widely agreed upon or international standards and to avoid proprietary products which will be difficult to maintain or enhance.

APPENDIX IX.

Profile of Authors

Michael McLindon served as Team Leader and Senior Expert for the Thailand privatization project. He has undertaken capital markets and investment research projects in Sri Lanka, the People's Republic of China, and Korea. He has consulted with the Capital Group, a Los Angeles based investment management firm, doing studies of Turkey and the Caribbean stock markets for Capital's emerging market funds. He has advised the Government of Senegal on privatization. Previously, he was an economist in the U.S. foreign service, serving in Washington D.C. and two tours in Jamaica, where he was responsible for economic modelling, policy dialogue, privatization and tax reform. He was an advisor to the Government of Cameroon on commodity pricing policy for 16 months, and spent 6 months in Zaire as a consultant to the US Embassy. He has a Ph.D. in international economics from the Fletcher School, Tufts University, and was a Fulbright Scholar in West Berlin.

Richard Downer Mr. Downer's experience in privatization and commercial matters was gained through his training in accounting and the responsibilities assumed in both the private sector and governments in several countries. He was responsible for designing and implementing the privatization program for large scale share offers in Jamaica, was the Divestiture Advisor for the Government of Ghana and prepared the privatization strategy and privatization law for the Government of Bolivia. He is the partner in charge of management consultancy services for Price Waterhouse in Jamaica. For two years he was seconded to be the head of the Bureau of Management Support of the Office of the Prime Minister in Jamaica and for one year as consultant to the Chairman of the National Investment Bank of Jamaica. For 5 years he was a member of the board of the Central Bank of Jamaica and is currently a director of one of the largest private sector financial institutions in that country. He is the Honorary Treasurer of the Private Sector Organization of Jamaica. In 1988 he was awarded the second highest honor bestowed by Jamaica, in recognition for his work in privatization.

Richard Samuelson served as a financial analyst and capital market expert in the Thailand privatization project. He is a principal in Emerging Markets Research, Inc. His previous international experience in financial analysis includes assignments in Japan and Korea. He is also completing a book on the Korea Stock Exchange for Praeger Publishing. Mr. Samuelson holds an MBA in finance from the Wharton School and an MA in International Economics from the Fletcher School.

David Smith is a Senior Financial Analyst for the Development Economics Group of Louis Berger International, Inc. He served as financial analyst with the Thailand privatization project. Mr.

Smith has served as a senior level advisor on financial, economic, and managerial policies to Ministers of Finance in several countries. He has worked with the finance ministries of over a dozen countries in Africa, the Middle East, South America, Asia and the Pacific to improve financial and managerial practices. Mr. Smith has also advised on the acquisition of 27 businesses in the U.S. by private investors. He is an active investor in the U.S. and abroad. He has an MBA from the Harvard Graduate School of Business, and undertook the MALD program at the Fletcher School, Tufts University.

William Schauffler. William Schauffler is currently Director of Information and Telecommunication Services for Scientex, International, a management consulting and technical services firm based in Washington, D.C. In this capacity he is responsible for providing a broad range of information technology services to international clients. He formerly worked for the United States Agency for International Development (AID) where he managed domestic and international automation programs. He has consulted for a large number of public and private sector clients in Africa, the Middle East, South Asia, and Southeast Asia. His work has ranged from conducting training workshops to managing the implementation of local and wide area networks. He graduated from Brown University and did graduate work at the University of Pennsylvania.

David Levintow. Mr. Levintow has been Assistant Director, Center for Privatization, since its founding in 1985, with program responsibilities for Asia, Near East, the Soviet Union and Eastern Europe. Before that he served for over 24 years as a Foreign Service Officer in U.S. AID, assigned to Missions in Asia, Africa and the Near East, and in program management positions at AID headquarters in the Department of State., Washington, D.C. He also served as staff member for the U.S. Executive Director of the Asian Development Bank. He is a graduate of Antioch College and has an M.A. degree in Development Economics from the Fletcher School of Law and Diplomacy, Tufts University.

Alan LeBel. Dr. Allen LeBel served as the human resources advisor for the privatization project. He is the Director of Securities Research for Washington Investment Corporation in Washington, D.C. He is also an economist specializing in survey research for monitoring and evaluation, privatization and enterprise development, and various aspects of manpower planning. He has worked extensively in the Far East, Africa and the Caribbean. He frequently works on the conceptualization and design of both data bases and analysis plans for measuring program and project performance utilizing both macro and microeconomic data sources.