THE FISCAL SPACE OF THAILAND

An historical analysis

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I INTRODUCTION

1.1 MDGs and Fiscal space

The concept of 'fiscal space' has emerged in the context of the Millennium Development Goals (MDGs). It is clear that enormous efforts are required from international donors and government and society in developing countries to achieve the goals. Whether a poor household can escape poverty and malnutrition, send its children to school, get access to safe water and good housing, live a healthy live, etc. depends on three factors: whether its income increases sufficiently, whether the government provides the required services and support and whether the international community assists where necessary.[1]

The achievement of the MDGs, in most countries, is going to be a heroic task. It should be recognised that the success in this endeavour depends mainly on economic growth that will put income in the hand of the people to reduce poverty and improve their health status, educational participation, housing, etc. Without growth it will be impossible to attain the MDGs. The growth is also necessary to generate the additional government revenue to finance government activities. Government spending will be required to create the conditions for growth but growth will not be enough. There is likely to be also a need for special government spending programme directly aimed at achieving the MDGs.

It is for these reasons that the discussion around fiscal space takes on the notion of 'finding fiscal space', i.e. mobilising the resources to finance the government activities that are needed to achieve the goals. In general, four sources of finance can be identified: taxes, domestic borrowing, aid and re-directing existing resources away from low-priority areas towards the MDGs. In this study we will concentrate on the first two sources.

However, fiscal space is not just about raising taxes and borrowing. It is the entire process of fiscal intervention and its interaction with the rest of the economy. The main concern is whether these fiscal interventions create a domestic regime of capital accumulation that promotes human development. This is not easy. Increasing taxes may run into economic bottlenecks, political resistance and problems of tax administration. Moreover, high tax rates may create negative incentives. High domestic borrowing may lead to excess demand which may result in inflation and current account deficits. Domestic borrowing by the government may make it difficult for the private sector to borrow at domestic financial markets. And the accumulation of government debt will raise questions about the longer run sustainability of this way of financing. At the same time, when government intervention fails to create the right institutions and incentives, and when government provision of infrastructure and social services fall short of what is required for productive private investment, growth will falter and human development will stagnate. This study will analyse how, in the case of Thailand, the interaction between the state and the private sector led to a successful accumulation strategy that contributed significantly to human development and to the achievement of the MDGs.

Poverty reduction depends on economic growth. If the benefits of growth are equally spread all income groups will gain. Of course, if a growth strategy can be engineered

[1] In the case of Thailand aid has played only a modest part. Total net ODA disbursements from all sources amounted to 1.4 per cent of GDP in 1960/61 and to 1.1 percent in 1982/3 (OECD 1985, 121) but has since then fallen to negligible levels. We will not deal with aid in this paper.

that is pro-poor, or if effectively targeted poverty alleviation programmes are implemented, poverty can fall faster. In some countries such distributive pro-poor strategies have been effective but in many other cases the contribution of pro-poor growth strategies or of re-distributive efforts to the reduction of poverty has been modest. This finding complicates the discussion around fiscal space. Any fiscal space should be used in such a way that it does enhance the growth potential. Economic growth is crucial to the achievement of the MDGs (World Bank 2005) and any fiscal action that may threaten growth should be considered with extreme caution. On the other hand, government spending can contribute to growth. But such a positive interaction will only take place when the infrastructure and human capital is used by producers. Any additional infrastructure or human capital that is financed in a way that reduce private investment incentives and opportunities may actually lead to stagnation and may block the achievement of the MDGs. We know that private investment is sensitive to macroeconomic conditions (inflation, current account balance, debt overhang), to cost (interest rate, tax rates) and to the availability of credit. Fiscal actions that deteriorate these investment conditions are likely to take us further away from the MDGs. We are thus faced with a dilemma: government spending is required but should be financed in a cautious way. This interaction explains why finding fiscal space is like walking a tightrope.

Apart from an economic tightrope, finding fiscal space is also a political struggle. Increasing fiscal space means that people have to pay and people do not like to pay. Powerful people and vested interests will use their position to prevent, avoid and evade taxes. Government interventions create institutions and incentives that induce and direct private action.

This study will analyse how Thailand has walked this tightrope. In the historical analysis that follows in the rest of this paper we will show how Thailand has successfully secured fiscal space which not only sustained growth but, more importantly, provided the basis for a sustainable capital accumulation process. In this analysis we focus not so much on the conventional concerns with short-term solvency and stability but on the long term impacts of fiscal interventions.

1.2 The case of Thailand

Thailand provides an interesting case study. Economic growth has been rapid over the last 50 years and poverty has fallen sharply, making Thailand one of the most successful developing countries. Table 1.1 brings together some basic data.

Growth was strong till the Asian crisis hit in 1997.[2] Behind the growth was an investment ratio that increased over the years to a high level. The investments were financed by high domestic savings. In the periods before the crisis, however, domestic savings always fell short of investment: a part of investment was financed by foreign capital. The rapid growth was supported by macroeconomic stability, reflected in the modest rate of inflation.

[2] The growth over the last period is strongly depressed by the very deep fall in 1998. The average growth rate over the post-crisis years 1999-2003 is 4.8 per cent per year. Thailand has not yet gotten back to its strong performance of before the crisis.

Table 1.1

Main economic indicators

	1950-59	1960-69	1970-79	1980-89	1990-96	1997-03
Growth rate real GDP	5.4	8.0	7.1	7.3	8.5	1.7
Savings/GDP ratio	11.5	20.6	21.8	25.1	34.1	31.2
Investment/GDP ratio	13.6	20.8	23.8	28.6	40.7	24.1
Inflation rate	5.1	2.2	8.0	5.8	5.1	2.1

Source: Ingram (1971, 222); NESDB and Bank of Thailand

The rapid economic growth meant a seven-fold increase in per capita income between 1950 and 2000 and resulted in a sharp fall of poverty (see table 1.2). Also other social indicators showed rapid gains. Life expectancy at birth was around 50 years in the early 1950s and increased to over 71 years by 2005. Infant mortality in 1960 was 103 per 1000 births; now it has fallen to 20. Primary school enrolment is now universal but at the secondary level, performance was rather poor compared to other countries in the East Asian region. The gross enrolment rate for lower secondary education was only 40 per cent in 1990 but active government policy since then led to a sharp increase up to 86 per cent in 2005.There is gender equality in schooling: the ratio of girls to boys stood, in 2000, for primary schools at 0.93, for secondary schools at 1.01 and for tertiary education at 1.12. In addition, Thailand booked significant success in controlling the spread of AIDS and reducing the incidence of malaria.[3]

Table 1.2 shows that the poverty target of the MDGs has already been achieved: poverty fell sharply with the economic boom of the 1990s. The crisis of 1997 provided a set back but did only temporarily change the trend of falling poverty. Table 1.2 also makes clear that the fall in poverty is fully due to growth, there was no re-distribution – the Gini coefficient is high. In fact, over the years the income distribution in Thailand has become increasingly uneven and income inequality now is at a relatively high level.[4]

[3] Data sources for these social indicators include NESDB/UN (2004), Jansen (2001), and the National Statistical Office (NSO) and Unesco websites.

[4] Over the years the poverty line has been adjusted making it difficult to compare poverty rates of the consecutive years. Still, the rapid decline of poverty reflected in table 1.2 is a real phenomenon.

Table 1.2
Poverty and income distribution

	Poverty incidence			Gini
	Total	rural	urban	coefficient
1962	57	61	38	0.41
1975	32	36	21	0.43
1990	27	34	2	0.52
2000	14	22	3	0.53
2004	11	…	…	0.50

Source: Medhi Krongkaew (1993, 415), Warr & Isra (2004), World Bank 2005.

The rapid growth since 1990 implies that the MDGs have already been achieved, or are close to being achieved (NESDB/UN 2004). The Thai government has now issued a set of MDG+ targets for 2015 which go beyond the MDGs. For instance, poverty incidence is to be brought below 4 per cent and universal secondary schooling is to be achieved by 2015.

The Thai political economy is dominated by the interaction between (big) business interests and the state. As we will show later, the size of the Thai state, as measured by the government expenditure to GDP ratio, is relatively small. But that does not mean that the state is inactive.

Pasuk and Baker (1998) present an interesting perspective on the role of the Thai state. Behind the rapid growth of the Thai economy are dynamic Chinese businessmen, the rapid integration of Thailand in the regional and global economy, but also a cautious but determined state. They emphasise that the state was hardly passive and that the state did make economic development a crusade and that it created the institutional structures for it. Development was considered necessary to deal with the communist threat. Communist groups were winning in neighbouring countries and there was communist insurgency in various parts of the country. In other East Asian countries a similar threat pushed governments to actively seek economic advancement (Campos & Root 1996).

To steer the development process a number of offices were created in 1959: the National Economic and Social Development Board (NESDB), the Board of Investment (BoI) and the Budget Bureau. In 1961 the first development plans was published, just a list of public sector investment plans. Pasuk and Baker (1998) claim that "at the hart of Thailand's economic policy making there is one long term constant. The policy makers believe that Thailand must growth through trade." (p 62). From the late 1950s this strategy focussed on agricultural exports. Intensive state investment in roads opened up all parts of the country to commercial farming and investment in irrigation expanded the irrigated area. The taxation of rice helped to bring about the diversification into other export crops. Banks were under the

obligation to reserve a part of their credit for agricultural/rural activities; this ensured the private sector of funds to invest in agriculture and agrobusiness.

The industrial policy was less structured and tariffs remained comparatively low. Tariff structures were haphazard, not the reflection of a coherent industrial policy. Changes in tariffs were driven more by revenue needs than by changes in industrial policy. Gradually, in the 1980s, the BoI shifted investment incentives towards the export industries, but the big boost for industrial exports came after the mid-1980s when the appreciation of the Japanese yen led to an investment boom of Japanese export industries in Thailand. The real trade liberalisation in the form of significant reduction of tariffs came only after that boom, in the 1990s (Jansen 1997).
Pasuk and Baker's claim that the Thai government was hardly passive thus is based more on its agricultural policy than its industrial policy. Even in the agricultural sector a main element of state intervention was the traditional government task of providing infrastructure. The Thai state never engaged in detailed sectoral policies, it just set overall conditions and let the private sector decide on the details. There are three types of government policies that have been important to growth: the maintenance of macroeconomic stability, the provision of infrastructure and education, and the control of labour.

An aspect of government policy that has had a significant impact on development is the government's concern for macroeconomic stability. Warr and Bhanupong (1996) see this as the main factor underlying the Thai economic success. The priority for maintaining macroeconomic stability has historical roots. In the colonial period the Thai state feared that financial instability might invite external intervention. Hence, very cautious fiscal and monetary policies ensured that international reserves remained high, inflation low and the exchange rate stable.

Structures were created to insulate macroeconomic policy making from the political process by giving it into the hand of independent technocrats. The main institutions involved were the Budget Bureau within the Prime Minister's Office, the Office of Fiscal Policy in the Ministry of Finance, the Bank of Thailand and the NESDB. These institutions were staffed with well-educated technocrats and were given a high degree of independence. The budget law strictly regulated the budget process. The Budget Bureau, in consultation with the Office of Fiscal Policy, the Bank of Thailand and the NESDB, would set ceilings for budget expenditures in line with expected revenue and politicians could not change these ceilings (Root 1998; Warr & Bhanuphong 1996). The Bank of Thailand was given a great degree of autonomy in deciding on monetary policy. In recent years, however, these arrangements have not worked so well. Under the democratically elected governments since 1988 the independence of the bureaucracy and of the economic technocrats has been reduced. Also the quality of the economic agencies is said to have fallen as, during the boom, its best staff were lured to the private sector. The NESDB is sidelined in major government investment decisions. It is argued that the increased political interference at the Bank of Thailand is one of the factors behind its loss of control over the financial system which led to the financial crisis of 1997 (Pasuk & Baker 1998).

The record of the Thai state in the provision of physical and social infrastructure is not impressive. Investments in ports, roads, transport systems and communications have not kept up with the pace of economic growth (Dixon 1999).
The social infrastructure is also far from adequate. It was already noted that secondary education participation is far below regional standards, and below standards required for a country of Thailand's level of development. Secondary education, and in

particular vocational education, is essential for the development of the modern sector of the economy. Tertiary education enrolment rates are well in line with those of other countries in the region. Thailand has a unbalanced educational structure with universal primary education, underdeveloped secondary education and a well developed tertiary education. This pattern is understandable from political reasons: the mass education at the primary level extends government control and helps to instil a national identity and good university education is necessary for the children of the elite. But economically, the pattern makes no sense as Thailand found out during the growth boom when skilled workers were in short supply. The recent spurt in secondary enrolments is an answer to that need.

The coalition between the state and the capitalist class has been very successful in the control of labour. Thailand has a long history of labour repression. The 1975 Labour Relations Law seemed to bring improvement, but its implementation has been stilted and it did not help workers much (Brown 1997). Unger (1998) links the absence of effective trade unions to the lack of social capital, but unwilling employers and a repressive government have much to do with it.

There is a legal minimum wage but this is only irregularly revised and very poorly enforced, some studies suggest that it is paid in less than one third of firms, covering about half of all unskilled workers (Warr & Bhanupong 1996, 87). A compensating factor is that the government policy to tax rice helped to keep the local price of rice, the main staple food, low, thus keeping urban cost of living under control.

During the boom of the 1990s the tight labour market exerted an upward pressure on wages which led Dixon (1999) to observe that at the end of the 1990s Thai industry faces the problem that its labour cost are too high for labour-intensive industries but that skill levels are too low for skill-intensive industries.

The record shows that, on the whole, the Thai state has been successful in stimulating development. The political dominance of business interests is translated into a preference for relatively small government, into little political support for re-distribution and into a concern for macroeconomic stability. Thai policy makers have always placed economic growth as their top priority and economic growth is seen as being mainly driven by exports. The main task for the government is to provide infrastructure and basic social services and to ensure macroeconomic stability. “The prevailing view in Thai political circles is that the government should play only a limited role in the economy” (Warr & Bhanupong 1996, 96).

The concern for stability is reflected in generally cautious fiscal and monetary policy. The development strategy that makes exports the engine of growth has resulted in a rapid integration with the global markets for goods, investment and finance. This globalisation may have further limited policy options.

1.3 Outline of the paper

This study will explore the ‘fiscal space’ of Thailand. We interpret fiscal space as the total of government activities and their financing. In line with the UNDP project of which this country study is part, the focus will be on government revenue and deficit financing. We will trace the experience of Thailand on these issues over the period since 1970.

In the fiscal space, there are a number of significant players which share the same properties of using resources for public purposes and/or function for some public purposes. Fiscal operations are identified with activities of the public sector agents in matters relating primarily to the provision of public goods and services.
The fiscal space can be viewed, at least in Thailand, from four vantage points, namely,

1. The central government.
2. The local governments.
3. State enterprises.
4. Non-budget Public-sector funds set up to carry out specific tasks.

Each of the four components of the fiscal space can perform in its own context and work milieu to help attain the aims in the country, whether reducing poverty, empowering women, taking good care of the environment, containing and fighting deadly diseases, etc.[5]
Part 2 of the paper will concentrate on the analysis of trends in central government revenue but will also have sections on the fiscal activities of local government and state enterprises. Government in Thailand is relatively centralised; only recently have there been serious attempts at decentralisation. Revenue collection and other financing by local government have been almost negligible. In our analysis we will concentrate on the central government finances (sections 2.2 and 2.3) but, in view of the discussion on decentralisation, we will analyse the role of local government (section 2.4). Some of the state enterprises in Thailand play a role in the fiscal space (section 2.5). There are two brief sections: one on administrative issues in the revenue system and the other to track some recent fiscal innovations.
Part 3 will focus on deficit financing by the central government. The section will explore the use of monetary financing and of domestic and foreign borrowing. The debt financing led to concerns about debt sustainability.
The final part of the paper draws the conclusions and tries to assess whether the way Thailand has used its fiscal space has contributed to the achievement of the MDGs.

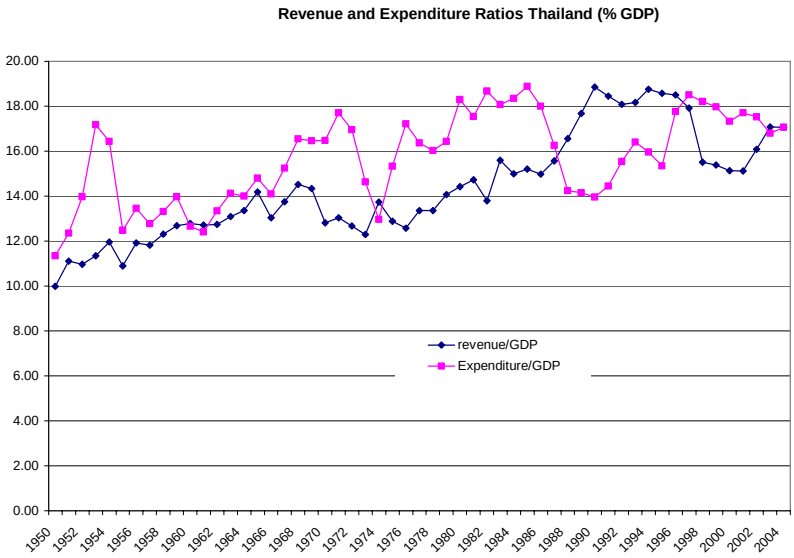
[5] In this paper we will not analyse the off-budget funds. In 2006 there were 91 funds controlled by the central government. The main ones are the Oil Fund, used to stabilise the local oil prices and social security funds for public sector employees. The funds are financially independent: they have their own resources and the government cannot claim their surpluses or assets. Most of the funds are very small and their economic significance is not great. That is why we decided not to cover them. The current government policy is to normalise the situation by reducing the number of funds and regulating their operation.

II Government revenue

2.1 Introduction

It is instructive to start with a really long-term view on government finances in Thailand. Figure 2.1 shows the expenditure and revenue to GDP ratio since 1950. Thailand had always remained independent but international treaties with the colonial powers had considerably limited its fiscal freedom before 1950. The Bowring Treaty of 1855 had fixed tax rates that the Thai government could impose at low levels. In 1926 these treaties were renegotiated and fiscal autonomy was considerably increased. This led to a considerable change in the tax structure, in particular the contribution of import duties increased from 7 per cent of total revenue in 1926 to 27 per cent in 1950 (Ingram 1971, 185). While the regained fiscal autonomy changed the tax structure it is less clear whether it changed the level of tax revenue. Data on revenue of Ingram (Ingram 1971) and estimates of GDP in Sompop (Sompop 1989) suggest that around 1926 the revenue to GDP ratio may have been around 11 per cent, i.e. not much different from the 1950 level depicted in figure 2.1.

Figure 2.1



source: Bank of Thailand

Figure 2.1 shows government spending, as percentage of GDP, gradually rising from 1950 to the early 1980s. There are, sometimes very sharp, short-term fluctuations which suggest an active use of short run fiscal policy (see Jansen 2004). The long-term trend is upwards, from an expenditure ratio between 12 and 14 per cent in the 1950s to a level around 18 per cent in 1971. The first oil crisis led to a fiscal retrenchment but later on the expenditure ratio climbed back to around 18 per cent in the early 1980s. During the growth boom of the 1990s, the expenditure ratio declined and, in recent years, the ratio recovered to a level around 17 per cent. The revenue ratio followed this trend at some distance. In the 1950s the revenue ratio was between 10 and 12 per cent of GDP. It rose to a level around 14 per cent by the late 1960s and stayed around that level up to early 1980s. In the late 1980s and the 1990s the revenue

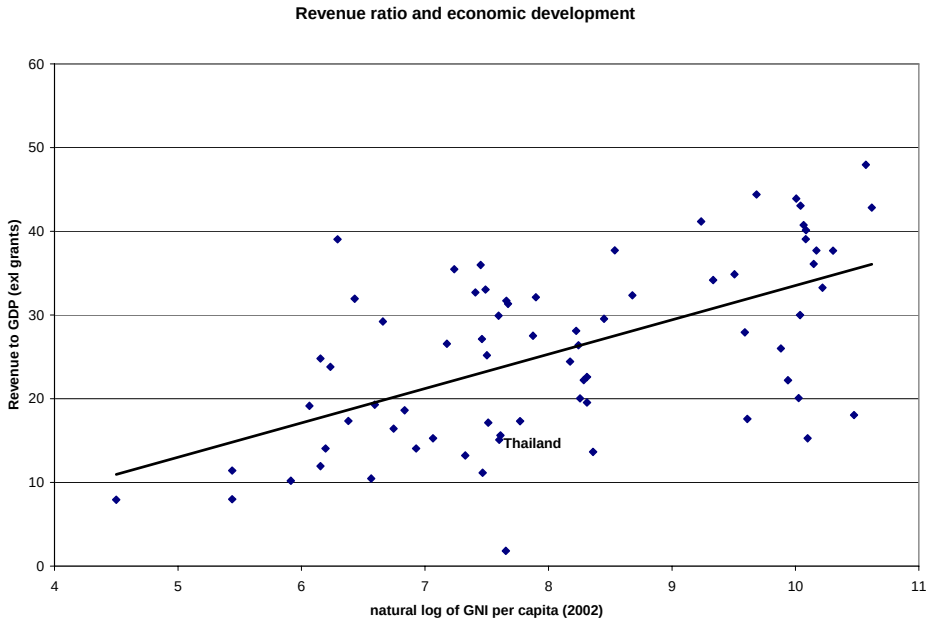
ratio climbed to around 18 per cent of GDP driven by the booming economy. The Asian crisis brought a sharp fall back to around 15 per cent in 1998/01. The most recent years see a recovery to around 17 per cent in 2003-05. The higher levels of the early 1990s are not regained and it seems as if fiscal space has been lost.

The balance between the expenditure ratio and revenue ratio was quite small up to 1970: budgets showed a small deficit. The 1970s and the first half of the 1980s show considerable deficits. The economic boom, driven by foreign capital inflows, which started in the late 1980s, gave a boost to government revenue. This contributed to the substantial fiscal surpluses of the period 1988-1996. It is remarkable, however, that the surpluses of this period are not only due to buoyant revenue but also to a significant decline in the expenditure ratio.
The Asian crisis led to a new fiscal situation. In 1996 and 1997 fiscal policy was strongly expansionary to compensate for the decline in export demand. But once the crisis occurred revenue fell sharply and the IMF imposed extremely tight fiscal policy conditions and government expenditure declined considerably. This is not so much reflected in the expenditure ratio in figure 2.1 because of that ratio both the nominator (government spending) and the denominator (GDP) declined. The table A2-1 in the Annex gives government spending at constant (1988) prices and shows that total spending declined from a peak of 604 billion baht in 1997 to 500 billion in 1998. This was totally due to a collapse of capital spending. Revenue at constant prices fell from 550 billion in 1997 to 425 billion in 1998. As revenue fell sharper than expenditure fiscal deficits returned in the period 1997 to 2002, but since 2003 fiscal balance is restored.

2.2 The 'size' of government in Thailand

In international comparison, the revenue to GDP ratio in Thailand is relatively low. The scatter diagram of figure 2.2 brings together data for a group of 72 developed and developing countries for 2002. The data show a clear relationship between economic development and the revenue ratio, reflected in the trend line. At the same time, there is considerable variation around the trend line; individual country characteristics, other than their income, play a large role in determining the level of the revenue ratio. Thailand lies below the trend line. Given its per capita income, one would have expected a revenue to GDP ratio close to 24 per cent, in fact Thailand's 2002 ratio was just over 15 per cent. Of course, the revenue ratio in 2002 was unusually low in the aftermath of the financial crisis but even the historical peak levels of the ratio (at just over 18 per cent) would be considerable below the average pattern suggested by figure 2.2.

Figure 2.2



source: World Bank: World Development Indicators

Moreover, the trend line in figure 2.2 would suggest that, as over time per capita income rises, also the revenue to GDP ratio would increase. In fact, the trend line indicates that the income growth that Thailand experienced since 1950 would result in an increase in the revenue to GDP ratio of close to ten percentage points. In fact, as figure 2.1 has shown, the revenue ratio increased from a level around 11-12 per cent in the 1950s to a level just over 18 per cent in the early 1990s but since then fell back to around 17 per cent in recent years.

The evidence from cross-country data in figure 2.2 is confirmed by time-series data. In the advanced countries of the world, over the last 100 years, the economy has grown and government spending has increased faster than GDP and, as a result, the ratio of government expenditure to GDP has increased (Tanzi & Schuknecht 2000, table I.1; Maddison 2001, table 3-9).[6]

The fact that the revenue ratio of Thailand lies far below the regression line of figure 2.2 and the fact that over time the revenue ratio did not grow as fast as the historical evidence of other countries would have suggested may be taken to indicate that there is unused fiscal space. Still, such a conclusion would be unfounded. Figure 2.2 shows a clear and significant trend line but it also shows a considerable dispersion around that line. Clearly there are, at each income level, countries with 'big' government and countries with 'small' government and Thailand appears to be a country with relatively small government. A number of reasons can be suggested to explain this.

[6] The average expenditure ratio of advanced countries has increased from 10.7 per cent around 1870 to 22.8 per cent in 1937, 27.9 per cent in 1960 and 45.6 per cent in 1996 (Tanzi & Schuknecht 2000, 6). The table I.1 of Tanzi & Schuknecht (2000) includes data for 17 industrialized countries, in all of them the ratio increased substantially over the long run.

- As noted above, in a historical perspective, the size of the government revenue had been restricted by international treaties during the colonial era. When, however, greater fiscal autonomy was obtained since 1926 this was not used to increase revenue sharply. The available evidence suggests that the revenue to GDP ratio in 1950 was not much different from its 1926 level. It could be hypothesized that the historical experience had instilled a habit of low taxes.
- The historical experience did not just instil a habit of low taxes but also a habit of cautious fiscal policy. The budget process in Thailand is driven very much by the revenue side. Estimates are made of available revenue and that determines the level of government spending that can be undertaken. An alternative approach to budgeting, in which necessary or desired government spending would determine the level of revenue that would be required, would give rise to a more active revenue policy. But this is not the way fiscal policy in Thailand has operated. Tax rates in Thailand are relatively low and politically difficult to raise and there are legal ceilings on the level of the acceptable deficit.
- Political power in Thailand is in the hands of a small elite of military, business and bureaucratic interests. This elite has no desire for high taxes that would eat into their incomes or increase the cost of production. As a result corporate and personal income taxes have remained fairly low and also indirect taxes, that could increase cost of living and labour cost, have been contained.
- This elite, and the general public may also find that the public sector is rather inefficient in providing services and that, therefore, the role of government and of state enterprises best remain small. A government that is seen as inefficient and highly corrupt will find it difficult to see high taxes accepted. In the 2005 Corruption Index of *Transparency International* Thailand scores only 3.8 (10 being the best score) and ranks fairly low. Thai newspapers regularly report about corruption in government projects.
- Globalization is another factor that may keep government revenue in check. Figure 2.1 showed how the revenue ratio slowly increased from 1950 to a peak in 1990 but since then stagnated and declined. This coincides with the acceleration of the process of integration of Thailand in the global economy. Since 1988 FDI into Thailand increased sharply. Since 1990 financial markets were liberalised and integrated with global financial markets. Trade liberalization deepened in the 1990s. As we will see in more detail later, these processes reduced revenue from taxes on international trade and may have reduced the ability to tax capital income.

Government expenditure and revenue ratios are comparatively low in Thailand. But size is not all. The relevant question is whether government activities are supportive of the process of capital accumulation and growth. Not all government spending is equally important in this context; generally capital expenditure and expenditure on social services are considered instrumental in the process of capital accumulation. Government investment is crucial because it creates the infrastructure required to sustain efficient and profitable private investment and production and competitiveness. Government spending on social services is crucial because it helps create the human capital which is crucial for increasing productivity and incomes. Apart from that, government spending on social services contributes directly to the achievement of the MDGs. Table 2.1 gives some period averages for these important categories of government spending.

Table 2.1 Structure of Government Expenditures (as percentage of GDP, period averages)

	Capital Expenditure	Social Services	Total Expenditure
1970-79	4.1	4.6	15.9
1980-89	3.0	5.3	17.7
1990-97	5.1	6.0	16.2
1998-03	4.2	8.0	17.6

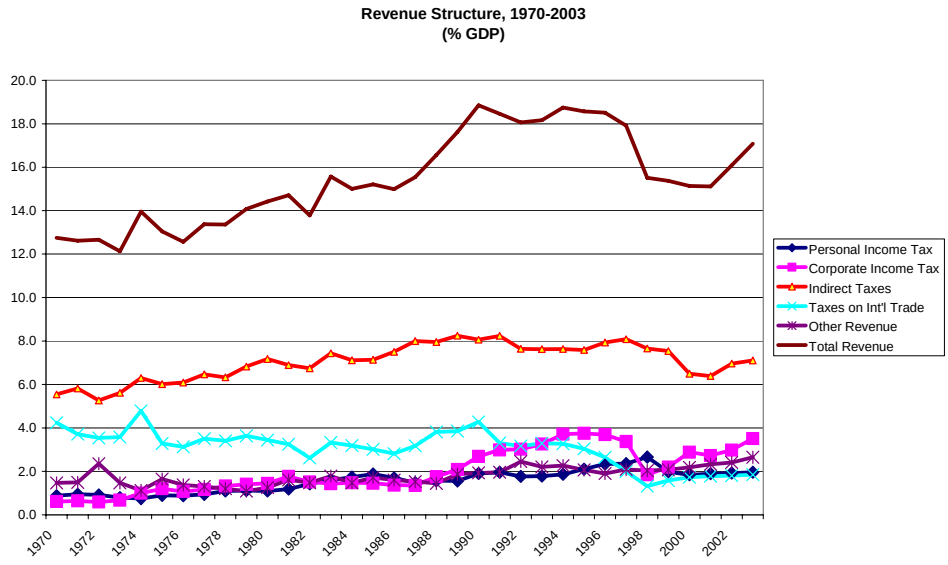
Source: Bank of Thailand

Sturm (2001) uses a sample of 37 developing countries with data over the period 1975-93 to calculate the median ratio of central government capital spending to GDP. The median ratio is around 4.5 in the period 1975-81 and then declines to around 3 per cent in 1990 after which it recovers a bit in the early 1990s but stays below 4 per cent. The capital spending in Thailand seems to follow the same pattern and to be around a level similar to other developing countries.
Fan & Rao (2003, 8) give data for Asian developing countries that indicate that, for 1980, social services spending accounted for 4.4 per cent of GDP and that, by 1998, this ratio had fallen to 4.1 per cent. Compared to these numbers the level of spending on social services in Thailand seems high.
It can thus be concluded that, while the overall spending ratio of Thailand, is rather low, spending on crucial items like infrastructure and social services is not low in a comparative perspective. Such spending has supported a dynamic accumulation process and contributed to human development.

2.3 The structure of revenue

The revenue structure, as percentage of GDP, has been relatively stable over the last 35 years as figure 2.3 shows. The increase in the overall tax ratio from 1970 to 1990s was mainly driven by the growing importance of income and indirect taxes. The share of trade and other revenue in GDP did not change much.
Since 1990 a systematic decline in the revenue from taxes on international trade sets in. While these taxes still generated an income equivalent to 4.3 per cent of GDP in 1990, by the early 2000s this share had fallen to below 2 per cent. This is also the main reason for the stagnation and decline of the overall revenue ratio since 1990.

Figure 2.3



source: Bank of Thailand

The share of other taxes in GDP did not change systematically since 1990. Of course, during the deep crisis after 1997 all revenue sources suffered from the sharp fall in incomes and expenditure and by 2003 the shares of personal and corporate income taxes, indirect taxes in GDP had not yet fully come back to the levels of the early 1990s.

Total revenue is composed of:

$$Rev = PIT + CIT + Ind + Trade + Other \qquad (1)$$

Rev = total revenue
PIT = personal income tax revenue
CIT = corporate income tax revenue
Ind = indirect taxes (business taxes and excise duties and since 1992 the VAT)
Trade = taxes on international trade
Other = other revenue

We can express (1) as a percentage of GDP (Y):

$$\frac{Rev}{Y} = \frac{PIT}{Y} + \frac{CIT}{Y} + \frac{Ind}{Y} + \frac{Trade}{Y} + \frac{Other}{Y} \qquad (2)$$

The long-term picture of figure 2.3 suggests a number of sub-periods (see table 2.2) The period 1970 to 1988 shows a slow but steady increase in the overall revenue ratio from 12.7 per cent of GDP in 1970 to 16.6 in 1986. This rise was driven by small gains in both the personal and corporate income tax ratios and a somewhat stronger increase in the indirect tax ratio. These gains compensated a slow decline in the contribution of trade taxes. The next period is the period 1989 to 1997, the pre-crisis

period of rapid growth. The overall revenue ratio increased rapidly from 1988 to 1990 and then stabilised at the peak level of over 18 per cent of GDP. This rise was driven by the good performance of the income taxes. The shares of indirect taxes and of taxes on international trade were stable over these years. In the post-crisis years the total revenue ratio first collapses but then recovers and seems now to stabilise at a level around 17 per cent of GDP, i.e. below the peak level of the early 1990s. By the end of the period, 2003, revenue from taxes on international trade has now fallen to a systematically lower level. The ratios of personal income tax revenue and of indirect taxes have recovered but stay below their pre-crisis peaks, while the corporate income tax ratio has come back to the pre-crisis level.

Table 2.2
Revenue structure (as % GDP, period averages)

	1970-79	1980-88	1989-97	1998-03
Personal income tax	0.9	1.5	2.0	2.0
Corporate income tax	1.0	1.5	3.2	2.7
Indirect taxes	6.0	7.3	7.9	7.0
Taxes on international trade	3.7	3.2	3.2	1.7
Other revenue	1.5	1.5	2.1	2.3
Total revenue	13.1	15.1	18.3	15.7

Zee (1996) provides comparative data on tax structures in developing countries.[7]

[7] Zee's data are based on a sample 80 countries: 25 OECD countries, 18 African countries, 15 Asian countries, 8 countries from the Middle East and 15 countries from Latin America.

Table 2.3
Comparative Tax Structure
(percentages of total Tax Revenue)

	Income taxes			Indirect taxes			Trade taxes		
	1975-79	1980-84	1985-89	1975-79	1980-84	1985-89	1975-79	1980-84	1984-89
OECD	38.7	39.4	38.6	27.3	27.9	29.2	4.2	2.9	2.2
Developing countries	32.3	31.9	31.2	29.5	30.9	32.5	29.6	27.4	26.5
Africa	33.3	32.3	34.5	25.5	28.5	29.3	36.4	34.8	32.5
Asia	32.8	34.0	32.6	36.7	37.6	39.2	26.5	24.8	23.8
Middle East	40.7	37.3	31.9	22.1	17.8	20.7	31.0	30.7	31.5
Latin America	26.0	26.4	25.3	31.2	34.1	35.8	23.8	19.3	19.2
Thailand	18.3	22.0	22.1	52.4	52.9	53.0	28.0	23.6	22.6

Source: Zee (1996, 1661). For Thailand: Bank of Thailand.

Table 2.3 reproduces the data from table 2 of Zee (1996) and adds to this the information for Thailand. The table suggests that Thailand has an unusual tax structure. The share of income taxes in total tax revenue is considerably lower than that of the other countries included in the table. On the other hand, while the share of income taxes is fairly stable over the period covered by the table in the other country groups, for Thailand there is an increasing trend for the share. But even at the end of the period the share is far below that of the other countries.
The share of indirect taxes on consumption, on the other hand, is relatively high in Thailand. While for most countries this share is somewhere between 25 and 40 per cent of total taxes, for Thailand it brings more than half of total tax revenue.
The share of taxes on international trade is comparable to that of the other countries.
It would thus appear that Thailand's tax structure is biased against income taxes and towards indirect taxes. It should be noted, however, that since the years covered in table 2.3 the Thai tax structure has changed. In recent years the share of income taxes in total tax revenue of Thailand has increased to around 35 per cent, a proportion more in line with the data in table 2.3. The share of taxes on international trade has fallen to around 12 per cent of total tax revenue and the share of indirect taxes has fallen to just below 50 per cent of total tax revenue.[8]

World Bank (2000) compares Thailand's revenue structure to that of other Southeast Asian nations. Compared to these neighbouring countries, Thailand has a relatively low overall revenue ratio. The comparison of the revenue structure confirms the findings above. The shares in total revenue of corporate income tax and of taxes on

[8] Tanzi & Zee (2000) give a table with tax ratios, as percentage of GDP, for developing countries. Compared to other developing countries and compared to developing countries in Asia the ratios of personal and corporate income tax to GDP are relatively low, while that of the indirect taxes is higher. The ratio of taxes on international trade to GDP are comparable to that of other countries.

international trade is comparable to those of other Southeast Asian countries, but the shares of the personal income tax is smaller and that of indirect taxes significantly higher.

Tax elasticity, or tax buoyancy, links changes in tax revenue to changes in GDP (see e.g. Warr & Bhanupong 1996 and World Bank 2000). Long run elasticity for total tax revenue is typically just above 1. The personal and corporate income taxes are elastic with respect to GDP (elasticity estimates for personal income tax centre on 1.3 and for the corporate income tax on 1.5), while the elasticity for indirect taxes is lower (around 1) and for import duties below 1. Such elasticity estimates give an indication on how tax revenue will develop as GDP grows.
The CERDI study performs a standard tax effort analysis. Tax revenue is explained in a cross-country regression by structural characteristics of the country (GDP per capita, import/GDP ratio, share of mineral exports, share of agriculture in GDP). The regression predicts, for each country, a level of the tax/GDP ratio and the difference between that predicted value and the actual tax ratio reflects the 'fiscal effort' of the country, i.e. its ability to create fiscal space. Results of this exercise suggest that Thailand's tax effort is rather poor. In the last decade, its tax revenue stayed behind what could be expected (Brun et al. 2006, table 2.5).
We prefer to use another method to show the impact of structural change on tax revenue. To get more insight into the factors underlying the changes reflected in table 2.2 we assume some simple proportional relationships:

$PIT = a\ W$
$CIT = b\ Pr$
$Ind = d\ C$
$Trade = e\ M$
$Other = h\ Y$

PIT: the personal income tax revenue is a proportion of wage income (W) in the formal sector of the economy. This will be approximated by the 'compensation of employees' of the National Income statistics.
CIT: the revenue from corporate income tax is proportional to profits (Pr) of corporations. This will be approximated by the 'savings of corporations and government enterprises' of the National Income statistics
Ind: the revenue from indirect taxes is proportional to private consumption expenditure (C). Data are taken from National Income statistics.
Trade: revenue from taxes on international trade is proportional to expenditure on imports of goods and services (M). Data are taken from National Income statistics.
Other: other revenue is simply assumed to be proportional to GDP(Y).

The variables *W, Pr, C, M, Y* constitute the tax base for each particular revenue source, while the coefficients *a, b, d, e, h* can be interpreted as the effective tax rates.

These assumptions allow us to rewrite (1):

$$Rev = a\ W + b\ Pr + d\ C + e\ M + h\ Y \qquad (3)$$

We can express (3) again as percentage of GDP. The change in the total revenue ratio over the period can be decomposed as follows:

$$\Delta(\frac{\text{Re}\,v}{Y}) = (a_t - a_0)(\frac{W}{Y})_t + a_0[(\frac{W}{Y})_t - (\frac{W}{Y})_0]$$
$$+ (b_t - b_0)(\frac{\text{Pr}}{Y})_t + b_0[(\frac{\text{Pr}}{Y})_t - (\frac{\text{Pr}}{Y})_0]$$
$$+ (d_t - d_0)(\frac{C}{Y})_t + d_0[(\frac{C}{Y})_t - (\frac{C}{Y})_0] \qquad (4)$$
$$+ (e_t - e_0)(\frac{M}{Y})_t + e_0[(\frac{M}{Y})_t - (\frac{M}{Y})_0]$$
$$+ (h_t - h_0)$$

Equation (4) shows that the change of the revenue to GDP ratio over the period can be decomposed (the subscript 't' indicates the value of the variable at the end of the period, while '0' refers to its value at the beginning of the period). For each of the revenue sources the change in the tax ratio can be attributed to:

(1) changes in the coefficients (($a_t - a_0$), etc.). This is the change in the effective tax rate or in the tax intensity and will, normally, be the result of changes in tax policy. This could be interpreted as the 'tax effort'.
(2) changes in the structure of GDP (*W/Y, Pr/Y, C/Y, M/Y*). The changes in these ratios reflect the structural change in the economy. For instance, increases in *W/Y* and *Pr/Y* reflects the increasing role of the formal sector in the economy and the increase in *M/Y* the steadily rising openness of the Thai economy.

Table 2.4 shows the result of the decomposition. Annex table A2-2 provides more detail.

Table 2.4
Decomposition of changes in the revenue ratio
(percentage points of GDP)

period	Structural change	Tax effort	Total change revenue ratio
1970-2003	9.598	-5.274	4.324
1970-79	2.217	-0.891	1.327
1979-88	0.600	1.355	1.955
1988-97	1.499	-0.138	1.360
1997-03	2.711	-3.549	-0.087

The table makes clear that the gradual increase in the total revenue to GDP ratio from 1970 to 1997 was, to a large extent, due to changes in the structure of the economy. Three changes are particularly important.

As the Thai economy developed the organisation of production became more formal. The small unincorporated, household businesses lost out to the modern and large corporation. The National Income statistics show that '*Income from Unincorporated*

Enterprises' accounted for 52 per cent of GDP in 1970. By 1996 that share had fallen to 23 per cent.[9] The share of corporate profits and of wage payments in the formal sector of the economy increased, thus widening the tax basis for the corporate and personal income tax. The revenue from the personal and corporate income tax together increased from 1.5 per cent of GDP in 1970 to 6.0 per cent in 1996 and 5.5 per cent in 2003. Table A2-2 shows that the effective tax rates for the personal income tax increased a little over the period and the effective tax rate for the corporate income tax increased by a bit more. For both taxes the increasing share of the tax base in GDP made an important contribution to the increased revenue.

The second important structural change is the opening of the economy. The share of imports of goods and services in GDP stood at 19 per cent in 1970. By 1996 the share had increased to 46 per cent and it continued to rise to 59 per cent by 2003. The effective tax rate on international trade (the '*e*' of the model) showed a steady and deep decline. The rate fell in the 1970s, then stabilised in the 1980s and continued its decline in the 1990s. The outcome of these two trends is shown in figure 2.3 above. The share of taxes on international trade in GDP remained high and rather stable during the 1970s and the 1980s. Trade liberalisation, reflected in the decline of tariffs, was leading to a decline in trade tax revenue but the rapid increase in the volume of international trade provided compensation. In the 1990s trade liberalisation advanced further and the fall in tariffs could no longer be fully compensated by the increase in the trade volume. As a result the revenue from taxes on international trade declined from around 4 per cent of GDP around 1990 to 1.9 per cent in 2003.

The third structural change relates to private consumption. The share of private consumption in GDP was 70 per cent in 1970. In the period up to 1990 this share declined as private savings increased. By 1990 the share had fallen to 55 per cent, a level at which it has stabilised in the years since. The relative decline of private consumption reduced the tax base for indirect taxes. Over the period 1970-1990 this was more than compensated by an increase in the effective indirect tax rate so that the share of indirect taxes in GDP increased from 5.5 per cent in 1970 to just over 8 per cent around 1990. Since 1990 the share of private consumption in GDP has been fairly constant while the effective indirect tax rate has shown a slight decline. The result is that the share of indirect taxes in GDP has fallen back to a level around 7 per cent in recent years.

The remarkable conclusion of this analysis is that the 'fiscal space' is created as much by the structural changes that come with economic development than by active revenue policy. If we interpret the changes in the effective tax rates in the model (i.e. the tax effort column in table 2.4) as the outcomes of policy changes, the conclusion will have to be that fiscal policy worked to reduce revenue over the long run.

Table A2-2 presents a more detailed picture than table 2.4. It shows that, over the entire period since 1970, effective tax rates for income and indirect taxes increased, albeit not by much. The overall decline in 'tax effort' is caused by the sharp fall in the effective rate of trade taxes, due to the process of import liberalisation. It is worrying that in the most recent period, since the Asian crisis, the effective tax rates on all types of taxes is falling.

The Annex table can be used to give some comments on individual revenue sources.

[9] With the financial crisis the share rebounded as the modern sector suffered the brunt of the crisis. In the years 2000-2003 the share stays around 28 per cent.

Personal Income Tax

If we look at the pattern of the personal income tax revenue (as percentage of GDP) over time in figure 2.3 we observe that the share was stable, at around 1 per cent, in the 1970s and started to rise in the 1980s reaching a level around 2 per cent of GDP in the early 1990s. Before the 1997 crisis the revenue ratio increased a bit more, driven by the booming economy but after the crisis the ratio of personal income tax revenue to GDP is stabilising around 2 per cent. The downward adjustment of the top rates in 1986 and 1991 resulted in a small and short-timed dip in the revenue to GDP ratio but it appears that the revenue from the tax is not so dependent on the tax rates. It is probably more driven by the changes in the exemptions, allowances and deductions and efforts of the tax administration.

As noted above, the contribution of the personal income tax to total tax revenue is comparatively small in Thailand. The personal income tax is generally judged to be inefficient and inequitable. Different types of income are treated in different ways and there are many exemptions and allowances and deductions which introduce an element of arbitrariness and possible inequity and distortion (see e.g. World Bank 2000 and Chaipat 1993).

Data from the Ministry of Finance show that in 2004 close to 6 million persons filed tax returns. This is out of a labour force of 35 million of which about 15 million public and private sector employees.[10] Of the almost 6 million tax returns just over 2 million actually paid some tax, most of them in the low brackets. But the bulk of the personal income tax is paid by a small group of big earners: a group of about 100,000 people, with incomes over 1 million baht per year, paid about two thirds of total personal income tax revenue in 2004.[11]

The personal income tax has a progressive rate structure. The top rate used to be 65 per cent but in 1986 it was reduced to 55 per cent and in 1991 it was further reduced to 37 per cent. Over the years the income brackets have also been adjusted. At present the rate structure contains six brackets ranging from 0 to 37 per cent. It should be noted that the progressivity of the rate structure does not necessarily lead to progressivity in actual tax payments; the many exemptions, deductions and allowances may reduce the incidence. Available studies conclude that the personal income tax in Thailand has a progressive incidence (World Bank 2000, Warr & Isra 2004). But the impact on the income distribution is only marginal. As observed above a very small group of high income earners pay most of the personal income tax and most of the population pays nothing; therefore the personal income tax only affects the incomes in the top income decile.

In terms of fiscal space, one could consider it unfortunate that the drastic change in the labour force is not reflected in a more significant change in the personal income tax revenue. From 1970 to 2004 the number of formal sector employees, the type of person most easily tractable for tax administrators, increased from 2.6 million to 15 million, or from 15 per cent of the labour force to 43 per cent. Over the same period the share of the personal income tax in GDP increased from 1 to 2 per cent. On the other hand, one should recognise that most of these formal sector workers earn only low incomes out of which they cannot really afford to pay much tax. The poverty of the personal income tax is thus closely linked to the very unequal income distribution

[10] About 17 million workers are classified as own account workers or unpaid family members.

[11] World Bank 1986 shows that in the period 1980-84 about 3.5 million persons filed a personal income tax return. At that time the labour force consisted of 26 million workers, of which about 6.5 million in formal employment. It would thus appear that the coverage of the personal income tax has not kept pace with the rapid growth of the number of formal sector workers.

that Thailand has. Most workers agriculture, industry and services earn a modest income out of which they cannot pay any tax. The very small group that earn a high income on which they should make considerable tax payment also have the political power and influence that helps to turn the available exemptions, deductions and allowances to their favour.

The corporate income tax

Corporate income tax made only a very small contribution to revenue in the early 1970s. In the 1980s the share rose to around 1.5 per cent of GDP and the economic boom of the late 1980s and 1990s lifted the share further to over 3.5 per cent in 1994-96. The Asian crisis was reflected in a considerable drop in revenue as most firms recorded losses but in recent years the share has returned to the level of 3.5 per cent of GDP.

Over time, the rate structure has changed. In the 1970s the tax rate depended on the size of profits: up to 1977 small profits (less than 500,000 baht) paid 20 per cent and large profits (over 1 million) paid 30 per cent. Since 1978 a uniform rate was applied, although now firms listed on the stock market paid less (30 per cent) than unlisted firms (35 per cent). This was done to encourage listing and help develop the stock market. Over the years there have been small variations in these rates. At present the basic tax rate is 30 per cent but there are (small) variations for different types of companies (e.g. for small firms or firms newly listed on the stock market). These small changes in the tax rates cannot be found back in the fluctuations of the tax revenue. The ups and downs of corporate income tax revenue follow closely the ups and downs of the economy. The growth in the 1970s was accompanied by a rapid increase in the corporate income tax revenue as percentage of GDP. The growth recession of the early 1980s is reflected in stagnation and even a small decline in the ratio and the boom of the late 1980s and 1990s results in a rapid growth of the ratio. The Asian crisis leads to a sharp fall and the economic recovery of recent years is reflected in a recovery of the ratio.

Like the personal income tax, also the corporate income tax is paid by only a few corporations. Warr & Bhanupong (1996, 76) mention that close to half of companies declare losses and do not pay taxes and that in 1984 less than 1 per cent of all corporations paid 77 per cent of all corporate taxes. These data suggest that compliance is rather poor.

Indirect taxes

Thailand depends relatively strongly on revenue from indirect taxes. Up to 1992 the main elements were business taxes (sales tax) and excise taxes. In 1992 the Value Added Tax was introduced to replace the business taxes. The business taxes were rather inefficient. There were 14 categories of business with rates ranging from 1 to 50 per cent (Chaipat 1993). But the effective tax rate depended on the structure of the sector. In highly segmented sectors, the cascading of the business taxes could lead to high effective rates. The VAT removed these distortions.

The VAT was introduced in 1992 with a uniform rate of 7 per cent. In 1997, in the context of the IMF conditionality after the Asian crisis, this was raised to 10 per cent. But the tight fiscal policy of that year turned out to be mistaken and contributing to an even faster economic downturn and in March 1999 the rate was brought back, temporarily, to 7 per cent. Since then many deadlines have passed at which the government was supposed to bring the rate back to 10 per cent but so far this has not

happened. At 7 per cent the VAT rate is rather low. Tanzi and Zee (2000) list VAT rates for 30 developing countries; Thailand has one of the lowest rates.
The share of indirect taxes in GDP has steadily increased from around 5.5 per cent in the early 1970s to a peak of 8.2 per cent in 1990/91. The introduction of the VAT in 1992 was associated with a small fall in the ratio (to 7.6 per cent). The Asian crisis undermined private spending and revenue from the indirect taxes fell to a low level from which it is now recovering. Still, in recent years the revenue from indirect taxes amount to about 7 per cent of GDP, i.e. considerably below its peak of the 1990s.
In our decomposition model the revenue from indirect taxes are driven by the trend in consumption spending and the effective tax rate. From 1970 to the 1990s the share of consumption in GDP gradually declined (from 70 to around 55 per cent) while the effective indirect tax rate gradually increased. Over this period the increase in the share of indirect taxes in GDP is due to the increase in the effective tax rate due to shifts in the tax rates and to shifts in consumption patterns. In the 1990s both the consumption share and the effective tax rate were rather stable and so was the share of indirect tax revenue in GDP. Since the Asian crisis the effective tax rate has been declining.

Taxes on international trade
In most countries, trade taxes are import duties but in the case of Thailand we also have to consider export taxes. Up to 1986 Thailand knew a rice premium, an export tax on rice next to export taxes on some other products like rubber. The premium varied over the years in order to stabilise the domestic rice price. The rice export tax was not important in terms of revenue; it brought in little revenue in most years. But it was important in that it created a wedge between the world market price of rice and the local rice price with considerable distributional consequences. The export tax shifted income from rice producers to rice buyers and can be interpreted as shifting resources from agriculture to industry and services or from rural to urban areas. In September 1985 the rice export tax was suspended.
The main revenue from taxes on international trade comes from the import duties. Tariffs are determined by considerations of trade and industrial policy and by revenue concerns. In Thailand they have also been used in short-run macroeconomic management. On several occasions import tariffs were raised or lowered depending on the macroeconomic and balance of payments situation rather than revenue considerations. For instance, in 1983 a surcharge of 10 per cent was introduced to manage the current account deficit which was caused by the overvalued exchange rate. When the exchange rate was eventually depreciated in 1984, the surcharge was lifted. Also in 1997 a 10 per cent surcharge was introduced to deal with the Asian crisis (it was dropped again in 1999).
It is difficult to give a picture of the rate structure because there are so many rates for different products and, at the same time, there are many exemptions, e.g. for firms receiving Board of Investment privileges or for export firms that can get tax rebates. The effective import tax rate of our decomposition model fell rapidly in the 1970s (from 22 to around 12 per cent), then stabilised in the 1980s to continue the decline in the 1990s. By the early 2000s, the rate has fallen to a fairly low level (3 per cent). Over the years, imports have been gradually and selectively liberalised. Particularly during the boom in the 1990s, Thailand was fully integrating in the global economy and import duties came down quickly. In 1991 and 1994 there were significant reductions of tariffs.

It is remarkable that the decline of the effective import tax rate in the 1970s was not reflected in the decline of trade tax revenue as percentage of GDP. In the 1970s the decline in the effective tax rate was compensated by the steady increase in the Import/GDP ratio (from 19 per cent in 1970s to around 30 per cent in 1980). In the 1980s both the effective tax rate and the Import/GDP ratio were rather stable. As a result, the ratio of trade taxes to GDP was rather stable over these two decades: it fluctuated in a range between 3 to 4 per cent of GDP. In the 1990s the Import/GDP ratio increased further (to around 45 percent) and the effective trade tax rate declined with import liberalisation. Now the increase in the Import/GDP ratio was not sufficient to compensate the fall in the effective tax rate: the revenue from trade taxes fell to below 2 per cent of GDP. Recent years have seen a further increase in the Import/GDP ratio (to close to 60 per cent in the 2000s) but now the import tariffs have fallen very low and there is no effect on the trade tax revenue.

2.4 The role of local government in the Thai fiscal space

Local governments are agents in the fiscal space. Up till very recently, Thai government was highly centralised with local government playing only a marginal role in government spending and an even smaller role in revenue collection. In the 1990s the central government spent 93 per cent of all general government expenditure and collected 95 per cent of all revenue and only 25 per cent of municipal revenue was locally collected and retained (World Bank 2000, 71).There would thus be little reason to devote much attention to local government were it not for the fact that in the last few years a rapid process of significant decentralisation has started. This process will give greater responsibility to local governments in the management of revenue and the delivery of economic and social services. Local governments get a substantial review here because of both their uses of resources, direct coverage on people's daily activities and their functions which identify logically with the poverty-reduction objective and the attainment of the MDGs.

Before the Constitution of 1997, the local governments were treated rather like a department in the Ministry of the Interior, so the budget and financial data were not clearly separated. The creation of the Tambon Administration Organizations as a group in 1992 (which number 6,622 today, see table 2.5) overwhelmed the local-government sector. Overall supervision of the local-government sector became focused on these newly created Tambon Administration Organizations, which delayed the refinements for the other sub-sectors of local governments.

The new Constitution of the Kingdom of Thailand of 1997 is a basis for the legal and constitutional definition of local-government roles. Part 9 of the Constitution, comprising 9 articles, defined the basic framework for local governments. The fiscal space is affected by local-government functions as prescribed in Article 284 of the Constitution (determination of local fiscal and monetary measures, management of local public-service provision, and obtaining allocation of tax revenues from the national total); in Article 289 (preservation of local art, custom, culture and learning); and in Article 290 (management, maintenance and use of local natural resources and the environment).

Two years after the Constitution came into force, a law based on these provisions in the Constitution, the Decentralization of Power to Local Governments Act, (1999), was passed. This law defined the status and scope of responsibilities of five

categories of local governments (see immediately below) in Articles 16-18; their revenues are set out in Section 3 (Articles 23-30). Article 30 set a framework for the decentralization of power to local governments, stating in Paragraph 4 that, by 2006, local governments shall get budget allocations equivalent to 35% of the central government's revenues.

In Thailand, there are 7,855 local governments which are grouped into 5 categories, as follows:

Table 2.5 Categories of Thai Local Governments

Type	**Number of Units**
1.Bangkok Metropolitan Administration	1
2.Pattaya City	1
3.Provincial Administration Organizations	75
4.Municipalities	1,156
5.Tambon Administration Organizations	6,622

Each category of local governments has its own law defining the basic framework for that type of local government. The fiscal functions of local governments, the management of budget and revenue sources are also defined in each of these laws.

To grasp the actual roles and performance of Thai local governments in delivering local public goods and services and carrying out their other functions, it is instructive to turn to the flows of revenues and expenditures of local governments. Table 2.6 contains the relevant summary data for the total local-government sector in recent years. From this table, there are a number of interesting observations which can be made. Firstly, up to the late 1990s the role of local government in revenue collection was small. A considerable part of the taxes received by local government was collected locally by central government agencies and handed over to local government. Another major source of revenue was the grants received from the central government. Since the decentralisation law the share of local government revenue compared to central government revenue increased rapidly to 24 per cent in 2006 but this increase is largely driven by the growing importance of transfers from the central government (grants). This ratio is higher than it used to be but still low and lower than the legal requirement. Part of the reasons for the small ratio is the relatively small collections of revenues by the local governments themselves. Given the political and constitutional mandates to provide certain public services locally, there is the question of the efforts put into raising revenues by the local governments. This issue will be dealt with below. Third, given the letters of the laws about local governments' receipts of resources, questions arise concerning the allocation of the necessary funds by the central government to local governments. The Decentralization of Power to Local Government Act (1999), Article 30, specified that by 2006, 35% of the revenues of the government must be allocated to local governments. As far as the Thai fiscal space is concern, one may view this problem as, on surface, a non-issue because what does not get spent through the local governments will be spent through the central government. However, activities by the

local governments are deemed to be important in themselves for expanding the fiscal space or for improving the quality of delivery of public services through local governments. (Brun et al. 2006, Chapter 3, 3.3-2 iii). The problem of Thai local governments not getting the targeted allocations raises the issue of whether the fiscal space is efficiently and effectively used.

Above we spelled out the broad constitutional basis for the operations of the local governments. Now, it is necessary to turn to specific laws that underlie and justify greater roles by the local governments. Realizing these mandated roles would add to the fiscal space, as well as improving the qualities of the public services that are delivered to the population. To concretely grasp the issues about fiscal space and local governments here, the following discussion will be done using the statistics of municipalities to supplement statements, but the analogies apply to all of the other local governments.

The municipalities are a very important group of local governments in Thailand. In table 2.5**,** above, it had been shown that they number 1,156 in Thailand today. The origin of present-day municipality form in Thailand can be traced back to the Public Administration Act of 1933. Before that, local governments were experimented from 1898 in a form called "sukhapiban" and institutionalized in a law, the Local Government Act of 1914. The Municipality Act of 1953, however, set out the present-day legal bases for the operations of, and for matters related to, municipalities of the modern days.

Municipalities are classified into three classes, depending on their population size. The largest, with population over 50,000, are the cities ("tessabaan nakon"); the smaller ones, with population between 10,000-49,999, are the towns ("tessabaan muang");and, those with population between 7,000 and 10,000 are the communes ("tessabaan tambon"). The latter's responsibilities, as specified in Articles 50-51 of the Municipality Act, include waste disposal, fire fighting, water treatment and provision, slaughterhouse operations, waterway and land access maintenance, provision of public transportation, piers operations, marketplace operations, hospital and first-aid operations, electricity provision, and general commerce. For the second type of municipalities, functions increase over and above what had been mentioned previously, as specified in Articles 53-54 of the Municipality Act, to include also operations of pawn shops and public utilities, vocational-school operations, sports-facility operations, public-parks and zoo operations, and maternity and child care operations. For the larger "tessabaan nakon", the previously mentioned functions are expanded, in Articles 56-57 of the Municipality Act, to include also supervision of food vending, cinemas and other service-provision outlets; tourism promotion; and, city-planning and supervision of construction.

Table 2.6 Financial Transactions of Local Governments

(unit: million baht)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1.Revenues	83,677	94,427	96,588	107,015	94,285	127,846	165,037	183,880	225,308	293,915	327,113
1.1 Taxes	46,046	50,675	57,568	50,436	55,177	65,631	69,853	82,984	97,744	110,983	n.a.
1.1.1 Taxes on Property	6,736	8,079	8,027	8,459	12,711	17,201	18,887	22,441	28,646	50,844	n.a.
1.1.2 Taxes on G&S	39,310	42,596	49,541	41,977	42,466	48,431	50,966	60,543	69,098	60,140	n.a.
1.2 Other Revenues	12,008	13,890	7,858	10,859	7,301	6,215	7,671	7,793	8,228	11,831	n.a.
1.3 Grants	25,623	29,862	31,162	45,720	31,808	56,000	87,513	93,104	119,336	171,101	n.a.
2.Central Government Revenues	854,235	849,208	732,351	712,960	747,873	834,141	871,700	1,045,580	1,168,655	1,320,998	1,360,137
3. 1./2. in percent	9.8	11.1	13.2	15.0	12.6	15.3	18.9	17.6	19.3	22.2	24.1

Source: Fiscal Policy Office, Ministry of Finance, and the Office of Local Government Decentralization, Prime Minister's Office.

The mandate to provide public service is not solely limited to what is specified presently in the laws. The appropriateness of using local governments to provide public services is determined by suitability, convenience, ability to serve real needs. The national government can be left to performing tasks which are truly 'public' and nationally relevant. Other public services which may be location-specific and very much locally determined should, then, be applied by and through local governments. These possibilities and the likelihood of the actual situations developing so are presently, however, reduced by the central government's unwillingness to devolve more of the power it now exercises. Thailand has been facing this dilemma for years since the decentralization policy was implemented under the Constitution of 1997. In one respect, there has been duplication of providing some public services in Thailand because of this tug of war going between various levels of government concerning the devolution of power. This is deemed to be wasteful in resource use. The duplication of functions occurred because the central government held on to the power that should be decentralized (for example, in environmental pollution clean-up, and in water provision, and much more). Those who resisted the decentralization process argued that they did not believe local governments were ready to take over such functions.

What are the revenues of the local government? Again the use of municipality data is meant to provide concreteness and clarity to the reader; analogies apply to the other local government forms.
Article 66 of the Municipality Act specifies that revenues of municipalities may derive from:

(i) taxes and tariffs as mandated in the laws;
(ii) fees, permit charges and fines as specified in the laws;
(iii) incomes from municipalities' assets;
(iv) incomes from public utilities and municipalities' commercial enterprises;
(v) bonds and loans as specified in the laws;
(vi) loans from Government agencies, organizations and other corporate bodies. Such loans can be acquired only after approvals given by the relevant municipal councils and the Minister of the Interior
(vii) grants from the Government or the Provincial Administration Organization (PAO);
(viii) contributions, whether in cash or in kind;
(ix) other revenues as specified in the laws.

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Observations can be made about most or all of the revenue sources of municipalities above, but it would be more useful to elaborate on the more important items, namely, (i) taxes and tariffs, (v) bonds and loans, (vi) loans from Government agencies; and (vii)grants.

On taxes and tariffs, reference to the data in Annex table A2-3 (Local Governments' Revenue Structure in 2005) helps one to understand better the actual situation confronting local governments in Thailand today. Tax revenues of local governments can be grouped in three categories: (i) taxes collected by the local governments themselves, such as land and building taxes; (ii) local-government taxes collected by the central government and turned over to local governments, such as vehicles taxes, VAT, excises on tobacco and alcohol beverages, and (iii) revenues allocated from the central government and grants. Category (i) revenues have never been greater than

10% of local government revenues. Lack of effort, and perhaps of interest and other related factors, here is very clear. Category (ii) revenues invite questions why local governments are not collecting many of these revenues themselves; whether local governments have the right to collect levies on values created in their jurisdiction, such as personal income and corporate income, and if they have such rights, why are they not collecting such revenues. Category (iii) revenues have been facing political volatility and central agencies' resistance to comply with existing relevant legislation, namely, the Decentralization of Power to Local Government Act of 1999. The latter law set the target for the allocation of revenues to local governments at 35% of the Government's revenues by 2006. There is, presently, a gap of about 11 percentage points of this 35% that is still withheld by the Government.

On bonds and loans, local governments have practically not tapped this source of resources to perform their tasks. Instances of capital-market resource mobilization or debt incurrence by local governments occurred only in very limited context and in an, essentially, highly controlled environment. Given the myriad tasks that should be performed by local governments in the MDG context and in the matter of poverty reduction, this closure of an important access to resources is, to say the least, very regrettable. The absence of resource mobilization in the money and capital markets by local governments signified losses of opportunities to grow and develop faster.

On loans from Government agencies, etc., there arise certain limitations that are put on local governments. One concern is the excessively conservative rules that are imposed on such borrowings, i.e., the delivery of security collaterals in the form of cash deposits. Another concern is the overlapping and crossings of central government power over local government power in that approval has to be given by the Minister of Interior. The last point creates a rather ambiguous context, i.e., the Minister approving borrowings as a regulatory authority of local governments. If the loans are correctly secured financially, there is no practice in the market that regulators have to also directly approve such transactions in order to launch the transactions. Government regulations in this matter are very unclear and proved to have effectively blocked local governments from mobilizing borrowed resources from the money and capital markets for developmental as well as for other tasks.

On grants, the Government had withheld part of the allocations according to the Decentralization Law of 1999 and set the funds up as grants for local governments (see table A2-3). The difference in treatment raises issues about controls and rightful ownership of the funds for purposes of budget setting and fiscal planning.

It would seem from the above, that there is an unused fiscal space at the local government level. Not only is there the limited allocation of funds from the central government but also local taxes do not raise much revenue and borrowing opportunities are not exploited.

Being public-financial entities, local governments should also perform other public functions, apart from the provision of public goods and services. Some of these other functions are performed at the national government level, or are more suited to be performed by the national government. However, questions should be asked of these other tasks whether local governments also have proper reasons to be involved and take actions. For example, in environmental pollution control and prevention, there

are responsibilities at the national level (e.g., commitments to the Kyoto Protocol on Climate Control), but there are also responsibilities at local level. This is the case of bad externalities, and, by logic, coverage by local governments should extend to positive externalities too. When the uses of resources face sub-optimum, non-sustainable situations, governmental roles are called for, including local governments. Such involvements by the governments will increase the fiscal space, by prompting appropriate governmental measures to deal with the externalities that arise: subsidizing where externalities are positive; taxing where externalities are negative. Local governments in Thailand may have certain tools which can be used to take such actions, but the governments have not yet tabled such policies, nor proposed integrated strategies to deal with these phenomena in their localities. The issues are usually left to central-government handling, for example, the cases of Songkla Inland Water pollution, Borapet Lake pollution in Nakon Sawan Province, Kwan Payao Lake pollution in Payao Province.

Another normal task of a public-financial entity concerns income redistribution and poverty reduction. A government should strive within its power to achieve a more equitable distribution of income for its population and local governments may be more effective at these tasks as they know local conditions best. Measures that can be taken toward this end are numerous. Performing this task adds to expanding the fiscal space. The consequences of implementing a redistribution measure are long-term and multi-directional in nature, but as the impacts work out, the end results would provide benefit in the reduction of poverty and the attainment of many of the MDG's.

Given their responsibilities and power, it is clear Thai local governments have not maintained the desired fiscal space as intended by scripts in the laws. They have under-collected the taxes that are within their power to collect (e.g. the Buildings and Land Tax and Local Development Tax); kept away from taking the initiatives to collect taxes which are theirs, but relied on Ministry of Finance agencies to collect those taxes for them (e.g., VAT on expenditures in their locality, excise taxes for consumption in their locality, vehicle registration fees); and, lacked initiatives to claim taxes for activities which are clearly in their jurisdiction that could be taxed (e.g., local income tax, as is now practiced in many countries; and, property tax). There are risks in a decentralisation process that devolves spending tasks but does not devolve the responsibility for revenue collection.

2.5 Administrative Issues in the Revenue System

Improving the fiscal space would involve improving the quality of the fiscal machinery. The qualitative aspects of improving the tax system are important in bringing the system inline with the level of change and development in the economy. For Thailand at the present, important issues in this regard will be put forth as follows.

1. Rationalization of the Tax System

Because of changes in the economy, collection of customs had declined steadily from the previously dominant position. Discussions had been going on from time to time to merge the excise and customs collection authorities together as are done in many countries elsewhere to rationalize tax administration. Idealism here clashed with

pragmatic (and bureaucratic) stand. The issue has not been permanently decided, so it may come back in the future.

On this same logic about tax-agency modernization, the Revenue Department which collects both the value-added tax (an indirect tax) and the income tax (a direct tax) was proposed in 1993 to be organized on an independent base, similar to the U.S. Internal Revenue Service (that is, more independent and distant from the reach of the Government). The proposal was not further pursued, however.

The thinking about the rationalization of the tax collection authorities came up in policy discussions from time to time. A more far-reaching proposal would bring all the operational aspects of collection under one administration, which would have no policy units at all, unlike the present tax collection agencies which have their own in-house policy units.

Actions in this respect, in whatever line chosen, would change the qualitative aspect of the Thai fiscal space, and may affect (in positive ways) tax collections themselves.

2. Overhaul of the Taxes on Property

Existing taxes on properties are not systematic, nor uniform. The logic behind taxing properties is not made clear, except for the handles which these targeted properties offer for some tax collection. Tradition also played a part in keeping some of these taxes around, even if they produced very little revenues. The basic drive for wanting a bigger role for property taxes had been the examples seen in other countries where property taxes are collected to finance local authorities' budgets. Since the decentralization of power to local governments in Thailand is still limited in actual scope, this should explain the unfinished work of bringing into use a new property-tax regime. The issues of property taxation evoked a logic to go deeper into wealth taxation. So far, this discussion had revolved around estate taxation or inheritance tax. The line of policy choice is not clear on this matter, and if the matter will be pursued, it would take more time, before any policy conclusion can be reached.

3. Reforms of the Income Tax

The income tax is an important tax for the whole tax system as well as for the economy. Its use over the years has raised many important questions about its character and structure. Perhaps the more important question is whether there should be a global or a partial tax. Many features existing in the present system, which seems to suggest a global character, are evidence of partial approach to taxation. The most important instance being the taxation of interest income, which can be separated from the global income and the maximum tax rate is 15%, different from the 37% on the taxable global income. Other instances of partial approach do exist, but the greatest flaw in the logic of income taxation is the exclusion of a large part of national income. Of the 38 million people in the labour force in the country, the Revenue Department demanded filings from only about 6 to 7 million taxpayers. Categories of income excluded from income taxation include agricultural income and income from stock trading in the national exchange. Further, petroleum income is separately taxed, and no meaningful discussions are raised about the need to separately tax petroleum income, or how this may be better done.

Income-tax holidays are important in the packages of fiscal incentives given to investors in order to attract them to invest in the country. Although this task is supervised by an agency, the fiscal implications of this 'tax expenditures' are not known outside of this agency, even as the taxpayers have to bear additional taxes because the government's budget has to be financed. It is not transparent what the

taxes given up for these investors are exchanged for, which can be accurately monitored and calculated, and which should be reported to the power which passed laws to tax the population. Rational decision-making can be made if the information is publicly given, and perhaps an improved resource allocation for the economy, and for the poor, can be organized if these 'tax expenditures' are spot-lighted.
Double Taxation Agreements (DTA) are important instruments for the management and development of the economy, and the promotion of commerce and prosperity. The issue is that rarely are the DTA's, their details, their implications, etc., brought to the knowledge of the public, and properly used to further the objectives of society and the economy, including promoting the causes for the poor. Thailand has completed DTA's with many nations.
Exemptions in the income tax assessment lead to unequal tax rewards to different taxpayers and promote unequal distribution of income. The inequity feature of the use of exemptions can be reduced by using and giving equal tax credit to each qualified person. Reform here is straight forward, but political acceptance is different.

4. Reforms of Excise Tax
Excise taxes were originally based on consumption behaviour which is considered luxurious, hence should be subject to taxation. Also, the penalty to be put on the consumption of 'public bad' such as alcohol, cigarette, etc., was considered to be done through excise taxes. Today, with the need to collect more money to finance the budget, the thinking has become rather desperate-like, in that the authorities justify taxing various 'handles' citing, e.g., environmental protection, health protection, etc., without clear logic or mandate why that should be so. Surely, excise authorities are not health experts, nor are they environmental experts, but collections are decreed anyway. A rationalization of this process and taxation would be reassuring to the taxpayers.

5. Reforms of Customs Taxes
Customs taxes and duties cannot be collected without regard to their consequences on commercial and production competitiveness. The increasing number of Free Trade Arrangements which Thailand entered into, and expect to conclude, plus the country's subscription to the multilateral trade talks, both past, present and the future, imply a change of responsibilities at customs authorities. Past mechanisms and practices which are not in line with this change of the way business will be done, for example, the arbitrary use of GATT valuation approach, heavy-handed imposition of bonded-warehouse regulations, etc., lead to missed opportunities for the country in value-adding, employment creation, foreign-exchange earnings and income creation, all of which are important variables for the country's prosperity, but none of them an important indicators for performance of the customs authorities. An overhaul of customs collection machinery will greatly benefit the economy in gearing up to a better competitive position in world trade and production.

2.6 The Roles of State Enterprises in the Fiscal Space of Thailand

The role of state enterprises is relevant to the analysis of fiscal space for three reasons. Firstly, state enterprises may provide goods and services that are relevant to the achievement of the MDGs: e.g. water and electricity supply, public transport, rural credit, housing. Secondly, state enterprises are owned by the government and, on top

of any taxes paid, transfer dividends to the owner. But, thirdly, some state enterprises may require subsidies from the government because the prices they charge do not fully cover cost (e.g. public transport) or because they are inefficient.
Every country has to decide on, in connection with state enterprises, about certain goods and services which have to be delivered through the public sector but have certain flexibilities not to be treated like a strictly public good or service. The flexibilities involved are properties which relate to pricing. Consumers pay according to the units, or amount, consumed. This makes these public goods and services similar in some sense to private goods and services, which are allocated by the rules of the market. Think of transportation services, potable water, public utilities, etc. These goods and services are usually delivered to society by entities in the form of 'enterprises', albeit public ones. Some of these services are 'natural monopolies' and provision through state enterprises is done to prevent the abuse of market power. Governments may also choose to use state enterprises to ensure that all have access to the services at affordable prices. There is no fixed rule on how public-private sector demarcation is done in different societies; and across countries, the choices made in a particular country are not always the same. It is generally true to say that this realm of public goods and services (not the strictly-public type) exists between the pure-public-goods-and-services realm and the private-sector economy.

The use of state enterprises to deliver goods and services to the public is widespread. In Thailand, the practice expanded in the years after the Second World War. In the 1950's, the Government set up a host of state enterprises to carry out tasks not necessarily related to public services. State enterprises in that period use the word "Organization" in their names, and many still remain in existence today, such as the Battery Organization, the Zoo Organization, and the Express Transport Organization. Also, state enterprises were set up more for delivering public utilities and for infrastructural development. At that time the preference for state enterprises were part of a nationalistic policy trying to prevent the domination of the economy by Chinese and foreign business. When many of these state enterprises turned out to be inefficient and not delivering the expected results, policy shifted in the late 1950s (Ingram 1971, 231). Since then the private sector has dominated in the productive sector and the role of state enterprises has been comparatively limited, although significant. There are, at present, 68 state enterprises, some of which have been partially privatised. Table 2.7 gives the historical perspectives of the roles which state enterprises have played in the Thai economy and fiscal space since 1984.

State-enterprise expenditures have grown almost 10 times over the 21-year period shown, while their operating and non-operating revenues had similar growth over the same timeframe. The Government had given them capital transfers over this period (1984-2004) amounting to 135 billion baht. State enterprises had, in turn, paid 123 billion baht of corporate income taxes over this period, and paid 628 billion baht of dividends out of the total profits of 1,379 billion baht. The dividends paid to the Government were sent to the annual national budget, thus went toward supporting the national expenditures. The net profits after payments of dividends went to the financing of expansion and necessary investments, which over the period, totalled 2,421 billion baht. The difference of 275 billion baht had to be borrowed from the markets.

Table 2.7 Operations of Non-Financial State Enterprises (unit: million baht)

		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
1	**Revenue**	**179,410**	**206,977**	**218,131**	**235,924**	**270,492**	**308,561**	**370,568**	**433,257**	**464,628**	**503,256**
2	of which: Capital transfer from central government	1,810	2,494	378	528	924	1,488	1,922	2,207	3,552	10,316
3	**Expenditure**	**150,792**	**173,278**	**181,613**	**189,749**	**214,733**	**234,249**	**276,054**	**330,317**	**346,058**	**379,429**
4	**Corporate income tax**	**1,075**	**738**	**955**	**1,155**	**2,676**	**3,244**	**3,167**	**2,271**	**1,836**	**971**
5	**Profit (or loss)**	**17,107**	**12,629**	**15,173**	**22,288**	**30,785**	**42,318**	**52,679**	**64,828**	**67,879**	**69,522**
6	Dividend & distribution	4,315	6,469	6,546	7,488	8,384	12,775	16,988	19,411	27,194	29,859
7	**Retained income**	**21,946**	**25,271**	**27,818**	**35,815**	**42,559**	**55,818**	**71,062**	**77,157**	**84,841**	**87,920**
8	**Capital expenditure**	**32,986**	**35,715**	**35,444**	**32,436**	**48,503**	**48,669**	**77,085**	**99,263**	**120,365**	**127,751**
9	**Financing requirement (-)**	**-11,040**	**-10,444**	**-7,626**	**3,379**	**-5,944**	**7,148**	**-6,023**	**-22,106**	**-35,524**	**-39,831**
10	Financing	11,040	10,444	7,626	-3,379	5,944	-7,148	6,023	22,106	35,524	39,831
11	External borrowing (net)	9,379	9,785	4,094	-2,384	-3,288	2,746	12,073	5,460	16,233	-759
12	Domestic borrowing (net)	926	7,080	6,618	8,839	16,043	6,631	10,110	35,971	17,894	35,583
13	Others 2/	735	-6,421	-3,086	-9,834	-6,812	-16,525	-16,160	-19,325	1,397	5,007
		as percentage of GDP:									
20	**Revenue**	18.2	19.6	19.2	18.1	17.3	16.6	17.0	17.3	16.4	15.9
21	of which : Capital transfer from central government	0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.3
22	**Expenditure**	15.3	16.4	16.0	14.6	13.8	12.6	12.6	13.2	12.2	12.0
23	**Corporate income tax**	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0
24	Dividend & distribution	0.4	0.6	0.6	0.6	0.5	0.7	0.8	0.8	1.0	0.9
25	**Retained income**	2.2	2.4	2.5	2.8	2.7	3.0	3.3	3.1	3.0	2.8
26	**Capital expenditure**	3.3	3.4	3.1	2.5	3.1	2.6	3.5	4.0	4.3	4.0
27	**Financing requirement (-)**	-1.1	-1.0	-0.7	0.3	-0.4	0.4	-0.3	-0.9	-1.3	-1.3
30	**net govt position(23+24-21)**	0.4	0.4	0.6	0.6	0.6	0.8	0.8	0.8	0.9	0.6

1/ Comprising 43 non-financial state enterprises by fiscal year

2/ Inclusive of changes in working capital and changes in cash & deposits, and etc.

Source : Bank of Thailand

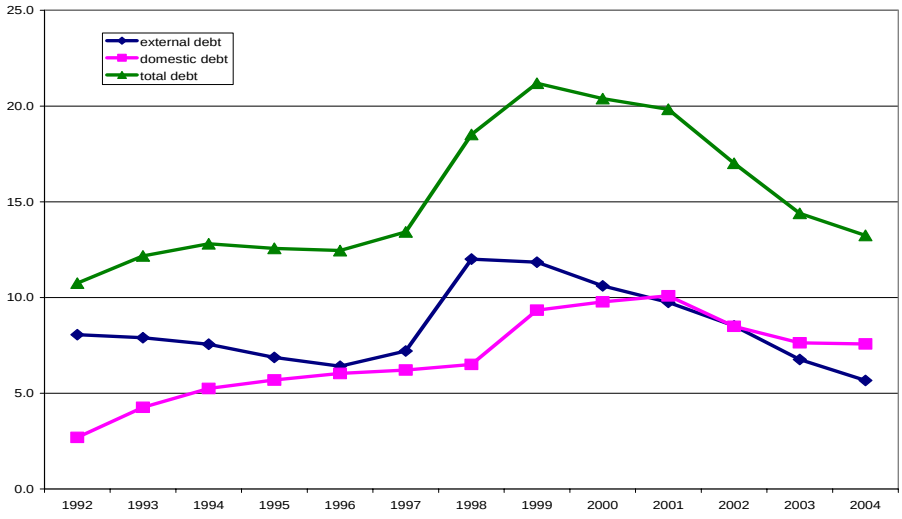
Table 2.7 cont'd Operations of Non-Financial State Enterprises (unit: million baht)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Revenue	**568,818**	**683,856**	**786,843**	**914,677**	**957,156**	**943,249**	**1,185,183**	**1,328,059**	**1,720,715**	**1,564,262**	**1,718,315**
of which: Capital transfer from central government	8,872	9,978	9,303	9,827	12,822	5,760	7,840	11,168	8,941	10,436	14,787
Expenditure	**419,585**	**505,812**	**589,002**	**744,214**	**773,193**	**766,690**	**1,015,971**	**1,105,405**	**1,456,606**	**1,282,042**	**1,422,375**
Corporate income tax	**1,938**	**2,429**	**3,125**	**1,623**	**4,266**	**5,037**	**4,409**	**6,667**	**12,756**	**29,781**	**32,541**
Profit (or loss)	**75,316**	**88,319**	**103,446**	**73,802**	**84,108**	**-21,922**	**65,983**	**95,071**	**145,873**	**126,551**	**147,430**
Dividend & distribution	31,372	37,288	39,266	47,712	56,022	49,406	39,213	58,167	49,481	51,515	56,550
Retained income	**108,788**	**132,187**	**148,335**	**113,719**	**116,138**	**118,255**	**123,128**	**155,323**	**200,330**	**197,528**	**201,706**
Capital expenditure	**121,989**	**148,113**	**137,073**	**194,356**	**193,937**	**176,037**	**202,318**	**171,744**	**100,957**	**132,945**	**182,905**
Financing requirement (-)	**-13,201**	**-15,926**	**11,261**	**-80,637**	**-77,800**	**-57,782**	**-79,190**	**-16,421**	**99,373**	**64,583**	**18,800**
Financing	13,201	15,926	-11,261	80,637	77,800	57,782	79,190	16,421	-99,373	-64,583	-18,000
External borrowing (net)	1,347	9,386	12,924	-7,834	-8,849	52,009	6,063	-7,152	-34,571	-47,633	-58,802
Domestic borrowing (net)	45,234	27,882	20,826	34,000	31,053	28,858	80,847	15,350	-22,841	-15,133	78,031
Others 2/	-33,380	-21,342	-45,011	54,471	55,596	-23,086	-7,720	8,223	-41,961	-1,817	-37,229
	as percentage of GDP										
Revenue	15.7	16.3	17.1	19.3	20.7	20.3	24.1	25.9	31.6	26.4	26.4
of which : Capital transfer from central government	0.2	0.2	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.2
Expenditure	11.6	12.1	12.8	15.7	16.7	16.5	20.6	21.5	26.7	21.6	21.9
Corporate income tax	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.5	0.5
Dividend & distribution	0.9	0.9	0.9	1.0	1.2	1.1	0.8	1.1	0.9	0.9	0.9
Retained income	3.0	3.2	3.2	2.4	2.5	2.6	2.5	3.0	3.7	3.3	3.1
Capital expenditure	3.4	3.5	3.0	4.1	4.2	3.8	4.1	3.3	1.9	2.2	2.8
Financing requirement (-)	-0.4	-0.4	0.2	-1.7	-1.7	-1.2	-1.6	-0.3	1.8	1.1	0.3
net govt position(23+24-21)	0.7	0.7	0.7	0.8	1.0	1.0	0.7	1.0	1.0	1.2	1.1

Profits had been increasing steadily up to 1996, then wobbled in the 1997-2001 period before taking on the normal level again. Since the total profits were mostly positive, it can be said that state enterprises as a group helped to accumulate capital. Profits are not necessarily an indication of efficient use of capital because some state enterprises enjoy monopolistic positions. Their dividend payments paid to the government were funding national budget programs. Finally, in making capital expenditures, state enterprises directly performed the task of mobilizing capital, tapping the financial markets, and add to the fiscal space in accumulating capital. The extent of this capital accumulation and expenditures which went toward benefiting the poor or reducing poverty must be looked in the pricing practices, products and services which apply to the poor, and special efforts that state enterprises put out for the poor.

In accumulating capital, state enterprises had to use the capital markets as well as the banking system to obtain financing. When state enterprises incur debt, they usually look toward the Government to provide for guarantee or to obtain other special treatments. The financially weak enterprises do get some "sympathy" from the Government, and usually get some deal in the banking and capital markets. As a group, state enterprises are significant participants in the financial markets, following the private corporate sector, but leading the Government in terms of the real volume of finance obtained.

Figure 2.4
State Enterprise Debt



Source: Bank of Thailand

Historical data on indebtedness of state enterprises are not complete. Figure 2.4 presents debt ratios since 1992. There were periods when weak economy and weak public-sector conditions brought down the amount of financial resources mobilized, for example, in the period 2002-2004. The instruments of indebtedness used by state enterprises include bonds, loans and notes, but bonds were by far the most extensively used of the instruments. This accords well with the objective of building a deep and wide domestic debt market; however, when state enterprises ask the Government to guarantee their bonds, this market development is stunted. On the maturity structure of state-enterprise debts, one sees the medium-term bond market as playing an important role, perhaps because state enterprises want to save costs, but the shying

away from the long-term end of the market does not reflect well on the true development intention of state enterprises themselves, or otherwise, the bond market has not been properly developed yet.

Given the conceptual location of the state-enterprise sector, it is necessary to establish the actual role of the Thai state enterprises in the economy. There are 68 state enterprises at present. This relatively small number reflects the predominance of the private sector in the Thai economy. The enterprises can roughly be grouped into three categories as follow.

- Near-public-good/service type. This type of state enterprises will enjoy separate existence for the foreseeable future. Their legitimacy is not seriously under question. In this category can be placed entities like the Tourism Authority of Thailand, Thailand Institute of Scientific and Technological Research.
- Market-compatible good/service type. In today's ever-evolving economies, goods and services which used to be provided through public entities are now provided through market-regulated bodies, and therefore are subject to competition and other market discipline. Goods and services, like electricity, potable water supply, education, transportation services, communication and telecommunication services, are nowadays provided through market-compatible enterprises. In Thailand, there are many state enterprises falling into this category such as Electricity Generating Authority of Thailand; Provincial Electricity Authority; Metropolitan Electricity Authority; Metropolitan Waterworks Authority; Provincial Waterworks Authority; Thai Airways International; the Transport Company; Bangkok Mass Transit Authority; CAT Telecommunications; Krung Thai Bank; PTT. In recent years, the Thai government has drawn up plans for privatisation of some of these enterprises, joining a world-wide privatisation drive. There are many philosophical, policy, and operational issues arising from the existence of this type of state enterprises. For example, in the market, one sees the co-existence of private entities providing similar and identical goods and services: Ban Pu Company; Lanna Lignite; Sahacogen; Eastern Water; Bangkok Airways; Bangkok Expressway; BTS; Juta Maritime, etc. Questions then arise about the abilities of the state enterprises to compete, the quality of the governance of their organizations, their abilities to appeal to investors to raise inexpensive funds (and not using state power to guarantee for low-cost funds), etc. A compelling benchmark is the raising of resources by other (private) enterprises which is based on performance, governance and management excellence. Should state enterprises which provide similar or identical goods and services be permitted to ignore such discipline for tapping society's resources? One possible reason for maintaining such state enterprises would be to correct for market failures and to guarantee that the poor will have access to essential services at affordable prices.
- Superseded type. There are state enterprises which for some obvious reasons do not have much ground for continued existence, for example, the duplication of tasks and total ineffectiveness. In this category can be placed entities like the Battery Organization, Tannery Organization, Provincial Waterworks Authority; Provincial Electricity Authority, Thai

Navigation Company. The justifications for having and keeping these organizations do not make any economic sense today

The budget implications of state enterprises are not very large. State enterprises pay income tax over their profits and the dividends paid by state enterprises are also part of government revenue. Table 2.7 shows that, on average, over the period 1984-2004 government income from state enterprises averaged around one per cent of GDP. There was some change over time: in the early 1980s the income amounted to around 0.5 per cent of GDP from which it increased to around one per cent during the 1990s and somewhat over one per cent in recent years. It seems that the state enterprise reforms in the 1980s had significant revenue effects. However, the government also provides subsidies to state enterprises – to compensate for losses or to help finance investment. If we deduct these subsidies, the net fiscal contribution of state enterprises remains positive but small at below one per cent of GDP (on average 0.8 per cent over the period 1984-2004).

Employment data for the entire state-enterprise sector are available for the period 1996-1999, as shown in table 2.8. The table helps to make two points. Firstly, state enterprise employment is rather small, compared to the total labour force. And, secondly, most of the employees work in the public transport sector. State-enterprise employees have an influence beyond their numbers as they are well organized in unions, which have certain impacts on the state enterprises themselves and on setting some agenda on national-welfare issues, as well as job-security issues for labour in general, with state enterprise employees leading in pushing for the general goals and welfare of members of the labour force. Because of their organization, state-enterprise employees wield some political leverage, not least because they can congregate their members to make physical presence, or demonstrate, for policy or political gains.

Table 2.8 Employment in State Enterprises, 1996-1999
(unit: thousand persons)

Sector / Year	1996	1997	1998	1999
1.Agriculture	9.2	8.9	8.8	8.7
2.Manufacturing,Mining	17.1	16.8	13.1	13.0
3.Transportation,Communication	148.6	147.2	148.6	149.2
4.Commerce,Tourism	2.4	2.4	2.4	2.4
5.Science,Technology,Energy	82.4	81.5	80.5	78.5
6.Education	0.3	0.3	0.3	20.3
7.Social Services	18.1	18.2	19.4	19.4
8.Banking	42.1	39.9	40.1	14.3
TOTAL	320.1	315.2	313.2	285.7

Source: Bureau of the Budget

The above cursory picture of the state-enterprise sector, necessarily, cannot yield reasonable useful details for thorough inspection. Can these enterprises be utilized to further the goals of poverty reduction, equity promotion, social welfare and justice, which are elements in the MDG's?

It should be noted that some state enterprises are active in areas that are crucial to the process of capital accumulation and poverty alleviation. The electricity authorities played a role in rural electrification. Water authorities provide access to safe water. The Bank of Agriculture and Agricultural Cooperatives (BAAC) provided many rural households with credit. Mass transport organisations provide cheap transport for low-income groups. The current government is using state-owned financial institutions to channel resources to villages, to low income groups, to cheap housing, and to small enterprises.

It must also be realised that the MDG's are mostly society-oriented ends, whereas running enterprises as business outfits can conflict with achieving the social objectives. Here lies the point for society to intervene to minimize the economic loss and to maximize the social goals. This intervention point is very crucial to the attainment of the MDG's but it is also very complex. Political machineries may not deliver the desired goals, as is well known. Ruling 'classes' are not legislating laws that will bring economic harm to themselves or they may implement privatization of state enterprises only to increase the wealth of the members of the elite. In practice, what occurred in resource mobilization was not much related to the theories of public goods and services provision through state enterprises. Often, sound economic management of the enterprises was ignored because political controls dictate a management that serves more political ends: expenditures continue to benefit the immediate areas/jurisdictions of politicians who influence the policies of the state enterprises. Resource mobilizations are done more for political expediencies than for the progressive development of the enterprises, so the demand for guarantees by the state enterprises is still very rampant; bankrupt enterprises are perpetuated because their bleedings feed some political tills. State enterprises continue to ignore market discipline. Often, the status as an 'enterprise' rings empty because management and employees of these enterprises continue to behave not differently from the ordinary civil servants staffing regular state agencies. The productive interactions between the boards of directors and management do not exist because collusion and/or dominance takes over this relationship, and is not subject to the cleansing discipline of the market, and which, thus, turn the enterprises to narrow, subjective controls. Most of these mis-directed outcomes occurred because of the dominance and influence of the politicians and political machineries. Corrections can be made, but this will take time and need citizens' controls of political machineries. There should exist in society a healthy, meaningful participation by the public in determining state enterprises' policies and activities. For the MDG's to be achieved, effective public watchdogs (whether that be the media, citizens actions, or other things) must function to get the desired targets.

2.7 New developments: fiscal innovations

The Thaksin government that came to power in 2001 introduced a number of fiscal innovations that have created some controversies. Although the perspective of this paper has been historical, it is relevant to briefly comment on these new developments.

Right after the elections and the formation of the new government a number of measures were announced. A village fund was created from which each of the over 70,000 villages in the country would receive 1 million baht for local development

purposes. A debt moratorium was announced for farmers. A 'People's Bank' was created to run a micro-credit scheme. And the 30-baht health scheme was introduced under which people can obtain a health card that gives right to medical treatment at a fixed cost of 30 baht per visit.

These initiatives are interesting for a number of reasons. Firstly, they were part of a plan for fiscal stimulus. After the slow recovery from the 1997 crisis the Thai economy needed a push and the measures put money in the hands of people with a high propensity to spend. Secondly, the measures were aimed at a part of the population that were not used to being spoiled by the government (rural population). This populist strand of 'Thaksonomics' changed the political economy of Thai politics. And finally the measures were financed in innovative ways. It is this last aspect that is of interest to us.

The revolving village fund is financed by loans of the Government Savings Bank (GSB). The burden of the farmers' debt moratorium is on the Bank of Agriculture and Agricultural Cooperatives (BAAC). The People's Bank was also established by the GSB. Other public sector financial institutions were engaged in new programmes of lending to small enterprises. The 30-baht health scheme is financed from the budget. It is clear that state enterprises play a dominant role in financing and organising these new initiatives.

The off-budget financing was clearly attractive at a time when concerns about the public sector debt were high. It enabled the government to increase expenditure without raising taxes or increasing the budget deficit and the government debt. But critics have questioned whether this way of financing really increases the fiscal space. To some extent the initiatives just mean a shifting of resources over time. The government will eventually have to pay or compensate the GSB and BAAC.[12] The financing of the health scheme has created some problems. Health providers get a fixed sum per person registered but the actual cost of treatment is higher, also because the scheme is so popular (almost three quarters of the population registered). The result is complaints about substandard treatment and overburdened state hospitals, particularly in rural areas. Work overload means that doctors are leaving state hospitals and inadequate budgets mean that hospitals are rapidly accumulating debt. According to Ministry of Finance data, health outlays now amount to 7.4 per cent of total government spending, a share that is similar to the share before the scheme.

The initiatives of the Thaksin government are directly aimed at that part of the population that is the focus of concern when discussing the MDGs. Providing health care for the poor and moving resources to indebted farmers and small enterprises can make a significant contribution to the alleviation of poverty. At the same time, the initiatives are also a calculated populist ploy trying to win the rural vote. This ploy paid off: Thaksin's party won the elections in 2005 by a wide margin. There is, of course, a danger in populist policies without sustainable financing. Current evaluations are too recent or too partial to come to a firm conclusion on these fiscal innovations.

[12] It is not unlikely that the revolving village loans and the debt moratorium will lead to, possibly considerable, default. Many villages may have assumed that the 1 million was a grant rather than a loan and farmers believe that the moratorium was a debt forgiving rather than suspension.

2.8 Conclusion

In this part of the study we have analysed the pattern and trends of government revenue in Thailand over the period 1970-2004. Over this period the economic performance of Thailand has been excellent. Over these 35 years the per capita GDP increased more than four times and the structure of the economy changed radically. As we have shown above it is particularly the changes in the structure of the economy that explain the changes in the level and the composition of government revenue.
Historical experience of the advanced countries, as well as cross-country comparison would lead us to expect an increase in the Revenue/GDP ratio as income rises. This did indeed happen in Thailand although to a lesser extent than might have been expected. The current level of the revenue ratio is low when compared to countries with similar level of development. Moreover, the current level of the revenue ratio is below historical peaks. All these findings together suggest that Thailand has unused fiscal space or even that fiscal space that had been occupied has been lost again.
However, taxation is a political process and in Thailand there is clearly a preference for a relatively small government. Business and political elite overlap to a considerable extent in Thailand and they have no need for higher taxes that would increase cost.
It should be noted that stable Revenue to GDP ratio or Government expenditure to GDP ratio, together with rapidly growing per capita GDP, imply that government spending and revenue per capita is growing fast. Per capita government expenditure at constant (1988) prices increased from around 2200 baht in 1970 to around 9500 baht in 2003. The success of Thailand in achieving the MDGs is to be attributed to the rapid growth that put income in the hands of the people that they could use to improve their living standards but that also increased the real resources available to government to provide the necessary services. Moreover, within government spending there has been a shift of resources towards social spending which has certainly helped to achieve the MDGs. While the overall government expenditure and revenue ratios are not high, the ratios of capital spending and of social services spending to GDP are relatively high. Thailand thus concentrates government spending in areas which support the private sector accumulation process and which promotes human development.

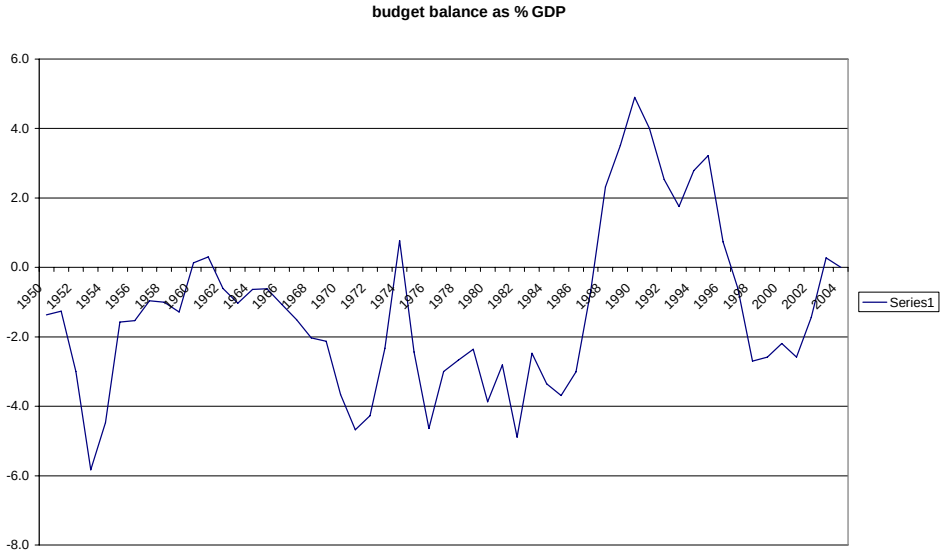
Thailand has gone through a fiscal transition in the period under study. Taxes on international trade in 1970 still accounted for 37 per cent of total revenue. By 2003 that share had fallen to 12 per cent. This fall was compensated by an increase in the contribution of income taxes (from 13 per cent of revenue in 1970s to 36 in 2003). The share of indirect taxes has remained the same over the period. In a comparative perspective the Thai tax structure is unusual in that the share of income taxes, and particularly personal income taxes, is rather small and that of indirect taxes relatively large. The share of income taxes has been increasing over the years thus bringing Thailand somewhat closer to the average pattern. The structure of the tax system has important implications for the income distribution. The incidence of indirect taxes is normally neutral; any progressivity in taxation has to come from income taxes. The small role of the personal income tax implies that taxation is not used in Thailand to redistribute income.
Another fiscal transition, that has just begun, is the decentralisation. The role of local government has been relatively small in the past but is now rapidly increasing.

Another element of the public sector, the state enterprises, is not very prominent but some of them are directly involved in activities that support private production and poverty alleviation. It is thus important to note that the activities of these enterprises have increased significantly over time.

III Deficit Financing

Figure 3.1 shows the budget balance for the national government since 1950. The figure shows that, up to 1988 deficits were the norm but since that year a period of surpluses occurred which came to an end with the Asian financial crisis.

Figure 3.1



source: Bank of Thailand

The deficits were never excessively large. The average deficit over the period 1950-87 was – 2.3 per cent of GDP. Deficits tended to occur in peaks (like 1953 and 1971-72) but were then quickly corrected. The only period of sustained considerable deficits was in the years 1976-1986. Then, for 10 consecutive years, substantial budget deficits were recorded. This period came to an end when, after 1986, substantial fiscal adjustment took place. Figure 2.1 showed how, after 1986 the expenditure to GDP ratio declined and the revenue to GDP ratio increased, leading to a period of fiscal surpluses.

The financing of the deficit can come from three sources: monetary financing, domestic borrowing and external borrowing. Thailand has used all three.

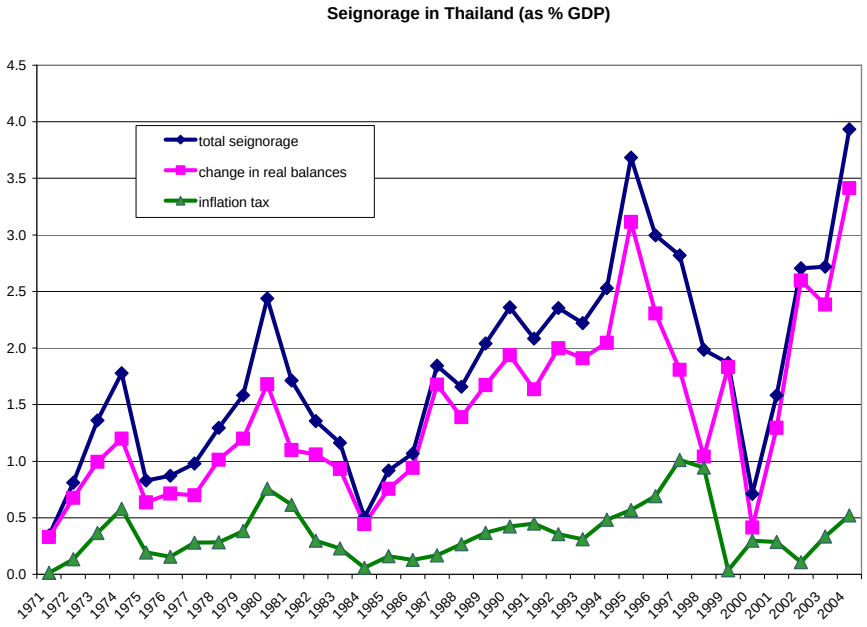
3.1 Monetary financing

Seignorage are the real resources that the government can mobilise through its ability to create money. It is measured by the increase in the monetary base (or high powered money).

$$\frac{\Delta M}{P} = \frac{M_t - M_{t-1}}{P_t} = \Delta(\frac{M}{P}) + \frac{M_{t-1}}{P_{t-1}}(\frac{\pi}{1+\pi})$$

The first term on the right-hand side (Δ(M/P)) reflects the increase in the demand for real balances. The second term $(\frac{M_{t-1}}{P_{t-1}}(\frac{\pi}{1+\pi}))$ is the inflation tax (π is the rate of inflation). The real resources the government can obtain from seignorage are determined by the increase in the demand for money (which in turn depends on the growth of income) and by the inflation tax levied on outstanding money balances.
Figure 3.2 shows the contribution of seignorage in Thailand.

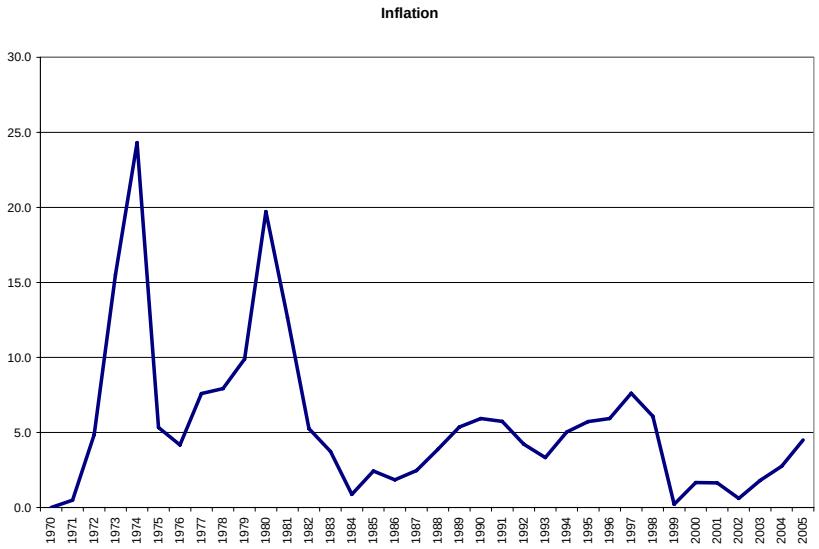
Figure 3.2



The average revenue from seignorage, over the period 1970-2004, is 1.8 per cent of GDP and most of that is due to the growth in the demand for real balances (1.4 per cent). The inflation tax accounts for only 0.4 per cent of GDP over the period.
The growing demand for real balances is fully determined by the growth of income, while the inflation tax depends on the level of inflation.[13]
Thailand is a country with a low appetite for inflation. The average inflation over the period 1970-05 is only 5.6 per cent. In figure 3.3 it is clear that this average is pushed up by high inflation in some special years.

[13] The scatter between the natural logarithms of real balances and real GDP is almost a straight line with a correlation coefficient of 0.99. The correlation between the revenue from the inflation tax and the rate of inflation is 0.53.

Figure 3.3



The peak in 1974 was due to the first oil crisis and the peak in 1980 to the second oil crisis. The lower peak in 1997 was due to the pass-through after the strong depreciation of the baht. In all these instances inflation was brought back very quickly after the shock. For instance, inflation jumped to 24 per cent in 1974 but was back at 5 per cent in 1975 and, similarly, it fell from 13 per cent in 1981 to 5 per cent in 1982. If we remove these peak years from the series the average rate of inflation in Thailand fall to around 4 per cent per year, which is rather low for a country going through a period of rapid structural change.

In 2000 the Bank of Thailand adopted inflation targeting as its monetary policy regime. The target is to keep inflation below 3.5 per cent which, in view of the historical experience, is ambitious.

Thailand's revenue from seignorage is relatively modest compared to the average seignorage revenue for developing countries and for Asian developing countries as recorded in table 3.5 of Brun et al (2006). This can be related to two factors. Firstly, Thailand is a low-inflation country. The average inflation is much lower than that of most other developing countries (see Brun et al. 2006, table 3.6).[14] Figure 3.2 shows spikes in inflation tax revenue in 1974, 1980, 1997 when external shocks pushed up inflation but outside these peaks the revenue from inflation tax is quite low. The second factor is that the Thai financial system is relatively well developed with the banking system taking care of a large share of payments. This implies economizing on base money (the most significant part of which is currency in circulation). This implies the monetary base as percentage of GDP is relatively low and that economic growth leads to modest demands for additional base money. In the period 1970-85 the increase in real money balances gave a seignorage revenue of around one per cent of

[14] Agnenor & Montiel (1996, 113) have a table that shows that the average revenue from the inflation tax is 1.2 per cent of GDP per year for Asian countries over the 1980s. Thailand's revenue over that period is only 0.6 per cent of GDP; the lowest of the Asian countries recorded in the table.

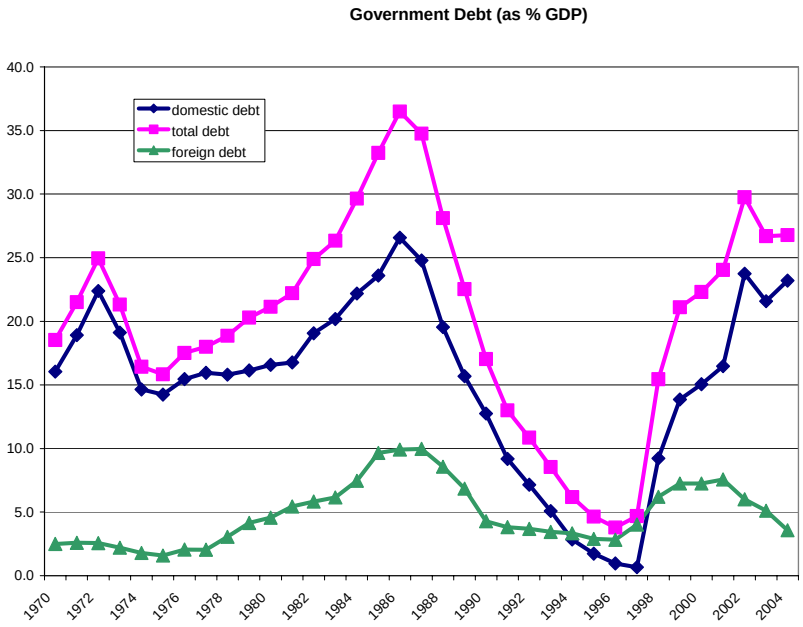
GDP. In the late 1980s and 1990s the rapid growth lifted this revenue to around 2 per cent of GDP.

The Bank of Thailand expands the monetary base and thus controls seignorage. The revenue from seignorage flows to the government in two ways. First of all, the central bank may print money to pay for the government bonds that it buys from the government (this flow is included in government borrowing). Secondly, the central bank transfers profits to its owner (this is recorded in the non-tax revenue on the budget).

3.2 Debt financing

The main way to cover fiscal deficits is government borrowing at home and abroad. At figure 3.4 shows the Thai government debt (as percentage of GDP) follows closely the pattern of the deficits of figure 3.1. In the 1970s, total government debt stood at around 20 per cent of GDP. But the sustained deficits in the 1980s led to a rapid rise in the debt/GDP ratio to a peak of over 36 per cent in 1986.

Figure 3.4



The period of budget surpluses from 1987 to 1996 created the resources to pay down the government debt and the debt ratio fell to below 5 per cent of GDP in 1996.[15]

Debt financing is regulated by law. The fiscal deficit is limited to 20 per cent of planned expenditure (World Bank 2000).[16] Recently, the Public Debt Management

[15] In absolute numbers the total outstanding government debt fell from 413 billion baht in 1986 to 174 billion in 1996.

Office has been created for more effective public debt management. Rules for borrowing, e.g. by state enterprises, are clarified and debt management plans are formulated. The Ministry of Finance has now formulated the following objectives: (1) the public debt should not exceed 50 per cent of GDP; and (2) government debt service payments should not exceed 15 per cent of budgeted expenditure.[17]

To judge the acceptability and sustainability of government borrowing the public finance literature suggests some simple criteria.
A first criterion is that prudent governments should only borrow to finance investment. The rationale is that investment lead to an increase in output and income, and thus an increase in future government revenue, out of which the debt can be serviced. Borrowing to finance current consumption spending will require a cut in future consumption spending to service the debt. Such borrowing may be acceptable as a short run adjustment measure but is not sustainable in the medium term. If the government would only borrow to finance investment, government savings (defined as total revenue minus government consumption spending) would be equal to or larger than zero.
Simple debt sustainability models focus on the relationship between the interest rate and the growth rate.

$$\Delta D = D_t - D_{t-1} = G + iD_{t-1} - \mathrm{Re}v$$

or

$$D_t = (G - \mathrm{Re}v) + (1+i)D_{t-1}$$

D is government debt, G is non-interest government expenditure, iD is interest payments, Rev is total revenue and (G-Rev) is the primary budget balance. Dividing by GDP (Y) and using $Y_t=(1+g)Y_{t-1}$ gives:

$$\frac{D_t}{Y_t} = \frac{(G - \mathrm{Re}v)_t}{Y_t} + \frac{(1+i)}{(1+g)}\frac{D_{t-1}}{Y_{t-1}}$$

The debt ratio will increase when the government keeps running primary deficits and/or when the interest rate on government debt exceeds the growth rate of GDP.[18]

These simple approaches give us three measures to judge the borrowing situation: government savings, the primary budget balance and the relationship between the interest rate and growth rate.

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[16] If the Government expenditure to GDP ratio is at 18 per cent, this rule implies that the fiscal deficit has to be less than 3.6 per cent of GDP. Figure 3.1 showed that this limit was occasionally exceeded but never systematically.
[17] Bank of Thailand, *Annual Economic Report 2004,* p. 50.
[18] Whether the Debt/GDP ratio rises or falls depends on the relative size of the primary deficit, the growth rate and the interest rate. If the primary deficit is zero, any growth rate in excess of the interest rate will imply a falling debt ratio. If there is a small primary deficit, the growth rate has to exceed the interest rate by more to have sustainable debt. If the primary deficit is large, say 3 per cent of GDP, then, for reasonable levels of the interest rate, the growth rate would have to be unrealistically large to maintain debt sustainability.

In most years over the period 1970-2004 government savings were positive. In 1982, and in 1984-86 government savings were negative but, as percentage of GDP, not very high at an average over these four years of -0.68 per cent of GDP.
Thailand experienced primary deficits in the years 1970-73, 1975-85 and 1997-2002, i.e. in the years in which there was also an overall budget deficit.
And comparing the effective interest rate on government debt to the growth rate of nominal GDP shows that in 1971, 1976, 1984-86 and 1997-99 and 2001 the interest rates were higher than the growth rates. Judging by these criteria danger signals were flashing particularly in the early 1980s and after the Asian crisis.

However, these indicators are only partial and incomplete. Fiscal balances have to be judged in the wider context of the state of the entire economy. One role of fiscal policy is stabilisation or demand management. If the economy is in recession, fiscal deficits may be required to maintain economic activity and to stimulate the recovery.
The early 1980s were certainly a difficult period for Thailand. In 1979 the oil prices had increased again sharply. As a result, by 1981 oil imports cost three times the 1978 level. [19] The government attempted to reduce the impact of oil on domestic prices through subsidies on retail prices and through cuts in taxes on oil products. Oil and energy prices were only gradually allowed to increase. This was one factor behind the fiscal deficits. In 1979 global interest rates started to rise and local interest rates followed increasing the cost of debt service. The oil shock and the rise of global interest rates resulted in a global recession: over 1981-83 world trade was falling. Thailand, as a strongly export-dependent economy, suffered. In 1982 export earnings stagnated and in 1983 they actually declined.
It could thus be argued that there was a need for fiscal stimulation. To analyse the role of fiscal policy in this period it is useful to refer to the macroeconomic balance equation:

$$S - I = CAB$$

The gap between savings and investment is equal to the current account balance. The overall saving investment balance can be split up into sectoral balances: the private sector and the public sector, with the public sector further divided into government and state enterprises.

$$(S_g - I_g) + (S_s - I_s) + (S_p - I_p) = CAB$$

The current account balance is the sum of the saving investment balances of the government, the state enterprises and the private sector. The equation can be used to analyse fiscal policy. Suppose that private sector confidence falls and thus private investment and consumption declines. The result will be a decline in aggregate

[19] or the cost of oil imports had increased from 4.6 per cent of GDP in 1978 to 8.6 per cent in 1986

Figure 3.5 Accumulation Balances

demand and a savings surplus of the private sector. To compensate the fall in demand, an expansionary fiscal policy is appropriate. The increase in government spending (or the fall in revenue) is likely to lead to a budget deficit but this can be easily financed as the private sector has idle savings. Figure 3.5 gives the three sectoral balances. The figure shows that in the early 1980s private investment were at a reasonable level and that, up to 1987, private sector savings and investment were always close together. This implies that there were few domestic resources available to finance government deficits.

The figures also show that the government savings gap in the period 1975-86 were accompanied by a substantial savings gap of the state enterprise sector over the same period. This led to a rather high aggregate public sector gap. Over the period 1976-86 the public sector saving investment balance was -4.7 per cent of GDP with peaks over 6 per cent in 1981/2. As the private sector was in balance, the savings gap of the public sector was fully reflected in the current account deficit and in foreign borrowing and external debt.

Figure 3.6 External and internal balance

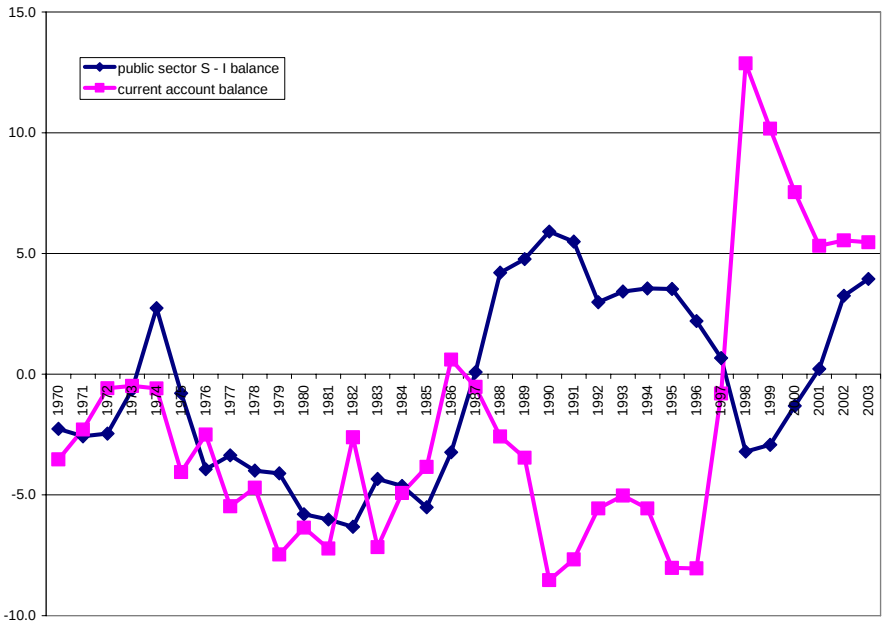


Figure 3.6 shows the close relationship between the public sector saving investment balance and the current account. Over the period 1970-1987 the two gaps were almost identical. The large public sector deficits of the period 1976-86 were associated with large external gaps. To some extent this reflects the attempt of the public sector to provide compensation for the external shocks that are hitting the economy. But there is also something else behind these patterns.

In these years there was an important shift on international financial markets. After the first oil shock of 1973/4 the recycling of petro dollars resulted in very high liquidity on international financial markets. International banks started lending to developing countries on a significant scale, preferably to governments and public sector entities that could obtain government guarantee for the debt service. For the

public sector a new source of financing opened up and it looked quite attractive: in the 1970s global interest rates were low. And it was used: the total external debt of Thailand increased from around 1 billion USD in 1973/4 to 10 billion in 1983/4. As a percentage to GDP, external debt increased from 8.5 per cent in 1974 to a peak of 39.2 per cent in 1985 (or as percentage of exports of goods and services from 40 per cent in 1974 to 162 per cent in 1985).
In the early 1980s problems emerged. As the global interest rates rose to high levels, and domestic rates followed, the cost of servicing debt increased fast. Interest payments by the government increased from 7 per cent of total government spending in 1978 to more than 15 per cent in 1985. While external debt service was rising, export earnings were stagnating in the early 1980s so that debt servicing capacity came under stress.
The debt crisis erupted in 1982 in Mexico which was quickly followed a by number of other countries that were no longer able to service their debt. The debt crises served as a warning to countries like Thailand and action was taken. The adjustment required action on the trade side (the devaluation in 1984) and on the fiscal policy side. Figure 3.5 shows that, after 1982, there was a gradual decline in government investment. Government savings only improved after 1986 but savings by state enterprises increased after 1981 as a result of increases in the tariffs and rates charged by some big enterprises.

In the context of our fiscal space perspective, this period provides some important lessons. While government borrowing to finance investment is perfectly acceptable, its sustainability depends on the efficiency of the investment made. If the investment contribute to the growth of output and income, the debt can be serviced without problem but if the investment are inefficient and not leading to growth, the debt burden will increase. In the case of Thailand, growth has generally been rapid, thus making it possible for the government to borrow to finance its investment.
A second lesson is that the sustainability of government borrowing depends on the situation in the rest of the economy. The state enterprise sector is of obvious importance: its profits provide revenue to the government and its investment may require government subsidies and transfers. But it is also important to note that its external borrowing carries and, explicit or implicit, government guarantee which could affect the budget in times of crisis. In general the macroeconomic balance equation gives us a good handle to assess the situation: it links the government balance to those of the state enterprise and private sector and to the external balance. The configuration of these balances implied that in the early 1980s government and public sector deficits were leading to large current account deficits and a rapid growth of external debt.
The third lesson is that assessing sustainability is difficult in the face of uncertainty. The external borrowing that looked perfectly attractive in the 1970s – when global interest rates were low and exports rising fast – became highly problematic once, after 1979, global interest rates increased sharply and global trade and Thailand's export earnings stagnated. In some countries, like Mexico, this led to a full-blown debt crisis. In Thailand such a crisis was avoided because the external debt was more moderate but there were significant problems that required fiscal adjustment.
However, it should be recognised that fiscal adjustment can be an illusion (Easterly 1999). Annex table A2-1 and figure 3.5 show that the period of fiscal adjustment in the 1980s was characterised by stagnating real capital expenditure and a declining

government spending to GDP ratio. Government investment in infrastructure suffered from adjustment. The investment by state enterprises, many of which provide infrastructure and public utilities, had risen to high levels, financed by debt, but then fell sharply between 1985 and 1990. When the private sector boom started in the late 1980s it quickly ran into infrastructure bottlenecks requiring a sharp increase in government investment (see figure 3.5). It could thus well be argued that the concern with short term stability during this period led to a public sector adjustment that endangered the capital accumulation process in the longer run.

The second period when fiscal danger signals were flashing is after the Asian crisis. The crisis itself was not caused by fiscal factors. As figure 3.1 has shown, there were fiscal surpluses up to and including 1996 and figure 3.4 has shown that the government debt had fallen to a very low level, below 4 per cent of GDP.

In July 1997, the combination of the overvaluation of the exchange rate and stagnating exports, the large current account deficit and rapidly growing external debt, the weakness of the financial system and the volatility of international financial markets, led to the collapse of the currency and the ensuing crisis (see Jansen 2000). Once the Baht was floated, the large outflow of capital led to a precipitous depreciation with disastrous effects on externally indebted corporations and financial institutions. The result was a rapid decline in demand and output.

The IMF came to the rescue and in the first Letter of Intent (LOI) of August 1997 a very tight fiscal and monetary policy was imposed, aiming at a fiscal surplus of one per cent of GDP through increased revenue (e.g. the VAT rate went from 7 to 10 per cent) and restrained expenditure. The second LOI (November 1997) observed that economic conditions had turned more negative than expected. Aggregate demand was declining faster and the exchange rate was depreciating more than expected. Still, the targeted fiscal surplus at one per cent of GDP was maintained and additional expenditure cuts and tax rises were introduced. This, it was said, was necessary to offset the cost of financial sector restructuring and to provide a clear signal to the market of the government's intent to implement the economic programme.

The fiscal surplus that was foreseen in the first two LOIs never materialised. The sharp fall in output led to a decline in revenue. Annex table A2-1 shows that real government revenue declined sharply in 1998 and even though the government cut deeply in its capital expenditure, fiscal deficits re-emerged.[20]

In early 1999 funds that became available from the Japanese Miyazawa Plan enabled some fiscal expansion. Thailand also reduced, temporarily, the VAT rate from 10 to 7 per cent. Around that time, Thailand stopped drawing on the IMF facility (after about 14 of the available 17 billion dollar had been used).

The fiscal balance was in deficit in 1999, 2000 and 2001 but still these years do not show the expansionary impulse that would have been appropriate. Annex table

[20] The third LOI (February 1998) projected that, due to the weak economy and the sharp depreciation, the fiscal balance would turn out at a deficit of two per cent of GDP rather than the target of a surplus of one per cent. This time, the IMF accepted that the shortfall of the fiscal balance target needed not to be fully offset, but still insisted on measures that would contain the deficit at one and a half per cent rather than the projected two per cent of GDP. Only the fourth LOI (May 1998) moved to a more expansionary fiscal policy. By that time a substantial current account surplus had emerged and this created the room for an adjustment of the fiscal target. In particular, expenditure on social safety nets increased.

A2-1 shows that real primary expenditure actually contracted in 1999 and 2000 as government investment was kept at very low levels.

In 2002, the fiscal expansion was stronger and is credited with reviving the economy.[21] The Thaksin government that came to power in 2001 adopted a different type of fiscal policy. First of all, it formulated a *dual track* approach to macroeconomic management under which fiscal stimulus is used when other elements of demand, such as exports or private investment, are weak but when exports recover the fiscal stimulus should be held back. The government introduced an explicit *contingency fund* in the budget to be spent when the economic conditions require it (e.g. to cope with the impact of the SARS crisis). Fiscal stimulus was provided through a number of grassroots programmes: these include the programme in which each of the 77,000 villages received Baht 1 million for village projects, a public works programme, subsidised health care, a moratorium of farmers' debt, etc.[22] These initiatives aim to put money straight in the hands of the people rather than spending it through government agencies. Some of the new initiatives of the Thaksin government are financed outside the budget. For instance, the directed lending programmes aimed at micro credit for the poor, at the housing sector or at SMEs are channelled through state-owned financial institutions, such as the Government Savings Bank, the Government Housing Bank and the Krung Thai Bank. The burden of the moratorium on farmers' debt is mainly carried by the Agricultural Bank (BAAC). Many are worried about the future impact of these off-budget items. Still, Annex table A2-1 shows the rapid increase in real primary expenditure in 2001 and 2002. However, the recovery of the economy also led to an increase in government revenue and the fiscal deficit was falling in 2002.

With the fiscal deficits, government borrowing increased as well and the government debt increased. The steep increase in government debt, shown in figure 3.4, is not so much due to the fiscal deficits; these were initially (in 1998 and 1999) mainly financed by running down Treasury cash balances that had accumulated during the years of surpluses. The debt is mainly due to the bonds issued to finance the restructuring of financial institutions. The cost of this turned out to be quite substantial.

In this context there was a debate, in 2002, on the sustainability of the fiscal deficits and of the public debt. Total public sector debt had peaked at over 57 per cent in 2000 and 2001 and, by the end of 2002, stood at 54 per cent of GDP.

The concern was that public debt may rise to 60 per cent of GDP, a limit above which, according to many, it would be dangerous to go and many studies have asked the question whether the level of public sector debt was sustainable (see e.g. IMF 2002, Sawitree *et al.* 2002, FPRI 2003). In some contributions to this debate it seems as if the only role of fiscal policy is to bring budget back into balance and to reduce the public debt. But that position is extreme and premature for a number of reasons.

Firstly, to limit government debt at 60 per cent of GDP is fully arbitrary; the number may have been borrowed from the EU that used it in the stability pact that was formulated around the introduction to the common currency, but even in

[21] See e.g. *Far Eastern Economic Review*, 11 July 2002.

[22] In 2001 57 billion Baht was spent on the programmes (which would be equivalent to about 1 per cent of GDP) and for 2002 an expenditure of 92 billion was foreseen (*The Nation*, 3 July 2002).

Euroland there are countries with still larger ratios. Some have argued that, when 60 per cent is the ceiling for rich countries, it should be lower for emerging markets. In countries like Thailand, government revenue ratios are lower and revenue may be more volatile, the domestic financial markets are not as deep, corporate governance poorer and many financial institutions weaker. Access to international financial markets is not always ensured and countries cannot borrow abroad in their own currency; as a result they always face currency mismatches. All these factors make that the debt carrying capacity is lower.

IMF (2003) observes that 55 per cent of the debt defaults in emerging markets occurred in countries with public debt to GDP ratios below 60 per cent. In 35 per cent of the defaults the debt ratio was even below 40 per cent. The median public debt to GDP ratio was about 50 per cent in the year before default. But the report notes that there are also countries with high debt ratios that never defaulted. It is thus difficult to pitch a ceiling. IMF (2003) uses several methods to assess the sustainability of public debt. It runs a fiscal policy reaction function in which changes in the primary deficit are regressed against a number of variables including the public debt ratio in order to establish whether policy makers respond to the level of the debt ratio. The result shows that this is indeed the case: when the public debt ratio gets higher, the primary balance improves. However, this positive relationship breaks down around a public debt ratio of 50 per cent. Apparently, when public debt becomes too high, authorities loose control over fiscal variables. Of course, the pattern observed is an average and there is a lot of variation around this average: individual countries have their own fiscal policy rules. Another method applied is to calculate the present value of future primary surpluses. It is assumed that past primary surpluses are the best indicator of future ones. On the basis of the present value a benchmark level of the public debt can be assessed and compared to the actual level to see whether the country has been overborrowing. The benchmark for public debt ratio of emerging markets that emerges from this exercise is as low as 25 per cent but this low level is mainly due to the poor fiscal balances in Latin America. For the Asian emerging markets the benchmark is close to 75 per cent (see IMF 2003).

The Euro norm of 60 per cent relates to government debt. In the case of Thailand the focus was on public debt, defined very broadly. It appears that the various studies are not fully consistent; they seem to be using slightly different definitions. The public debt includes

- Domestic and external debt of the government. It should, however, be noted that only the debt of the central government is included. There is no central record of local government debt but it is known that the level of this debt is presently very low. This could change in the future with fiscal decentralisation.
- Domestic and external debt of state enterprises (bonds issued). It is not clear whether also loans from domestic commercial banks are included. Most studies only include the debt of non-financial state enterprises. It should be noted that the majority of state enterprise debt is issued by perfectly healthy and profitable enterprises and can be serviced from their cash flow and is backed by assets of these enterprises (FPRI 2003). The public debt problem is overstated by including this part of the debt. One study also included the debt of the central bank, incurred with the IMF package of 1997. But this raises the question about what to do with the international reserves. Should

we consider the external debt on a net basis (foreign liabilities minus foreign assets, such as the central bank's reserves) or on a gross basis?

- debt incurred to salvage financial institutions. This debt is in the form of bonds issued by the Financial Institutions Development Fund (FIDF) but the government has the obligation to finance the servicing of these bonds.

It is clear that public debt is a flexible concept. For instance, if we assume that half of the state enterprise debt is held by commercially viable companies that will never bother the government and if we include the net foreign position of the central bank in the calculation, the 2001 public debt to GDP ratio would be only 27 per cent and not the 57 per cent that was subject to the debate.

On the other hand, public debt may be understated as there may be contingent liabilities that in the future could increase government debt. The concept of contingent liabilities is clear from the FIDF debt. These bonds were issued to raise funds necessary to salvage the banks after the Asian crisis had made them insolvent. The majority of these banks are privately owned; still the government felt it had to intervene to keep financial intermediation going and not making the crisis even worse. More contingent liabilities may arise from further losses of financial institutions for which the government may have to assume responsibility but it is also possible that some of the losses may be recouped when bad loans turn good again with the recovery of the economy or when the assets of closed financial institutions can be sold above the purchase price paid by the asset management companies. The financing of some of the new initiatives of the Thaksin government may also lead to future contingent liabilities. But there can be too much attention for the contingent liabilities and no eye for contingent assets. The public debt can be reduced when state enterprise privatisation is undertaken as the current government is doing.

A second point to note is that the public debt is composed of domestic and of foreign debt. Presumably, the external debt is more worrying as a too high level may reduce access to foreign funds or would increase the risk premium. About 70 per cent of public debt is domestic, only 30 per cent is external debt. Total (public and private) external debt, by the end of 2002, was 59 billion USD or 46 per cent of GDP, down from a peak of 109 billion USD in 1997. These numbers are relatively low, particularly when taking into account that net foreign assets of the central bank were about 33 billion at that time. Moreover, almost all public debt is long-term, only 17 per cent is short term.

Thirdly, the domestic public debt would only constitute a problem if the conditions on financial markets are tight. This was not the case: figure 3.5 shows that private investment was low in these years and are far below private savings. Financial institutions are thus awash with funds and there is a ready market for government bonds. Despite the high level of government debt, the yield on government bonds is very low. The liquidity on financial markets makes monetary policy rather ineffective: despite the low loan rate the demand for credit is small. This leaves fiscal policy as the only instrument to stimulate the economy. But the emphasis on debt sustainability, based on an excessively broad measure of public debt and the pessimistic assessment of possible contingent liabilities made fiscal expansion suspect. In 2003 there was only a small increase in government spending and the government expenditure to GDP ratio declined (see figure 2.1). As revenues were increasing, 2003 already recorded a small fiscal surplus and the public debt ratio has been declining rapidly.

As noted above, debt sustainability depends on how the borrowed funds are used. If debt is financing public investment the resulting growth will generate the revenue to service the debt. This requires an efficient allocation of the public investment and avoiding crowding out. Debt to finance infrastructure may have that effect. In this respect it is worrying that so much of the current debt is accumulated to bail out financial institutions, which is not a very productive investment. On the other hand, if the government had allowed the financial system to collapse, the economic consequences would have been disastrous.

It should be noted that, at the time of the debt sustainability debate, various studies engaged in model simulations to assess sustainability (World Bank 2000, IMF 2002, Sawitree et al 2002, FPRI 2003). All came to the conclusion that, under reasonable assumptions with respect to economic conditions, the public debt was sustainable and that fiscal deficits would come down and the debt ratio would decline.

One significant impact of the rising government debt is the rising level of debt service payments. In the 1980s, when the debt was high and the interest rates were high, interest payments on government debt increased to over 15 per cent of total government spending. In the early 2000s, government debt is again high but interest rates are rather low. Still, interest payments on government debt took more than 7 per cent of government spending in 2000-02, up from one per cent in 1996. In a budget that is under pressure such a claim easily crowds out other government activities.

Again we can draw some lessons from this period. The first lesson is that, if a country wants to keep autonomy and control over its fiscal policy it is best to stay out of the hands of the IMF because that institution has a strong predilection for tight fiscal policy. Thailand has been fortunate in this respect. During the early 1980s there were two stand-by agreements (SBA), in 1981 and 1985. The fiscal reforms demanded in the 1981 SBA were largely unsuccessful and the 1985 SBA was interrupted halfway by the Thai government, amongst others for reason of disagreement on fiscal policy. In these years the Thai government was not really dependent on the IMF; they had access to other sources of finance (see Jansen 1997). In 1997 Thailand was more dependent on the IMF and, as we have seen, there was again disagreement on fiscal policy.

A second lesson is that the sustainability of fiscal deficits or of public debt are highly fuzzy concepts. There is no agreement on how public debt should be measured, what to include and what not. When we looked at the debt situation in the early 1980s it was noted that one should not only consider government debt but also the debt of state enterprises. In recent years the problems of private sector financial institutions directly affects fiscal balances and public debt. More of such ‘contingent liabilities’ can be imagined. But the inclusion of contingent liabilities also opens the door to arbitrary and farfetched arguments. Fiscal policy makers find it difficult enough to deal with today’s problems and it is not very realistic to expect them to take into consideration any possible future problem that may arise.

There is also no agreement on the standard for sustainability. The 60 per cent norm is totally arbitrary and attempts to come to analytically based norms show that country-specific conditions are crucial and that acceptable levels will differ from country to country. Moreover, any number that is proposed is subject to a wide uncertainty range. Sustainability is a forward looking concept and depends on future growth of output and exports, on terms of trade, on future inflation and interest rates, etc. All

these variables may show unexpected variations. In the end, fiscal sustainability is based on the market perception of what is acceptable and market perceptions are subject to sudden changes of mood, contagion or shocks.
The result of all this is that sustainability is an almost unworkable concept. Still, it is equally obvious that this does not mean that anything goes. Fiscal space through borrowing is constrained; we only do not and cannot know precisely how. One way out is to set an arbitrary norm, like the Ministry of Finance has now done stating that public debt should not exceed 50 per cent of GDP. Such a norm helps the Minister of Finance to contain spending pressures and to prioritise expenditure but it may not be an appropriate guide under all circumstances.

3.3 Macroeconomic impact of deficit financing

The fiscal space that can be created by deficit financing is, in the end, determined by its macroeconomic effects. Deficit financing has direct and indirect effects on economic growth. Growth of output is determined by the rate of investment and the efficiency of investment and fiscal policy and deficit financing can impact on both.
Deficit financing is generally used to finance public investment in infrastructure and it is recognised that adequate infrastructure is instrumental in stimulating private investment and growth. But excessive deficit financing may harm growth.
First of all, it has been widely established that macroeconomic stability is a pre-requisite for growth and, to the extent that fiscal policy undermines stability, it negatively affects growth. These stability links can be assessed through the analysis of the relationships between fiscal balances and inflation, current account balance, and debt overhang. Excessive fiscal expansion will threaten stability. The excess demand will translate into inflation and current account deficits and the financing of the current account deficits will result in an accumulation of external debt. The debt overhang will eventually affect creditworthiness and reduce the access to credit or increase its cost. Macroeconomic instability may negatively affect private sector confidence and private spending and it may change the system of incentives and distort the allocation of investment.
Fiscal policy would directly affect growth when fiscal expansion would lead to a decline in private investment. This is the issue of crowding out. Deficit financing on domestic financial markets may lead to an increase in the interest rate or to rationing of credit for the private sector. As a result, the level of private investment that can be undertaken declines. According to standard open economy macro models, under flexible exchange rate and capital mobility, fiscal expansion will lead to an appreciation of the exchange rate. Under fixed exchange rates, the inflation caused by fiscal expansion will lead to an appreciation of the real exchange rate. In both cases, the profitability of the traded goods sector declines and investment falls.
To assess the impact of fiscal policy we need thus to study the links between the fiscal variables and inflation, current account balance, debt burden, interest rates, private credit and the real exchange rate. This is what we will do in the following pages.

Inflation

Figure 3.3 showed that inflation in Thailand, on average, has been modest and that the spurts of inflation that occurred were due to external shocks. It is not possible to establish a link between the budget balance and inflation. Theoretically, one would

expect a negative relationship: a larger deficit associated with higher inflation. However, the correlation coefficient between the budget balance (as percentage of GDP) and inflation is positive and very low at 0.08.[23]
In another study one of us showed that, in fact the relationship is the other way around. It is not fiscal policy that leads to inflation; rather fiscal policy responds to changes in inflation (see Jansen 2004). In that study we construct an indicator for the fiscal impulse (or the fiscal policy stance) and see it quickly respond to changes in inflation. One of the reasons for the low inflation in Thailand is this cautious fiscal policy.

Current account balance and debt overhang
Figure 3.6 above showed the link between the public sector saving investment balance and the current account. In the period 1975-86 there was a substantial public sector savings gap which was fully reflected in the current account deficit since private sector saving and investment were in balance in this period (see figure 3.5). In these years there were concerns about the current account deficits and the debt that was accumulating. For instance, it its report over 1985 the central bank stated:

> "The government has faced chronic financial problems for many years…The problem is one of overspending, giving the government persistently high deficits and state enterprises continuing operating losses. The result of this overspending is cumulatively high government debt, both domestic and international, which, if not resolved, will have profound repercussions on both the economic and the financial stability of the country" (Bank of Thailand, *Annual Economic Report 1985*, 13).

The recovery of the world economy and the fiscal adjustment measures together helped to solve this problem. It should be noted that the debt problem in Thailand did not get as serious as in some other countries: Thailand always remained able to fully service its debt obligations and maintained its access to international financial markets.
In the subsequent period, 1987-96, these balances turned upside down. As figure 3.5 showed in these years the private sector had a very large savings gap. This was caused by, and financed by, very substantial inflows of private international capital. The saving investment balance of state enterprises was, on average, in balance. The government now had a savings surplus (and a budget surplus) with government savings far exceeding government investment. The fiscal policy at this time tried to dampen the sharply expansionary effects of the private sector boom. Here again we see an illustration of the generally cautious nature of fiscal policy in Thailand. While the government had ample revenue available and while there was no shortage of desirable public sector expenditure (e.g. in infrastructure), the government controlled spending to cool down the overheating economy.

[23] The correlation coefficient between current inflation and the budget balance lagged one year is indeed negative but only -0.07.

Crowding in or out

Crowding in or out is usually analysed as the link between government investment and private investment. When an increase in government investment is followed by a fall in private investment, this is called crowding out. Note that there may also be crowding in: government investment inducing private investment. Government investment can not only affect the level of private investment, it may also affect its efficiency. Crowding in or out is a complex process as there are many channels along which public and private investment may interact:

- Government investment creates infrastructure which reduce the production cost of the private sector. The increase in private profitability or competitiveness will induce a higher level of private investment (crowding in) and may increase the efficiency of investment.
- An increase in government investment will increase aggregate demand which may induce more private investment (crowding in). Such interaction would particularly be expected when the economy is in a recession and the government would use fiscal policy to improve economic conditions. In countries like Thailand fiscal policy is mainly implemented through variations in government investment spending. In the other phase of the business cycle, the interaction between public and private investment may be negative. During the boom, when private investment is at (too) high levels, the government may reduce its spending to cool down the economy.
- The high tax burden to finance government spending reduces private profits. Or the government borrowing on domestic financial markets pushes up interest rates or reduces the availability of credit for the private sector. As a result, private investment falls (crowding out)
- Fiscal expansion may lead to an appreciation of the real exchange rate which reduces the profitability of the traded goods sector. This may result in a fall in investment in this sector.

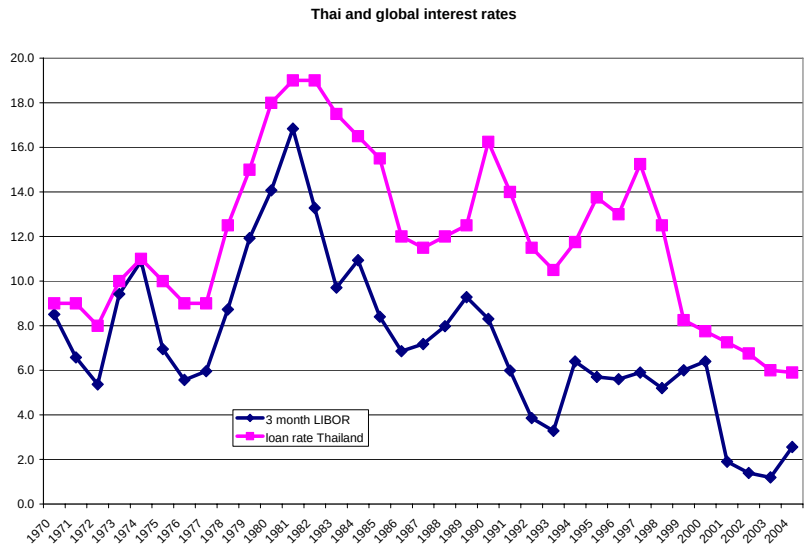
The first two points suggest crowding in: public investment generates infrastructure and demand that makes private investment possible and profitable. If there is crowding in a higher level of public investment invites a higher level of private investment: the correlation would be positive. On the other hand, crowding out would mean that more public investment is associated with lower private investment, a negative relationship.

One of the main ways in which public investment could crowd out private investment is through the claims the government makes on the financial markets to finance its expenditure. If there is a strong government demand for funds credit markets could become tight leading to either higher interest rates or a rationing of credit for the private sector.
Thailand has fairly well developed financial markets, dominated by commercial banks. The M3/GDP ratio has steadily increased over time from 32 per cent in 1970, to 47 per cent in 1980, 86 per cent in 1990 and 112 per cent in 2004. Financial institutions used to hold most of the government debt. For instance, 85 per cent of total domestic borrowing was financed by financial institutions in fiscal year 1985. Particularly since the Asian crisis the central bank and the Ministry of Finance have

been consciously planning the development of the bond market. An active bond market will contribute to financial stability as it will provide firms with opportunities for longer-term financing. The Ministry is issuing bonds with varying maturity so as to establish a benchmark yield curve against which corporate paper can be priced.
In recent years the share of government debt held by the general public and non-financial entities has increased but still the majority is held by financial institutions.
These bond market development plans are an interesting case where government debt management is placed in the service of financial market development which could improve private financing and so, indirectly, contribute to investment and growth.
At the regional level, there is the Asian Bond Market Initiative (ABMI). Here East Asian governments work together to develop local and regional bond markets. The purpose is to contribute to financial stability by creating long term financing opportunities and by creating the possibility of issuing international bonds in the local currency, thus removing the currency mismatch and exchange rate risk. If the ABMI is successful it would enhance financing opportunities for public and private sector in the region.

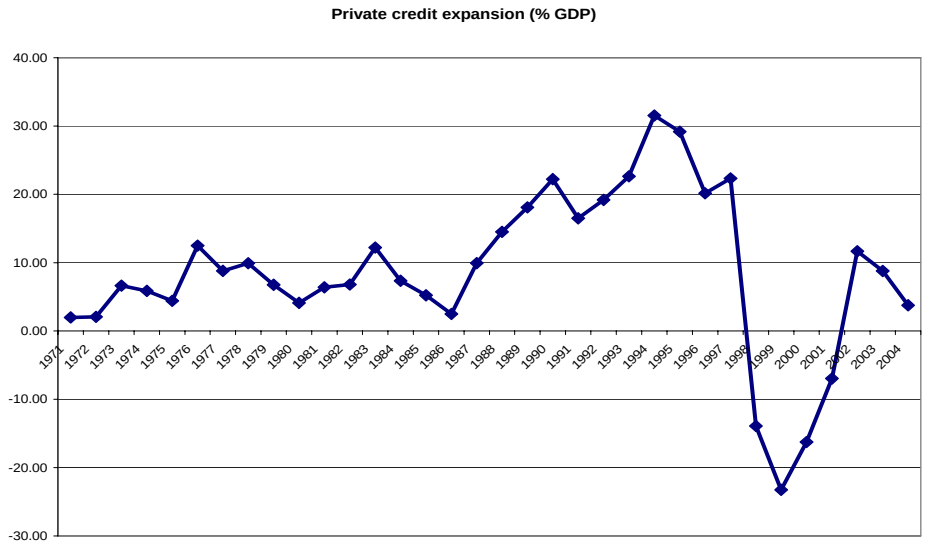
There is some suggestion of crowding out through financial markets. Figure 3.7 traces the local loan rate against the international interest rate (LIBOR).
In general, the local market rate follows the trend in the global interest rate quite closely. The loan rate tends to be above the global prime rate. In the early 1980s when public sector borrowing was heavy the gap between the two rates became a bit wider. However, in the period 1990-98, when the government was not borrowing at all, the gap between the two rates was even wider. It may well be that the gap between the two interest rates in figure 3.8 do not so much reflect fiscal pressures but more the tight monetary policy that was implemented in the early 1980s (to fight the current account deficit and to defend the exchange rate) and in the 1990s (to cool down the economy during the private sector boom).

Figure 3.7



Another indicator of financial crowding out is the availability of domestic credit for the private sector. Figure 3.8 shows the change in private domestic credit as percentage of GDP.

Figure 3.8



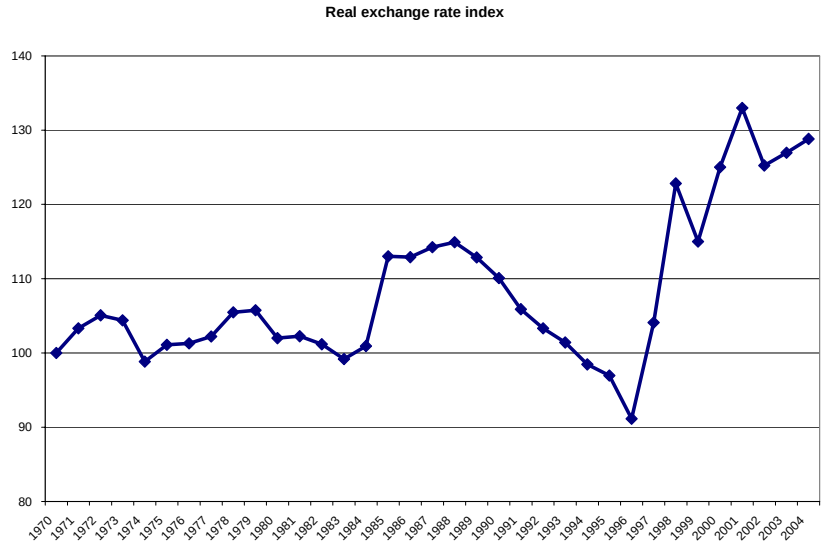
From 1970 to the mid-1980s the ratio hovers between 2 and 12 per cent with an average of 6.7 per cent per year. Against that average private credit growth in the early 1980s is not particularly poor. There is even a peak in 1983 after which credit growth falls to a low level in 1986. After that year there is a boom in private credit expansion, fuelled by capital inflows but also facilitated by budget surpluses which implied that the government did not need to borrow.
It is difficult to judge whether the low level of private credit growth in 1985/86 is due to crowding out of private sector by public sector borrowing or by a low demand for credit in the private sector. The economy was doing rather poorly in these years and it is thus likely that credit demand was low.

Figure 2.1 had shown how the government spending ratio fell from its high level, around 18 per cent, in the mid 1980s to a much lower level, between 14 and 16 per cent, in the late 1980s and the first half of the 1990s. This period recorded substantial fiscal surpluses and rapidly declining government debt. In figure 3.5 we have seen how government investment, which had fallen to a very low level by 1988, recovered to a more normal level but government savings increased sharply as current spending stayed behind the rapid growth of revenue. The fiscal policy of this period aimed very clearly at compensating for the private sector boom. Private investment was very high in this period (see figure 3.5), financed by large capital inflows and a very rapid expansion of domestic credit (see figure 3.8). The government was worried about the inflationary pressures and the large current account deficits that the private sector boom engendered and used fiscal policy to reduce demand pressures. The fiscal policy in this period could be interpreted as a case of *reverse crowding out*: a private sector investment boom crowding out government spending. If such a situation persists over time problems may arise. The growing private sector needs government

services and infrastructure and, when cautious fiscal policy prevents the adequate provision of such services, private growth may falter.

A final channel for crowding out would run through the exchange rate. Fiscal expansion could lead to an appreciation of the real exchange rate which, in turn, will reduce the competitiveness of the traded goods sector and reduce production of and investment in this sector. Figure 3.9 traces the trade weighted real exchange rate index. The index is so constructed that a rise in the line is a depreciation of the own currency and a fall of the line an appreciation.
In the early 1980s there is a mild appreciation of the real exchange rate. It could be argued that in that period the public sector expansion pushed up domestic prices which, together with the fixed nominal exchange rate, implied an appreciation of the real exchange rate. It is good to remember that this was a period of extreme shocks. Domestic prices soared after the second oil shock and authorities were slow to adjust the nominal exchange rate to the new situation. There was a minor devaluation in 1981 but strong resistance against further adjustment. Only by November 1984 was it obvious to all that further action could no longer be avoided: the baht was devalued by almost 15 per cent.

Figure 3.9



The fiscal deficits after the Asian crisis did not affect the exchange rate. At that time the exchange rate was driven by the outflow of capital and there was a strong depreciation of the real exchange rate between 1996 and 2001, after which there is a stabilisation. As noted above, the fiscal deficits of these years did not cause any domestic demand pressures because they were mainly due to sharply falling revenue.

In conclusion, there is little evidence of crowding out. None of the channels for crowding out (interest rate, credit supply, real exchange rate) show a strong relationship with the fiscal balance.
A number of econometric studies have tried to establish the link between public and private investment in Thailand. World Bank (2006, 31) contains a single equation regression analysis of the determinants of private investment in Thailand and concludes that public investment has a positive impact. More complete

macroeconometric models have estimated the relationship between public and private investment and found evidence for crowding in; private investment is stimulated by public investment (see e.g. Jansen 1995 and Somchai & Chalongphob 1993).[24]
We can, therefore, conclude that in general there has been a positive relationship between public investment and private accumulation. Government investment has, through this mechanism, significantly contributed to the high level of investment and the rapid growth of the economy.

3.4 Conclusion

This part of the study has analysed deficit financing in Thailand. Historically, Thai fiscal policy has been cautious in nature and this is reflected in a limited use of deficit financing.
Seignorage has made a significant contribution to government revenue but the use of the inflation tax has been minimal. The majority of government borrowing is done on domestic financial markets. The rapid financialisation of savings implied that it has been easy to place government debt. There was concern in the early 1980s about the rapidly increasing domestic and external debt of government and state enterprises. It is possible that, at that time, private investment was crowded out to some extent as the combination of fiscal borrowing and tight monetary policy pushed up interest rates. But the increasing interest rates were also caused by high global rates and it is more likely that the slow expansion of private credit in these years is due to low demand as the economy was doing poorly. Private investment did not fall very much in this period (see figure 3.5).
This period showed the dangers of deficit financing in an open economy like Thailand. Global interest rates are volatile and may change suddenly, as e.g. happened after 1979. Local interest rates in open markets with relatively developed financial systems tend to follow global trends. This can thus lead to sudden changes in the cost of deficit financing. In the 1980s this led to a rapid increase in government spending on interest payments, crowding out other government activities. On the external debt, the borrower faces an exchange rate risk: the cost of external debt service increased after the devaluation of 1984. In response to these shocks the gradual fiscal reform improved the finances of the government and state enterprises. But the brunt of fiscal adjustment was on public investment and this had a negative impact on the infrastructure supply.

The cautious nature of fiscal policy was further illustrated in the 1990s when the government was running substantial budget surpluses for a period of 10 years. It could be argued that during this time desirable government expenditure were postponed in order to maintain the stability of the economy.

The crisis of 1997 and its aftermath renewed the discussion about the sustainability of public sector debt. Unfortunately, in this debate the concept of public debt was stretched to such an extent that it became useless for analysis. It is not meaningful to

[24] Jansen (1995) builds a small macroeconometric model in which private investment are explained by an output gap variable, public investment, FDI inflows, the real exchange rate and the external debt burden. Public investment has a significant positive impact. Somchai and Chalongphob (1993) construct a three-gap model and find a positive relationship between public and private investment.

include all elements of public sector debt, including commercial debt of profitable state enterprises. Moreover, the insistence on considering all possible types of contingent liabilities takes the discussion away from the reality of day-to-day policy making.
The correct conclusion is that we do not know what the sustainable level of public sector debt is. This is not only because of definition and measurement problems but also because of uncertainty: what looks sustainable today may be unsustainable tomorrow once some serious and unforeseeable shock occurs. Sustainability is a forward looking concept and the future is always uncertain. What to do? The reaction of the Thai government seems to be that it is better to err on the safe side. In the last few years the government has been running balanced budgets, the public debt is rapidly declining and the central bank has accumulated a huge stock of international reserves.

Was there, in the period under study, unused fiscal space? Could Thailand have borrowed more to finance public investment? The answer is difficult to give.
It could be argued that Thailand could have obtained more resources from the inflation tax; other Asian countries did so without ending up with runaway inflation. It is also possible to argue that Thailand could have borrowed more. The public debt never became excessively high, there were never any problems with servicing the debt and there is no evidence of crowding out.
At the same time, the fiscal caution paid off. Fiscal policy has been very much concerned with maintaining macroeconomic stability and this stability is seen as one of the main factor behind the strong performance of the economy. This rapid growth has, in turn, helped Thailand to achieve the MDGs.

IV Fiscal space and the MDGs.

This study has analysed the fiscal space of Thailand in the context of poverty reduction and the MDGs. Poverty has fallen sharply and most of the MDGs are already achieved, well before the 2015 target date. In this final section we want to assess the relationship between fiscal interventions and this outcome.
Human development first of all depends on rapid and dynamic accumulation and growth. Fiscal interventions can support this process in two ways. By creating institutions, incentives and infrastructure government can induce rapid and efficient private investment. Moreover, fiscal policy underlies the macroeconomic stability that is required for sustained growth. Fiscal interventions can also directly support human development and the achievement of the MDGs through the provision of essential social services and through the re-distribution of income.
In this final part of the paper we will summarise our findings under the familiar headings of growth, stabilisation and distribution.

4.1 Fiscal interventions and growth

Economic growth has been rapid in Thailand over the last 50 years and is the main force behind the phenomenal decline in poverty that occurred. The economic growth literature is not very clear about the role of fiscal variables in economic growth. Various cross-country regression studies have included fiscal variables among the explanatory variables. The results are not robust: different studies, using different methods and country samples and covering different periods, find different results. A number of studies find a negative relationship between the level of government spending (total spending or current spending as percentage of GDP) and growth. Some studies also find a positive relationship between the budget balance and growth. If we accept these findings we can conclude that Thailand's record of a low level of government spending and, on average, good budget balance has promoted growth. But this conclusion may be too quick and not only because the statistical basis for it is not very robust.
There is a contradiction in the growth studies. Many studies have concluded that good infrastructure and human capital promote growth. Government spending is required to produce these. One could thus imagine a growth regression in which growth is positively influenced by infrastructure and human capital but negatively influenced by the government spending that created this infrastructure and human capital. But one cannot have one (infrastructure, human capital) without the other (government spending) and one could thus argue that, even when government spending ends up with a negative coefficient in the regression, its impact on growth is positive. While it is obvious that excessive and inefficient government spending will never be good for growth, reasonable levels of efficient and well-allocated expenditure are likely to promote growth. This suggests that it is not so much the level of government spending, as reflected in expenditure or tax ratios, that explains growth but the composition and quality of government spending.
In Thailand, the government and state enterprises have been active in the provision of infrastructure (such as roads, electricity, water) and the general level of service is

good. Still, there have been periods when the supply of infrastructure ran behind the rapid growth of the private sector. Also the human capital formation has been far from exemplary. Up till 1990 Thailand had one of the lowest secondary school enrolment ratios in the region. It is thus well possible to argue that more public investment should have been undertaken to support growth.

Growth is mainly generated in the private sector of the economy. But fiscal policy can affect the incentives the private sector faces. In the public finance literature there is a concern about the 'distortions' that government action will create. Government regulation, spending programmes and taxation affect decisions of economic agents and thus change economic outcomes. Theoretically, the economic reason for government intervention is to correct for market failures and such interventions would thus be expected to improve economic outcomes. Government intervention is necessary to provide the public goods and merit goods that the market cannot provide and to regulate in case of externalities. The taxes required to finance the government interventions will, of course, distort economic incentives as they inevitably change relative prices. The tax literature is full of analysis on how to minimize such distortions. Inevitably, taxation in Thailand has affected incentives but there is reason to believe that distortions through taxation have become less over time. In 1992 Thailand shifted to the VAT, supposed to be less distorting than the preceding cascading sales tax. The import tariffs, which according to the trade and development literature have a strong anti-export bias, have been declining in Thailand over time and have now reached fairly low levels. But there are many inequities in the administration of the income taxes and these may well have increased over time.

On the other hand is the widespread concern that governments are rather inefficient or captured by special interests and that the interventions would lead to a less efficient allocation of resources and to rent seeking. It is our impression that the reputation of the Thai government under the population is not very strong in this respect. Thailand scores fairly high on the corruption index and Thai newspapers regularly carry stories of alleged corruption in government projects. State enterprises are perceived to be rather inefficient, dependent on government protection and resistant to change.

It is difficult to assess the impact of the microeconomic distortions that are inherent to government intervention on the economic performance of the country. Clearly, the impact cannot have been very negative; otherwise private investment and growth would not have performed so well. Presumably, distortions could lead to low productivity and to low productivity growth. But productivity growth in Thailand has been quite good. In growth accounting studies growth is explained from the accumulation of production factors (capital, labour) and from the total productivity growth (TFP). The TFP has made a significant contribution to Thai growth. In the studies summarised in Jansen (2001) productivity growth accounts for 20 to 50 per cent of total economic growth. In the East Asian comparative perspective the contribution of TFP to growth is relatively large for Thailand. This would support the conclusion that the inefficiency caused by the various ways of government intervention has not been too serious.

We may thus conclude that fiscal interventions have, on balance, supported the dynamic growth process. Governments have been supportive of private business, have

provided infrastructure and human capital at workable levels and have kept the number and level of distortions at a relatively low level.

4.2 Fiscal policy and stabilisation

One of the factors behind the rapid growth is the macroeconomic stability ensured by the conservative fiscal and monetary policies. As we have shown, inflation was always kept low and when the public sector debt approached dangerous levels in the early 1980s and around 2002 corrective action was taken. During the late 1980s and early 1990s fiscal surpluses tried to counterbalance the private sector boom. Short-run fiscal policies were driven by concern for macroeconomic stability. In another study one of us has shown that fiscal policy has been actively used to stabilise the economy (Jansen 2004).

Over time, fiscal policy has consistently been used to stabilise the economy in the face of external and internal shocks. When the country was faced with the collapse of the Bretton Woods system of fixed exchange rates in 1973, the baht was tied to United States dollar. This practice had the main consequence of pitching the country's fortunes to the fortunes of dollar. Business cycle volatilities in the period were, thus, very much linked to how the dollar fared. These volatilities caused pursuits of fiscal policies to seek adjustments which would restore economic stability. The fiscal space was used up more, in this period, for the purpose of economic stabilization rather than for development or for poverty reduction/eradication. This period of high economic volatilities saw the country faced with currency devaluations in 1981 and in 1984 and came to a close when the currency was linked to a basket of currencies (1984) for better stability of the baht and of the economy. Fiscal policy was devoted to correcting macroeconomic instability while the monetary policy was very constrained by financial fragility. The financial crisis of 1984 saw the collapse of a bank and about 16 finance companies, whereby, the authorities turned to the Life-Boat method of rescue for those institutions. A new mechanism, the Financial Institution Development Fund (FIDF) was set up to administer this support tool. The burdens that arose were partially channelled to the fiscal space.

Thailand accepted structural adjustment loans from the World Bank from 1981-86, and the country implemented through its development plan some structural adjustments. The Plaza Agreement currency realignment of 1985 did the rest in carrying the Thai economy into a new era.

In this period, the country was awash with capital inflows, not because of the implementation of particular domestic policies (fiscal policies included), but because of the world currency realignment. The resultant monetary changes in the country brought a period of boom time (1987 to 1995) whereby many people became suddenly wealthy because of rapid growth and asset inflation. Investments (from outside mostly) were very strong. International reserves increased in leaps and bound, and revenue collections did likewise. An important change, then, occurred when in 1990 the country liberalised the capital account. This freedom reinforced Thai external economic activities, with consequent foreign-exchange abundance, hence driving monetary policy into expansionary posture for the years up to 1996. The fiscal space, certainly, benefited from this economic expansion. The eventual rejection of the sales tax in favour for the value added tax was part of the fiscal reforms in this period. Fiscal practices and budgetary procedures were also reformed

to bring the fiscal space up to modernity. Finally, in the financial system, an offshore-banking variant was introduced into the Thai system, called the Bangkok International Banking Facility (BIBF), to further link the financial sector to international financial markets, just as the domestic commerce and economy were opened up and linked to international trade and businesses

From 1990 on, the fiscal space became copious, in relations to resource use. The expanding economy post-1987 generated such plentiful taxes that the treasury surplus balance kept rising to high levels for the period 1990-1997. At the peak of this tide, the level of the surplus balance reached Baht 400 billion. The plentiful revenues of the day were not usefully employed in the economy. The high treasury balance was mainly used to keep and maintain macroeconomic stability, i.e., to counter the expansionary monetary policy (because foreign exchange inflows kept the liquidity level relatively high throughout this period). Neither was the copious Treasury surplus used to carry out re-distribution policy. On reflection, it can be said that opportunities were lost to do meaningful activities, like reforming the total tax system to be progressive, installing needed infrastructure in the economy to reinforce real growth, further carrying out structural adjustments of the economy, etc. The great lesson from this period was the under-utilization of the fiscal space to further society's important goals. Expansionary monetary policy and a mismanaged exchange-rate regime finally brought disaster to the whole economy. Facing the crisis, in 1997-99 as in 1981-84, the fiscal space was mobilized to the economy's rescue. A big difference in 1997 was the much bigger roles taken on by the IMF.

For the period post-1997, the country faced numerous reforms and changes, as the economy struggled to adjust from an overvalued (uncompetitive) position to normal competitiveness. The conditions imposed by the IMF were severe, and led to widespread popular discontent. The fiscal space was confined to helping big banks instead of being allowed to underwrite the future for the rest of the economy. Resources from the fiscal space were devoted more to rescuing private assets than to laying down fresh infrastructure and other needed foundation for new changes which were taking place in the international scene.

4.3 Re-distribution

The public sector can contribute to poverty reduction through re-distribution. We have observed that the level of government spending, as reflected in the Government expenditure to GDP ratio, is relatively low in Thailand. This limits the resources the government can use to directly attack poverty. At the same time, the very rapid growth of GDP translated in a rapid growth of government revenue and this has implied that expenditure per capita could rapidly increase. Moreover, within total government spending, over the years the share of expenditure on social development (education, health, social services, agriculture), which are presumably crucial for poverty alleviation, have increased significantly. While such expenditure constituted only 10 per cent of total government spending in 1970, this share has increased to over 40 per cent by 2003.

Were government taxation and spending pro-poor? World Bank (2000) reviews available studies on tax incidence. Different studies use different methods and come to different conclusions but there is agreement that

- The overall effects of taxation on income distribution, if any, are very small.

- The personal income tax is progressive. But this tax generates only a small part of total government income and hence the effect on the income distribution is negligible. As we have seen the top income decile pays almost all of this tax.
- Indirect taxes are either neutral or regressive.

The conclusion is, therefore, that the overall tax system is neutral: the income distribution after tax is not more equal than the one before.
The World Bank report also concludes that government expenditure on education, health and agriculture do not particularly benefit the poor; middle and high income groups benefit more (World Bank 2000).
Warr and Isra (2004) also go into detail on the government expenditure incidence. They first review an existing study that finds that government spending benefit the rich more than the poor and they then go into an analysis of the provincial allocation of government spending. They find that total per capita government spending increases with the per capita income of the province and the per capita spending has no relationship with the poverty incidence in the province. Per capita expenditure on education and health are not significantly related to provincial income or poverty.
Focusing specifically on anti-poverty programmes of the government Warr and Isra, first of all, observe that spending on such programmes has been relatively low, before 2001 only around 4 per cent of total government spending. Poverty-related expenditure has increased a bit in recent years. But they observe that the allocation of poverty-related spending over the provinces is not in proportion to the poverty incidence in the provinces.

From these studies we can conclude that fiscal policy has not been used to improve the income distribution. Moreover, direct anti-poverty spending has been very low and not well targeted.
The conclusion must thus be that the main contribution fiscal policy has made to poverty reduction is through its support for growth and stability. The rapid growth of income meant also a rapid increase in government revenue and a growing share of these resources was spent on social development. This will have helped the poor even when the distribution of these social expenditure was not particularly pro-poor.

ANNEX

Table A2-1

Government Expenditure and Revenue at constant 1988 prices (billion bahts)

	Primary Expenditure			Interest payments	Total Expenditure	Total Revenue
	Current excl. interest payment	Capital Expenditure	Total Primary			
1970	50.1	25.5	75.6	5.2	80.8	60.4
1971	54.7	27.2	81.9	6.4	88.3	62.8
1972	50.2	23.7	73.9	13.3	87.2	65.5
1973	56.0	20.0	76.0	7.8	83.8	69.0
1974	53.9	13.5	67.4	7.5	74.9	82.8
1975	62.9	20.8	83.7	9.0	92.7	81.2
1976	74.5	30.3	104.7	8.5	113.2	85.5
1977	81.9	31.5	113.4	9.1	122.5	100.0
1978	99.0	32.1	131.1	9.0	140.1	110.3
1979	100.9	30.0	131.0	11.5	142.5	122.5
1980	116.8	36.7	153.5	13.4	166.9	131.8
1981	116.7	35.9	152.5	17.3	169.8	142.3
1982	132.4	37.7	170.1	20.1	190.2	140.5
1983	135.6	34.8	170.4	24.9	195.3	167.6
1984	149.5	32.0	181.4	28.5	209.9	170.8
1985	153.6	37.3	190.9	34.6	225.5	181.1
1986	153.7	34.1	187.8	38.8	226.6	188.5
1987	152.5	33.0	185.4	39.1	224.5	214.0
1988	154.2	28.7	182.9	40.2	223.1	258.2
1989	171.6	35.5	207.0	41.6	248.6	308.3
1990	185.6	49.1	234.6	35.7	270.3	365.5
1991	208.2	65.8	274.0	29.6	303.6	387.7
1992	239.6	93.1	332.7	23.9	356.6	411.9
1993	264.4	122.8	387.2	19.4	406.6	448.7
1994	277.4	136.3	413.6	16.3	429.9	505.1
1995	296.3	146.0	442.2	9.4	451.7	546.2
1996	330.7	215.8	546.6	6.2	552.7	575.8
1997	322.3	271.9	594.2	10.1	604.3	549.8
1998	325.0	163.5	488.5	11.1	499.6	425.4
1999	344.9	140.9	485.8	30.2	516.1	441.7
2000	366.5	118.2	484.8	36.6	521.4	455.4
2001	391.0	114.4	505.4	38.7	544.1	464.5
2002	406.3	121.1	527.4	40.6	568.0	521.3
2003	443.9	98.6	542.5	38.7	581.2	590.8

Table A2-2 Decomposition of the changes in revenue

	$(a_t - a_0)(\frac{W}{Y})_t$	$a_0[(\frac{W}{Y})_t - (\frac{W}{Y})_0]$	$(b_t - b_0)(\frac{\mathrm{Pr}}{Y})_t$	$b_0[(\frac{\mathrm{Pr}}{Y})_t - (\frac{\mathrm{Pr}}{Y})_0$	$(d_t - d_0)(\frac{C}{Y})_t$	$d_0[(\frac{C}{Y})_t - (\frac{C}{Y})_0]$	$(e_t - e_0)(\frac{M}{Y})_t$	$e_0[(\frac{M}{Y})_t - (\frac{M}{Y})_0$	$(h_t - h_0)$
1970- 03	0.56	0.51	1.38	1.52	2.62	-1.06	-11.01	8.62	1.17
1970-79	0.01	0.23	0.58	0.21	1.67	-0.39	-2.78	2.17	-0.38
1979-88	0.38	0.08	-0.42	0.77	2.01	-0.88	-0.45	0.63	-0.16
1988-97	0.47	0.32	1.50	0.12	0.42	-0.29	-3.17	1.35	0.64
1997-03	-0.36	-0.04	-1.80	1.93	-1.27	0.30	-0.68	0.52	0.56

Note: this table is based on the decomposition model presented in the text.

Table A2-3 Local Governments' Revenue Structure (2005)

	Municipalities	TAO	Pattaya	PAO	BMA	Total	%
Revenues Collected by LG	8,987.2	5,570.8	239.3	2,290.0	9,931.7	27,019.0	9.2
-Taxes Collected by LG	4,665.9	2,837.4	150.1	1,837.5	7,833.5	17,325.0	5.9
-Land &Building Tax	3,913.7	1,833.3	126.0	-	7,173.2	13,046.1	4.4
-Non-Tax Revenues	3,504.3	2,226.9	66.9	385.7	1,195.3	7,397.1	2.5
-Charges,Fines,Permits	1,556.4	747.9	47.5	68.1	658.1	3,078.1	1.1
-Efficiency Improvement	817.0	506.4	21.8	66.7	902.9	2,314.8	0.8
Revenues Collected by CG	15,913.9	42,167.9	383.9	15,887.0	28,167.6	102,520.3	34.9
-VAT	4,901.6	12,905.2	96.4	4,440.0	11,552.5	33,895.6	11.5
-Alcohol Tax	1,638.4	5,903.3	12.0	-	778.5	8,332.2	2.8
-Excises	3,748.6	13,543.4	26.3	-	1,772.8	19,091.0	6.5
-Vehicles Tax	-	-	-	10,914.5	5,998.1	16,912.6	5.8
-Land Registration Fee	5,161.9	8,351.0	240.6	-	6,298.5	20,052.0	6.8
Allocations from CG	19,634.2	23,416.7	608.0	3,052.9	2,288.2	49,000.0	16.7
Sub-Total before Grants	44,535.4	71,155.3	1,231.3	21,229.9	40,387.4	178,539.3	60.8
Grants from CG	-	-	-	-	-	115,210.7	39.2
Total Revenues of LG	44,535.4	71,155.3	1,231.3	21,229.9	40,387.4	293,750.0	100.0
CG Net Revenue	1,250,000.0	1,250,000.0	1,250,000.0	1,250,000.0	1,250,000.0	1,250,000.0	
%	3.6	5.7	0.1	1.7	3.2	23.5	

Notes : Unit in million Baht
LG Local Governments; CG Central Government; TAO Tambol Administration Organization; PAO Provincial Administration Organization
BMA Bangkok Metropolitan Administration
Source : Fiscal Policy Office.

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