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# Thailand: Selected Issues

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THAILAND

**Selected Issues**

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Approved by the Asia and Pacific Department

December 27, 1999

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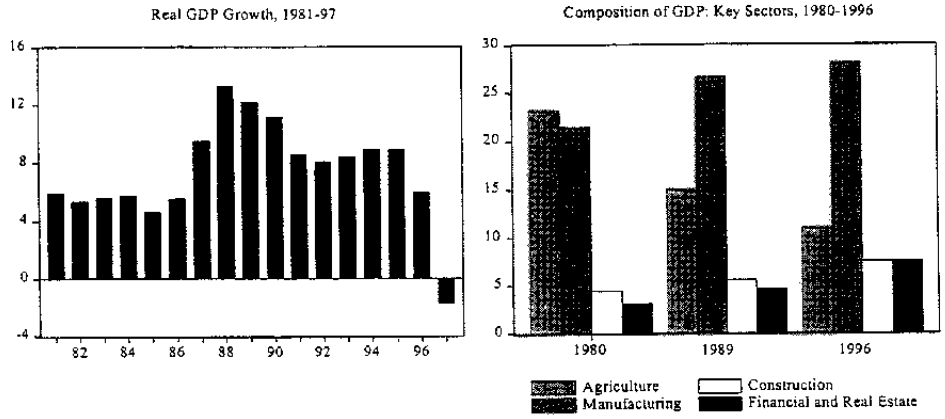
# I. From Recession to Recovery: A Real Sector Perspective[1]

1. **This chapter presents a real sector perspective on the rapid growth years, highlighting some of the weaknesses that were threatening the sustainability of Thailand's economic growth even before the 1997 balance of payments crisis.** In particular, the years of rapid growth had been powered by over-investment and excessive capital accumulation. This mechanism of growth would eventually encounter diminishing returns, and so prove unsustainable. As the rate of return on new investment fell, and the growth rate slowed, this called into question the sustainability of the persistent current account deficit, which had financed much of this capital accumulation. Resolving these two imbalances would inevitably result in adjustment, in the form of lower domestic demand, particularly investment; an increase in the relative price of tradable goods; and a redirection of production from the nontraded to the traded goods sectors. This necessary adjustment shaped economic developments during the onset of the crisis.

## A. Economic Growth Before the Crisis

2. **During the mid 1980s Thailand's economy embarked on a decade of rapid economic growth (Figure 1).** From 1981 through 1986 growth had already averaged an impressive 5.5 percent. But from 1987 through 1995 Thailand's growth rate almost doubled, averaging close to 10 percent per annum. These years of rapid growth brought about an equally decisive reduction in poverty, which fell from more than 30 percent in 1988 to less than 12 percent in 1996. The surge in growth was accompanied by a significant shift in the composition of production, as Thailand moved from a predominantly rural to a more industrialised economy. From 1980 to 1996, agriculture's share in GDP fell in half, declining from 23 to 11 percent. This was offset by manufacturing (whose share increased from 22 to 28 percent) and, especially in the latter years, in the nontraded sectors of construction, finance and real estate.

Figure 1. Growth Performance Before the Crisis




[1]Prepared by Mark Griffiths (APD).

3. **The acceleration of Thailand's economic growth was primarily investment-led (Figure 2).** The expansion of investment was the counterpart to the more general industrialization that was taking place. Between 1987 and 1990, investment growth rates exceeded 20 percent, almost double the growth rate of the economy as a whole. As a result, the share of investment in GDP increased by 15 percentage points, to more than 40 percent—high both by historical and international standards. In the 1990s investment growth rates levelled off, rising more in line with overall GDP, and the share of investment in GDP stabilized. But since investment was now a major component of output, the contribution of investment to overall output growth remained substantial, on a par with that of consumption.

Figure 2. Thailand: Investment and Growth Before the Crisis

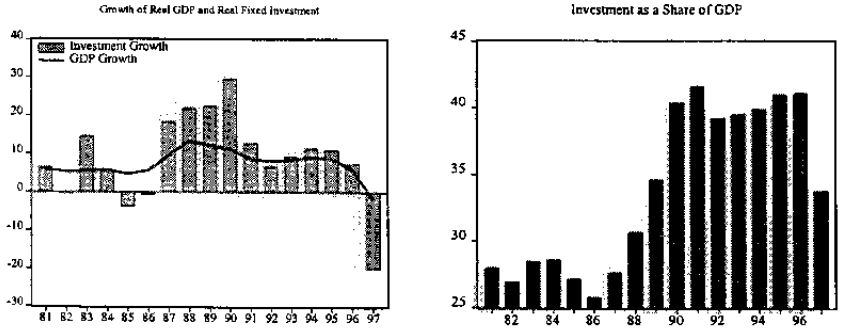



Table 1. Evolution of GDP Growth Before and After the Crisis

| | Average 1991-94 | 1994 | 1995 | 1996 | 1997 | 1998 Estimate | 1999 Projection |
|---|---|---|---|---|---|---|---|
| | | | | (in percent) | | | |
| Real GDP growth | 8.5 | 9.0 | 8.9 | 5.9 | -1.8 | -10.0 | 4.0 |
| Domestic Demand | 8.2 | 9.1 | 9.1 | 7.2 | -9.5 | -24.2 | 7.9 |
| Consumption | 7.5 | 7.9 | 7.3 | 7.5 | -1.2 | -12.0 | 5.5 |
| Private | 7.6 | 7.9 | 7.6 | 6.8 | -0.8 | -14.0 | 5.0 |
| Public | 6.5 | 8.2 | 5.4 | 11.9 | -3.6 | 1.2 | 8.7 |
| Gross Investment | 9.5 | 10.9 | 11.8 | 6.8 | -21.7 | -46.7 | 15.0 |
| Gross Fixed Investment | 10.0 | 11.4 | 11.0 | 7.4 | -20.3 | -38.1 | 3.0 |
| Private | 8.0 | 8.8 | 10.5 | 3.4 | -29.7 | -44.3 | -1.2 |
| Public | 20.1 | 22.5 | 12.6 | 21.9 | 9.2 | -25.7 | 9.3 |
| Exports of g & nfs | 14.0 | 14.2 | 15.5 | -5.5 | 8.3 | 7.9 | 9.6 |
| Imports of g & nfs | 12.4 | 15.7 | 19.9 | -0.5 | -11.7 | -24.9 | 22.3 |
| Contributions to growth, of which: | | | | | | | |
| Consumption | 4.8 | 5.1 | 4.6 | 4.7 | -0.7 | -7.7 | 3.5 |
| Private | 4.3 | 4.4 | 4.2 | 3.7 | -0.4 | -7.8 | 2.7 |
| Public | 0.6 | 0.7 | 0.4 | 0.9 | -0.3 | 0.1 | 0.8 |
| Fixed investment | 4.0 | 4.6 | 4.5 | 3.1 | -8.6 | -13.2 | 0.7 |
| Private | 2.6 | 2.9 | 3.4 | 1.1 | -9.6 | -10.2 | -0.2 |
| Public | 1.4 | 1.7 | 1.1 | 2.0 | 0.9 | -3.0 | 0.9 |
| Change in stocks (incl. stat. disc.) | -0.5 | 0.3 | 2.4 | 0.5 | -1.6 | -3.8 | 2.7 |
| Net exports | 0.2 | -1.0 | -2.6 | -2.3 | 9.2 | 14.7 | -2.9 |

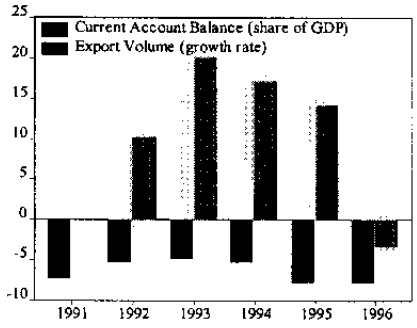
Source: NESDB; Staff calculations.

4. **But even before the crisis took hold, there were already signs that Thailand's rapid growth rate was slowing and would prove unsustainable.**

- **First, the years of the investment boom had led to a large increase in Thailand's capital-output ratio, which rose from 2.2 in 1990 to 2.6 in 1996.** Given the scope for diminishing rates of return, it was inevitable that the sustainability of investment-led growth would be questioned. In the end, investment growth slowed, falling to little more than 7 percent in 1996, as compared with an average of more than 10 percent in the five years preceding. Breaking down this investment growth between private and public sectors points to an even more marked slowdown. In 1996 *private* investment grew by only 3 percent, reflecting signs of excess capacity and earlier over-investment; growth in overall investment was sustained only by a 22 percent public investment increase.

- **Second, export growth declined sharply (see Chapter VII).** Thailand's current account deficit had always been a potential source of concern. But since it largely financed investment, which was assumed to generate growth (and with it the earnings for future debt repayment), the current account was perhaps viewed with less concern than if it had been driven by a low savings rate. From 1991-94, export growth managed to outpace imports, so that the contribution to growth from the external sector was even slightly positive. However, in 1995 and 1996 competitiveness problems took on increasing importance. With the baht essentially pegged to the dollar, and the dollar strengthening in effective terms, and in particular against the Japanese yen, Thailand's competitiveness deteriorated. The result was a further increase in the current account deficit, to almost 8 percent of GDP. In 1995 import growth jumped to almost 20 percent, and in 1996 export growth (volume terms) collapsed from the double digit growth rates of 1991-94 to *minus* 3 percent. Both these years saw sizeable *negative* contributions to growth from the external sector.

Figure 3. Current Account and Export Performance

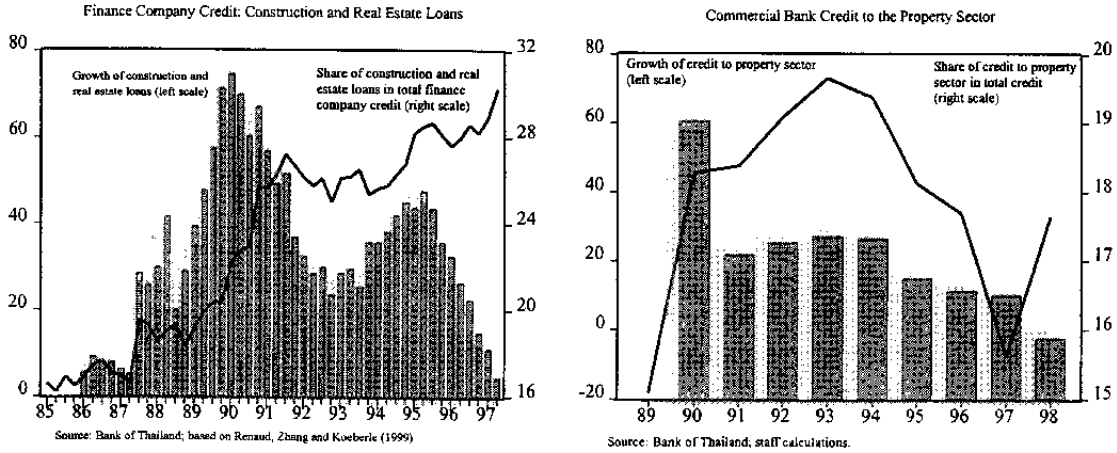



- **Third, consistent with the tendency toward over-investment, there was also evidence of an excessive expansion in the nontraded sector, particularly in real estate.** From national accounts data it is difficult to isolate the impact of the real estate sector, in part because of misclassification among sectors, though, as shown earlier, the share of GDP devoted to real estate and the financial sector increased in the run up to the crisis. At first sight, it is difficult to make the case for an over-expansion in construction, at a time when *every* sector was growing rapidly. Construction investment grew roughly in line (12 percent 1990-94 annual average) with overall investment through much of the 1990s. But this also reflects the fact that during this period construction took up roughly 50 percent of total fixed investment—so the two were bound to grow in line. Also, there were major changes in the composition of construction investment: on average during this period, public investment in construction grew at more than double the growth rate

(25 percent), while private investment averaged only 8 percent, less than two-thirds the overall average.

5. **The result was an over-extension of the real estate and construction sectors.**[2] In the residential sector, the number of housing units in the Bangkok region had increased since 1988 by around 1¼ million, raising the vacancy rate in 1998 to around 14 percent. In the commercial sector, increasing office construction in the pre-crisis years (even though the price of office space essentially peaked in 1991) led to an increase in the vacancy rate to around 20 percent before the crisis. Much of the office construction was built not by professional property developers, but by companies for their own use. Credit data point to a rapid increase in loans to the real estate and housing sectors, especially among finance companies, at a time when overall credit was already growing rapidly (Figure 4). In the end, many of these loans were to turn nonperforming, and the finance companies closed, clear evidence of the overexpansion of property sector credit.[3]

Figure 4: Credit to the Property Sector, 1985-1998




6. **Thus, even before the crisis, Thailand's ability to sustain its impressive growth performance was in doubt.** The persistence and then widening of the current account deficit; over-investment, declining rates of return to capital and the over expansion of the nontraded sector; and the slowdown in export growth: all pointed on macroeconomic grounds to the need for current account adjustment.

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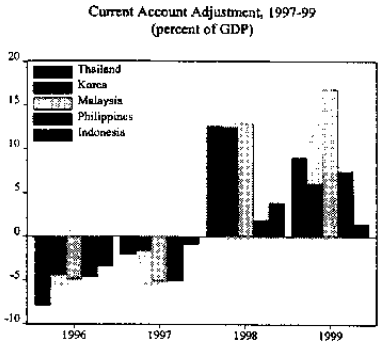
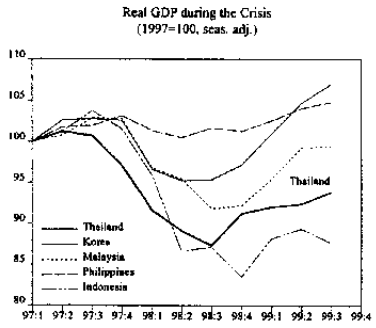
[2]The discussion in this paragraph draws on Renaud, Zhang, and Koeberle (1999).

[3]Chapter IV of this Selected Issues paper gives a full discussion of credit conditions before and after the crisis.

## BOX 1. ASIA'S CRISIS: THE REAL SECTOR ADJUSTMENT

**Other Asian crisis economies have shared many of the features of the adjustment path outlined in this chapter.** In particular, the crisis countries have seen massive current account adjustment and correction of the overinvestment that had characterised the boom years. All of the countries have seen a sharp initial drop in real GDP, followed by a more broad-based economic recovery.




**Balance of payments problems resulted in the need for massive current account adjustment.** In part this reflected the correction of earlier years' over-investment, though its extent was exaggerated by panic among international investors. As a result, Thailand's external current account balance shifted from a *deficit* of almost 8 percent of GDP in 1996 to a *surplus* in 1998 of more than 12 percent of GDP, paralleling the adjustment in the other crisis countries.

Contributions to GDP growth:1997-99

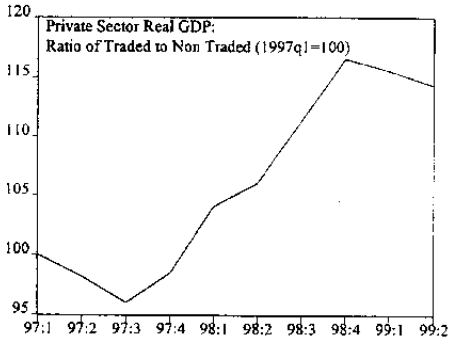
| | Korea | | | Malaysia | | | Philippines | | | Thailand | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1997 | 1998 | 1999 | 1997 | 1998 | 1999 | 1997 | 1998 | 1999 | 1997 | 1998 | 1999 |
| **Domestic demand** | **-0.8** | **-18.1** | **9.9** | **8.2** | **-26.9** | **0.7** | **6.7** | **-1.9** | **-1.2** | **-10.1** | **-23.7** | **6.5** |
| Consumption | 2.1 | -5.2 | 4.6 | 2.9 | -5.9 | 3.9 | 4.2 | 2.5 | 0.2 | -0.7 | -7.7 | 3.5 |
| Private | 1.9 | -5.2 | 4.8 | 2.1 | -5.0 | 2.4 | 3.8 | 2.6 | -0.6 | -0.4 | -7.8 | 2.7 |
| Public | 0.1 | 0.0 | -0.1 | 0.9 | -0.9 | 1.6 | 0.4 | -0.2 | 0.8 | -0.3 | 0.1 | 0.8 |
| Gross fixed investment | -0.8 | -7.3 | 1.2 | 4.4 | -21.0 | -3.6 | 2.4 | -3.0 | -2.8 | -8.6 | -13.2 | 0.7 |
| Change in stocks | -2.0 | -5.6 | 4.1 | 0.9 | 0.0 | 0.4 | 0.1 | -1.4 | 1.4 | -0.7 | -2.9 | 2.3 |
| **External demand** | **5.7** | **12.2** | **-0.3** | **-0.7** | **19.4** | **5.6** | **0.1** | **1.7** | **4.7** | **9.2** | **14.7** | **-2.9** |
| Exports | 6.7 | 4.8 | 8.0 | 5.2 | -0.2 | 5.0 | 8.0 | -7.5 | 6.5 | 3.5 | 3.7 | 5.4 |
| Imports | 1.1 | -7.3 | 8.3 | 5.9 | -19.6 | -0.6 | 7.9 | -9.1 | 1.8 | -5.8 | -11.0 | 8.2 |
| **GDP growth** | **5.0** | **-5.8** | **9.0** | **7.5** | **-7.5** | **6.3** | **5.2** | **-0.5** | **3.4** | **-1.8** | **-10.0** | **4.0** |

Source: Staff estimates; figures for 1999 are projections.

**The whole of the region has seen a sharp output decline, though this is now giving way to economic recovery.** The fall in output came first in Thailand, while recovery took hold across the region in the second half of 1998. Indeed, Korea's recovery has been so robust that output has already surpassed pre-crisis levels. While the output decline was largest in Indonesia, output in Thailand also remains well below pre-crisis levels.

**In all four countries, declining investment contributed most to the output contraction.** In part, this represents the unwinding of excess investment of the past, but it also reflects the greater sensitivity of investment behaviour to the business cycle. In Korea especially, but also in Thailand and the Philippines, the extent of the recession and recovery has been amplified by stock adjustment. Finally, in all of the countries the emerging recovery is largely consumption and export-led, though in Korea and Thailand, the net export contribution is turning negative as growth becomes driven by domestic demand, and the current account returns to more normal levels.

## B. Adjustment During the Crisis

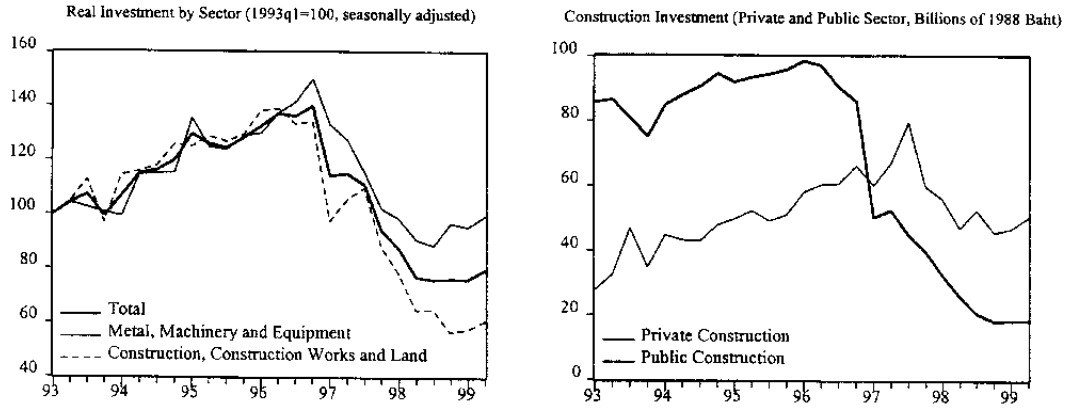



7. **To remedy these macroeconomic imbalances, both expenditure-reduction and expenditure-switching were required.** These were need to bring about contraction of the over-expanded nontraded sector, a return of investment to more normal levels, and the "crowding in" of the production and sale of tradable goods. The evolution of the real economy since the crisis has broadly conformed to this classic textbook pattern.

8. **In the event, the current account adjustment proved far greater than anticipated.** Once the full extent of the weaknesses in Thailand's economy became known, including the underlying problems in the financial sector (discussed in Chapter III below) and the collapse of Thailand's international reserve position, financial market confidence vanished. Thailand's pre-crisis problem of persistent and excessive capital inflows was transformed into one of managing major capital *outflows*, with creditors refusing to rollover short term debt and calling in long term debt as it matured.

9. **Investment suffered the bulk of the decline in domestic demand (Figure 5).** As discussed above, investment had already peaked in 1996 and was falling sharply in 1997q1, even before the balance of payments crisis took hold. But the impact of higher interest rates, lower domestic demand, and weaker corporate cashflows brought about a further adjustment. Between 1996 and 1998, the cumulative fall in gross investment is estimated at around 70 percent. In addition, the increase in interest rates and the depreciation of the exchange rate worsened corporate balance sheets (many corporations had financed their investments with foreign borrowing, either directly, or by using domestic banks as intermediaries). This made banks reluctant to roll over credit, let alone extend new credit for profitable investment

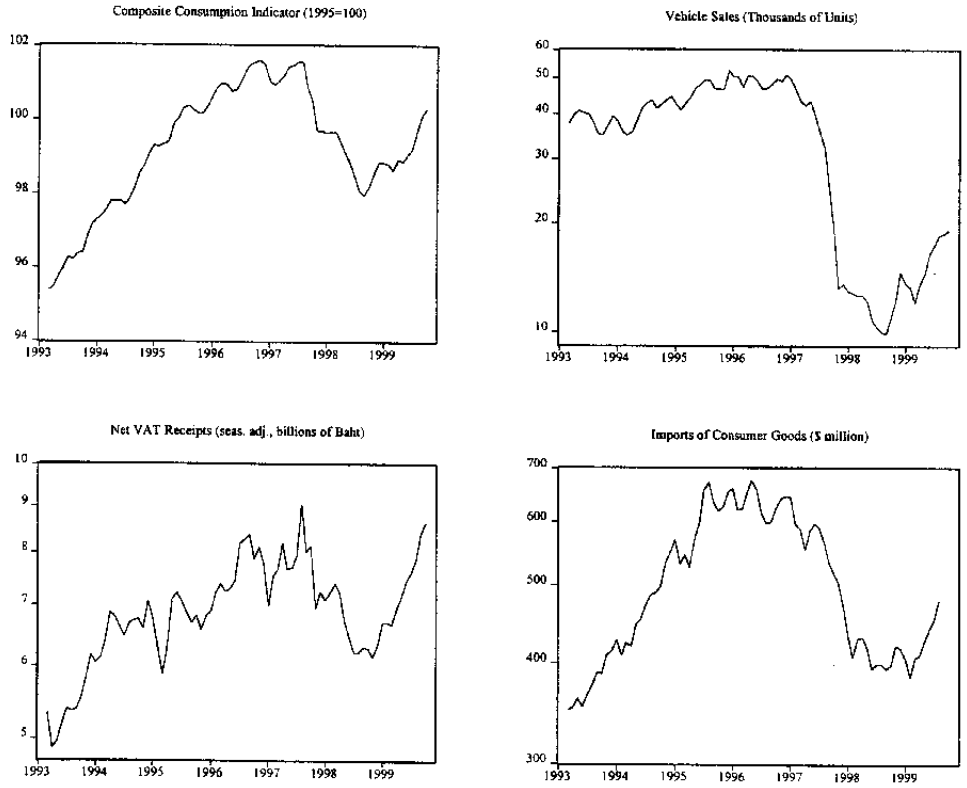
Figure 5. Gross Fixed Investment: Boom, Collapse, Recovery



projects, for fear that the money would be diverted to existing debt service obligations.[4] While investment fell across the board, the decline in machinery and equipment investment was smallest, while investment in construction—primarily nontraded—was particularly badly hit, its share falling to 35 percent from 50 percent before the crisis.[5]

10. **Private consumption also fell markedly (Figure 6).** After levelling off in late 1996 and early 1997, the Bank of Thailand's composite consumption index fell sharply in mid 1997. Consumer durables were particularly hard hit, with vehicle sales falling to around one quarter of their pre-crisis levels. Evidence from VAT receipts points to a broader decline in consumption as a whole. As a result, consumption fell by an estimated 13 percent in 1997 and 1998. The private savings rate is thus estimated to have increased from little more than 20 percent in 1997, to around 27 percent in 1998.

Figure 6. Indicators of Consumption Demand
(Three Month Moving Average)




[4]Chapter II of this Selected Issues describes the evolution of Thailand's corporate debt problem, and the attempts of the authorities to resolve it.

[5]Inventory adjustment also took part of the burden. Data on inventories are unreliable, but the fall in raw materials imports early on the crisis is consistent with widespread de-stocking, consistent with the Korean experience.

11. **What caused this dramatic decline in consumption?** High interest rates and the reduced availability of credit (in part because of the closure of finance companies, but also due to difficulties more generally in the financial system) dampened consumption. With the general collapse in demand, unemployment increased and wages declined (in particular, through reduced bonus payments), lowering personal income. As the severity of the recession intensified, proving far worse and far longer than earlier anticipated, uncertainty grew and precautionary saving increased. The unprecedented nature of the recession also reduced permanent income, as consumers lowered their expectations of future income, which would now increase by considerably less than the 10 percent per annum of the pre-crisis years that consumers had grown used to.[6]

12. **Consistent with the increase in the relative price of tradable goods, growth in export volumes after the crisis has been relatively robust.** Headline figures, which show dollar exports in 1998 still almost $2 billion *lower* than in 1996, are misleading. Correcting for falling dollar export prices, in part due to the fall in Thailand's terms of trade as it exported more, export volume growth was much more robust, exceeding 8 percent per annum in both 1997 and 1998. Conversely, import volumes fell dramatically, falling by more than 40 percent from 1996 to 1998, reflecting the weakness in domestic demand and the relative price effect of the devaluation.

### C. Emergence of Recovery

13. **Once the balance of payments position stabilized, the exchange rate recovered, and interest rates began falling.** Fiscal policy was shifted rapidly to a more expansionary stance, through increased expenditures (in particular on the social safety net, financed partly by the Miyazawa initiative) and through cuts in consumption taxes. Recovery followed.

14. **On the supply side, tradable goods have shown the clearest signs of recovery.** Manufacturing production, which had already bottomed out by the middle of 1998, grew at double-digit rates through much of 1999, and by September 1999 it had surpassed its pre-crisis peak (measured in seasonally adjusted terms). Transportation equipment has shown the largest increase, output more than doubling, the result of a redirection of production toward export markets. But in recent months the recovery has even extended to products typically associated with the nontraded sector, such as construction materials, though here even these products—such as cement—have become potentially exportable.

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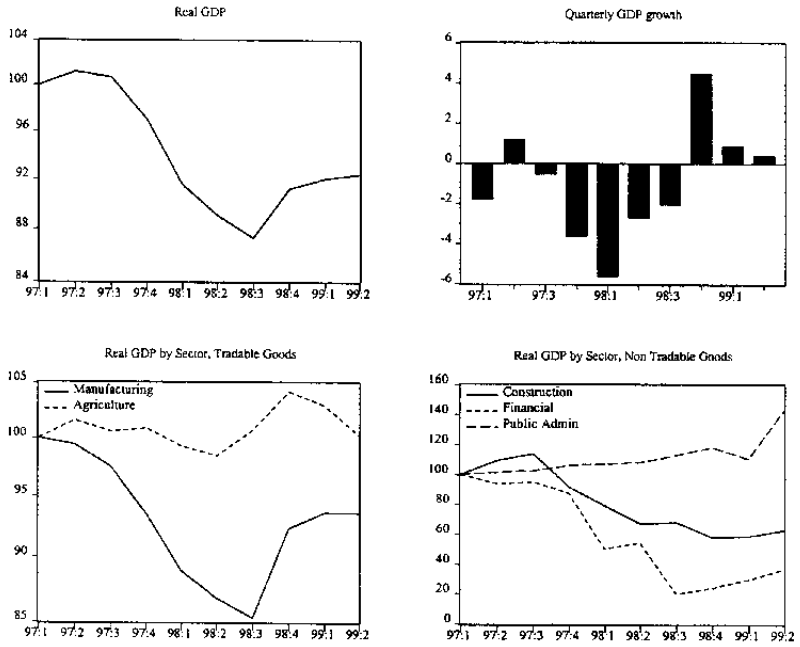
[6]If expected future income growth falls, permanent income falls by more than the decline in current income, prompting a decline in the consumption-to-GDP ratio. For example, assuming a 20-year life cycle, and a real interest rate of about 4 percent, a decline in income growth from 8.5 percent (the 1991–94 average) to 5.5 percent (a more cautious projection of future income growth) lowers permanent income by around 30 percent. Consumption may therefore fall by more than the 10 percent fall in current income.

15. **On the demand side, lower interest rates and improving recovery prospects have stimulated private consumption.** Consumption levelled off in the second half of 1998 and has been rising since then. This trend was supported by a temporary VAT reduction which took effect in early 1999, providing an additional stimulus, particularly for consumer durables. Together with the redirection toward export markets, this has allowed for some recovery in investment, mainly through ending the running down of inventories, but also through new private fixed investment in certain sectors of the economy.

Figure 7. Real GDP: Recent Developments (1997q1=100, seas. adj.)




16. **Latest national accounts data confirm this assessment of recovery, suggesting that GDP bottomed out in the third quarter of 1998 (Figure 7).** On the production side, tradable sectors such as agriculture and manufacturing fell least, and are closer to regaining their pre-crisis levels. Conversely, nontraded sectors such as financial services and construction have been hardest hit by the crisis, though even these are now showing signs of recovery. Finally, the production data make clear the role of fiscal stimulus—and increased government expenditure—in cushioning the effect of the recession and in stimulating economic recovery.

17. **Recovery is still at an early stage.** Reasonable estimates suggest that a sizeable output gap still remains and, taken literally, the national accounts data suggest some slowing of the growth rate in the most recent quarters. However, this finding is at odds with almost all other real sector economic indicators, and points to continued data deficiencies in the quarterly national accounts (and future upward data revisions) or end-point problems with seasonal adjustment procedures. Even so, recent data suggest that growth in 1999 should reach 4 percent, far higher than would have been forecast one year earlier.

## D. Conclusion

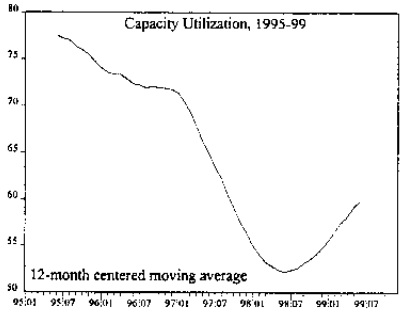
18. **Thailand's recession and recovery mark a rebalancing of the economy away from the over-investment and over-expansion of the nontraded sectors of the pre-crisis years.** The size of the balance of payments adjustment, and thus the extent of the recession and the rebalancing of the economy may have proved larger than warranted. However, the character of the economic adjustment—decline in investment, relative price adjustment, shift toward greater tradable goods production—has been in line with the resolution of these earlier imbalances. With the current account position now much stronger, and with the potential for significant improvement in the balance of payments outlook, there is now the prospect of sustained economic recovery, albeit at more modest rates than in the past.

## II. Resolving the Corporate Debt Problem[1]

19. **Thailand's current economic problems are mirrored in the underlying weaknesses of its corporate sector**. To give an additional perspective on the problems facing the economy, this chapter takes a closer look at recent corporate performance. It outlines the main sources of the current corporate debt problem; explains the steps taken by the authorities to improve corporate governance and promote corporate debt restructuring; describes the progress made to date; and sets out the remaining agenda for reform.

### A. Causes of the Corporate Debt Problem

20. **The current difficulties faced by Thai corporations have their roots in the over-investment that took place in the years leading up to the crisis**. As noted in the previous chapter, from 1987 to 1995, growth of real fixed investment averaged almost 16 percent, as compared with a real GDP growth rate averaging almost 10 percent. The acceleration in investment took place in the late 1980s, as investment growth rates rose to 20–30 percent per annum. The result was a rise in the investment ratio to around 40 percent of GDP, high both by historic and international standards. In the first half of the 1990s, investment growth moved in line with real GDP growth, holding the investment share at this high level. However, with the capital-output ratio increasing as a result, it was inevitable that diminishing returns to capital would set in, calling into question the sustainability of this investment-led growth. One clear symptom of this was the decline in capacity utilization, which was already showing signs of weakness before the crisis, and which contributed to the investment slowdown starting in 1996.




21. **This picture of over-investment and declining real rates of return can also be seen from the financial statements of listed Thai corporations**. In three years from 1994 to 1997, the value of assets of a representative sample of 239 nonfinancial listed SET companies almost doubled (Table 1). Asset growth was particularly large in petrochemicals, but also in such largely nontraded sectors as construction, communication, and property development. However, the growth in asset values was not accompanied by equivalently high earnings growth. This deterioration can be seen from declines in the return on assets—which both fell by roughly one-third from 1994 to 1996—and from the fall in stock prices which started in the second half of 1996.

22. **The financing of the investment boom of the 1990s lies at the heart of Thailand's current corporate debt problem**. In Thailand, in the ten largest nonfinancial private sector firms, the top three shareholders own on average as much as 45 percent of the outstanding shares (Alba, Claessens, and Djankov (1998)). The desire of families to retain control of their conglomerates led them to use debt to finance their expansion. Capital account liberalization

[1]Prepared by Mark Griffiths and Toshihide Endo (both APD).

facilitated this expansion, by increasing the supply of funds to corporations, both directly and through banks. As a result, by end-1997 the corporate sector had debt of approximately $153 billion (more than 150 percent of GDP), $123 billion financed through the domestic banking system and finance companies, and $30 billion directly financed from overseas.[2] The result of this debt-financed expansion was to increase debt-equity ratios, from around 150 percent in 1994 to more than 200 percent by the first half of 1997. (This is high both when compared to the region, and compared to industrialized countries such as the United States, which in 1996 had a debt-equity ratio of just below 100 percent.)

Table 1. Asset Growth in Selected Sectors 1/

| | 1994 | 1995 | 1996 | 1997 | 1998 H1 | 1998 | 1999 H1 |
|---|---|---|---|---|---|---|---|
| | (in level terms, 1994=100) | | | | | | |
| Total | 100 | 129 | 157 | 199 | 201 | 191 | 187 |
| of which | | | | | | | |
| Agribusiness | 100 | 121 | 126 | 138 | 142 | 150 | 174 |
| Building | 100 | 129 | 164 | 259 | 254 | 240 | 238 |
| Chemicals | 100 | 141 | 188 | 274 | 289 | 281 | 281 |
| Commerce | 100 | 156 | 188 | 195 | 195 | 186 | 189 |
| Communication | 100 | 147 | 198 | 243 | 244 | 239 | 212 |
| Electrical productions | 100 | 131 | 151 | 151 | 142 | 119 | 111 |
| Health Care | 100 | 153 | 183 | 206 | 207 | 199 | 199 |
| Machinery | 100 | 102 | 123 | 133 | 116 | 103 | 88 |
| Property development | 100 | 130 | 156 | 160 | 161 | 152 | 151 |
| Textiles | 100 | 131 | 126 | 171 | 175 | 132 | 126 |
| Vehicle | 100 | 130 | 120 | 107 | 85 | 78 | 71 |
| Memorandum Item: | | | | | | | |
| Total return on assets | 3.69 | 2.98 | 2.54 | 1.51 | 1.66 | 1.75 | 2.52 |

Source: Staff calculations based on data from Stock Exchange of Thailand and Merrill Lynch Phatra.

1/ Based on a sample of 239 SET listed companies.

[2]These numbers exclude debt instruments such as bills of exchange and commercial paper, and are calculated using an end-1997 exchange rate of B 47=$1. Almost half of the foreign debt was held by Japanese creditors, just under 20 percent by U.S., and 5–10 percent each by the U.K., France, and Germany.

Table 2. Debt-to-Equity Ratio in Selected Sectors 1/

| | 1994 | 1995 | 1996 | 1997H1 | 1997 2/ | 1998 H1 | 1998 | 1999 H1 |
|---|---|---|---|---|---|---|---|---|
| Total | 1.54 | 1.70 | 1.97 | 2.18 | 4.61 | 3.77 | 2.86 | 2.89 |
| of which | | | | | | | | |
| Agribusiness | 1.28 | 1.63 | 1.70 | 1.94 | 2.76 | 2.25 | 1.58 | 1.37 |
| Building | 2.00 | 2.14 | 2.78 | 3.30 | 5.14 | 4.58 | 3.14 | 3.07 |
| Chemicals | 1.10 | 1.34 | 1.74 | 1.91 | 5.44 | 3.06 | 2.04 | 2.59 |
| Commerce | 1.05 | 1.49 | 1.38 | 1.39 | 2.56 | 1.96 | 1.76 | 1.37 |
| Communication | 1.10 | 1.41 | 2.02 | 2.23 | 9.54 | 6.32 | 4.43 | 3.05 |
| Health Care | 0.76 | 1.23 | 1.42 | 1.58 | 4.92 | 4.49 | 5.14 | 5.87 |
| Property development | 1.66 | 1.82 | 2.01 | 2.14 | 3.83 | 4.58 | 4.93 | 9.76 |
| Textiles | 1.19 | 1.61 | 1.64 | 1.69 | 2.64 | 1.97 | 1.11 | 1.20 |
| Vehicle | 2.03 | 2.32 | 1.35 | 1.44 | 5.08 | 1.94 | 1.67 | 1.51 |

Source: Staff calculations based on data from Stock Exchange of Thailand and Merrill Lynch Phatra.

1/ Based on a representative sample of 239 SET nonfinancial listed companies.
2/ The end-1997 increase reflects the effect of exchange rate depreciation on foreign currency debt.

## B. Strategies for Resolving the Corporate Debt Problem

23. **Thailand's approach to restructuring corporate debt has been private sector led, market based, and voluntary**. Even so, for this approach to succeed, the government has had to make significant efforts to develop the institutional environment. Thus the government's role has included: (i) significant legal reforms to strengthen the framework for debtor-creditor negotiations; (ii) the removal of barriers (including tax system anomalies) to corporate debt restructuring; and (iii) development of institutional reforms to foster out-of-court debt workouts. The remainder of this section discusses each of these three areas of reform.

### Legal Reform

24. **Insolvency reform in Thailand has been designed to facilitate corporate debt restructuring in two main respects:**

- **First, insolvency reform has sought to create incentives for debtors and creditors to reach out-of-court agreements.** For example, by establishing a predictable set of rules that enables creditors to initiate insolvency proceedings against a debtor, which can potentially lead to a total transfer of equity (in the case of rehabilitation proceedings), or liquidation (under bankruptcy proceedings), insolvency law is designed to bring debtors to the negotiating table. In turn, and of more general benefit, strengthened enforcement powers will reduce the riskiness of future lending, thereby increasing the availability of credit in the economy. This leverage provided by an effective insolvency system is of particular importance in countries such as Thailand, where alternative enforcement proceedings (including foreclosure on collateral) are subject to considerable delays and uncertainty.

- **Second, the rehabilitation chapter of Thailand's insolvency law is designed to provide a mechanism whereby an out-of-court agreement reached between a debtor and a majority of its creditors can be imposed upon a dissenting minority of creditors.** Consistent with other modern insolvency laws, the prospects of plan approval are enhanced in Thailand by the use of creditor classification and "cram down" rules (to enforce agreements on any dissenting minority of creditors).

25. **To meet these objectives, the authorities introduced a wide range of legal reforms (Box 1).** The bankruptcy law has been amended to improve the prospects for the rehabilitation of companies, both by making it easier for creditors to grant additional loans to distressed debtors, and by creating mechanisms that will bind dissident creditors to court-approved restructuring plans. At the same, amendments to the foreclosure law have been designed to strengthen the rights of creditors, speeding up what has been an inordinately long process, and so increasing the incentive for debtors to enter serious negotiations.

**Removal of institutional barriers to corporate debt restructuring**

26. **A number of steps have also been taken to encourage banks to restructure their holdings of corporate debt.** First, provisioning requirements have been lowered for nonperforming loans, which become performing after being successfully restructured in line with Bank of Thailand rules. Second, the authorities' financial sector restructuring plan of August 14, 1998 offered official Tier II capital support in exchange for approved corporate debt restructuring. Finally, rules limiting bank ownership of shares in companies have been relaxed to encourage debt-equity conversions.

27. **Throughout the process, the government has sought to avoid the use of public funds to bail out corporations.** Even so, the government has accepted that there may be a case for providing indirect support to the corporate sector, by providing assistance to the financial sector. One example of such support is the linking of the provision of subordinated debt under the August 14, 1998 Tier II scheme to progress in corporate debt restructuring. However, the government has consistently ruled out purchasing bad loans from banks.

**Encouraging out-of-court workouts**

28. **The authorities have complemented legal reforms with steps to encourage informal corporate debt workouts.** The sheer size of Thailand's corporate debt problem far exceeds the capacity of the court system to rehabilitate corporations. Just as important, the courts lack the expertise to manage and rehabilitate corporations. Rather, the point of legal reform has been to establish a clear and predictable framework so that debtors and creditors understand the likely outcome under a court-supervised process. They can then use this as a reference point—and a spur to action—when entering out-of-court negotiations. Thus the authorities have developed complementary measures aimed at facilitating informal reorganization or liquidation plans.

**Box 1. Legal Reforms to Promote Corporate Restructuring**

**Thailand's original Bankruptcy Law dated from 1940, and suffered from two main defects: (i) it provided only for liquidation, not for corporate rehabilitation; and (ii) it gave no legal protection to new financing of corporations in distress.**

**Amendments to the Bankruptcy Act in April 1998 and March 1999 have included measures to allow the development of rehabilitation plans under bankruptcy:**

- Protection has been increased for unsecured creditors who extend new credits to distressed debtors. This was intended to encourage financing during out-of-court workouts, such as in a pre-packaged bankruptcy. Under Section 94(2) of the original Bankruptcy Act, unsecured creditors were not entitled to file claims for payment of the debt if the debtor was known to be insolvent at the time the loan was extended. This prevented insolvent debtors from receiving new credit, even when this might have increased the value of the firm, for example, by providing essential working capital. Section 94(2) has since been amended to exclude (i) debts incurred under a court-supervised rehabilitation plan and (ii) to recognize the claims of unsecured creditors who choose to restructure their debt outside formal bankruptcy.

- Provisions have been included that allow for voting on reorganization plans by classes of creditors.

- Bankruptcy procedures have been made more predictable by (i) establishing new Bankruptcy Courts with trained judges specializing in bankruptcy procedures; and (ii) introducing objective rules for courts to confirm reorganization plans approved by creditors, and protecting creditors by requiring that no dissenting class of creditor or the debtor would receive less under the approved plan than they would under liquidation.

- Reforms of a more technical nature include: (i) allowing for the rescission of payments and transfers prior to reorganization or liquidation; (ii) providing clear rules whereby outstanding contracts of the debtor may be rejected; and (iii) clarifying the rules for use of the exchange rate in determining the voting power of creditors with foreign currency denominated claims.

**Additional measures have been introduced to strengthen foreclosure procedures, and so encourage new financing of corporations through secured lending.** These include streamlining procedures for so-called "petty cases", and expanding their applicability; and limiting the discretionary power of courts to rescind auction sales of foreclosed assets. However, rules to allow the courts to automatically rule in favor of creditor if the debtor fails to respond to the court, which would speed up the court process, have still to be enacted.

**Finally, the authorities have amended the Alien Business Law, in an effort to liberalize foreign investment.** This has involved easing restrictions on the foreign ownership of companies, supplemented by reforms to facilitate foreign ownership of land and property in Thailand.

29. **Most prominent among these has been the creation of a Corporate Debt Restructuring Advisory Committee (CDRAC), charged with monitoring progress in restructuring corporate debt.** Chaired by the Bank of Thailand, CDRAC brings together the respective heads of the Board of Trade of Thailand, the Federation of Thai Industries, the Thai Bankers' Association, the Association of Finance Companies, and the Foreign Banks' Association, to monitor and facilitate private sector debt restructuring negotiations.

30. **CDRAC's role in monitoring and seeking to resolve the corporate debt problem has been progressively enhanced.** At the outset, CDRAC's scope was relatively limited and focussed on developing a framework for guiding voluntary debt restructuring—the so-called "Bangkok Approach" (Box 2)—which draws on the informal London Approach to debt restructuring developed in the UK. CDRAC has since formalized this framework through the establishment of inter-creditor agreements (following the example of Korea), to help speed up the resolution of disagreements among creditors, and so to expedite corporate restructuring. Despite initial opposition, in particular from some foreign banks, CDRAC has been successful in getting all domestic creditors and foreign creditors with branches in Thailand to sign on. This agreement formalizes existing elements of the Bangkok Approach, but also includes (i) firm timetables—backed up with the threat of fines imposed by CDRAC—for making progress in debt restructuring (such as deadlines for establishing a steering committee, appointing a lead creditor, calling meetings for voting on restructuring plans); (ii) scope for mediation between debtors and creditors; and (iii) if necessary, arbitration to resolve disagreements between creditors (Box 3).

31. **In addition to setting out the framework for debt restructuring, CDRAC has concentrated on speeding up debt restructuring in some 700 key cases, covering loans of more than B 1.5 trillion.** Claiming some success in promoting debt restructuring in these cases, and anticipating that significant progress in debt restructuring will be made by the first quarter of 2000 when the fixed timetables are expected to yield results, CDRAC has expanded its caseload to cover 1,700 indebted corporations, with credit outstanding of approximately B 2.1 trillion. This compares with total nonperforming loans in the system of around B 2.5 trillion. Also, to expedite the restructuring of debt owed by small and medium firms, CDRAC has simplified versions of its inter-creditor and debtor-creditor agreements, which already cover 2,800 debtors with credit outstanding of more than B 0.2 trillion.

**Box 2. The Bangkok Approach to Corporate Debt Restructuring** 1/

Objective: Successful implementation of an informal framework outside bankruptcy proceedings for the efficient restructuring of the corporate debt of viable entities to benefit creditors, debtors, employees, shareholders and the Thai economy by: (i) minimizing losses to all parties through coordinated workouts, and (ii) avoiding companies being placed unnecessarily into liquidation, thereby preserving jobs and productive capacity wherever feasible.

1. Corporate debt restructuring should achieve a business, rather than just a financial restructuring, to further the long-term viability of the debtor.

2. Priority must be given to rehabilitating assets to performing status in full compliance with Bank of Thailand regulations.

3. Each stage of the corporate debt restructuring process must occur in a timely manner.

4. From the first debtor-creditor meeting, if the debtor's management is providing full and accurate information on the agreed schedule and participating in all creditor committee meetings, creditors shall "standstill" for a defined, extendable period to allow informed decisions to be made.

5. Both creditors and debtors must recognize the absolute necessity of active senior management involvement throughout the duration of the debt restructuring.

6. A lead institution, and a designated individual within the lead institution, must be appointed early in the restructuring process to actively manage and coordinate the entire process according to defined objectives and deadlines.

7. In major multi-creditor cases, a steering committee representative of a broad range of creditor interests should be appointed.

8. Decisions should be made on complete and accurate information, which has been independently verified to ensure transparency.

9. In cases where accountants, attorneys, and professional advisers are to be appointed, such entities must have requisite local knowledge, expertise and available dedicated resources.

10. While it is normal practice to request the debtor to assume all the costs of professional advisers, lead institutions and creditors' committees have a direct economic interest, and hence a professional obligation, to help control such costs.

11. The Ministry of Finance and the Bank of Thailand should be kept informed on the progress of all debt restructuring to aid the review and regulatory and supervisory framework and to facilitate corporate debt restructuring.

12. The Corporate Debt Restructuring Advisory Committee shall have the role of following up developments in debt restructuring, facilitating debt restructuring for the public good, and acting as an intermediary in the particularly difficult cases of restructuring.

13. Creditors' existing collateral rights remain in force.

14. New credit extended during the standstill period of the restructuring process on reasonable terms in order that the debtor may continue operations must receive priority status.

15. Lenders should aim at recovering their claims through devising a plan with lower risk and hence lower interest rates, rather than through increased interest rates and imposition of restructuring fees.

16. Trading of debt is appropriate under certain conditions, but the selling creditor has the professional obligation to ensure that the purchaser does not have a detrimental effect on the restructuring process.

17. Restructuring losses should be apportioned in equitable manner, which recognizes legal priorities between the parties involved.

18. Creditors retain the right to exercise independent commercial judgment and objectives but should carefully consider the impact of any action on the Thai economy, other creditors and potentially viable debtors.

19. Any of the principles or implementing principles contained in this framework can be waived, amended or superseded in any particular restructuring with the consent of all participating creditors.

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1/ Issued by the Corporate Debt Restructuring Advisory Committee, August 4, 1998.

### Box 3. The Debtor-Creditor and Inter-Creditor Agreements of March 1999

The Debtor-Creditor Agreement on the Debt Restructuring Process and the Inter-Creditor Agreement on Restructuring Plan Votes and Executive Decision Panel Procedures were jointly developed by the Association of Finance Companies, the Thai Bankers' Association, and the Foreign Banks' Association. The Agreements are binding contracts, which commit signatories to follow a set framework in debt restructuring, so as to expedite the process. After securing CDRAC approval, the Agreements were signed on March 19, 1999 by 34 local and 31 foreign financial institutions, and will come into force in individual restructuring cases once the target debtor signs the Debtor Accession form and so falls under the Debtor-Creditor Agreement.

**Main Elements**

The Agreements set out the debt restructuring process from the calling of the first creditors' meeting, the provision of information by the debtor, to the proposal and voting on a restructuring plan, as outlined in the Bangkok Approach. Under the agreement, both debtors and creditors may use the CDRAC for technical advice and to mediate conflicts. Creditor signatories must vote on the proposed restructuring plans; if they choose to reject the plan they must make clear their reasons for objecting. If a majority of financial institutions (both by number and by credit) approve a restructuring plan, but this is less than the majority required under the Bankruptcy Act, the plan passes to an Executive Decision Panel (EDP) for binding arbitration among creditors.[1] If there is no majority, inter-creditor arbitration is not enforced, and creditors must then file in court for loan collection, liquidation, or reorganization.

**Expected Benefits**

For **debtors**, set time schedules and a clear negotiating framework, the potential for mediation in cases of conflict, and the requirement that creditors not charge default interest if a credible restructuring plan is being developed, should encourage them to enter the debt restructuring process. For **creditors**, the Agreements are designed to ensure fair and equal treatment, access to complete and accurate information necessary for restructuring, and clearly set out time frames. In addition, creditors can be assured of a clear resolution on the restructuring plan, with the support of independent third parties for mediation—and, in the limit, arbitration—where necessary.

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Source: Corporate Debt Restructuring Advisory Committee.

[1]Failure to vote or comply with an approved plan may result in a warning letter or fine. However, a creditor may opt out of arbitration if it has over B 1 billion in outstanding claims.

## C. Progress in Corporate Debt Restructuring

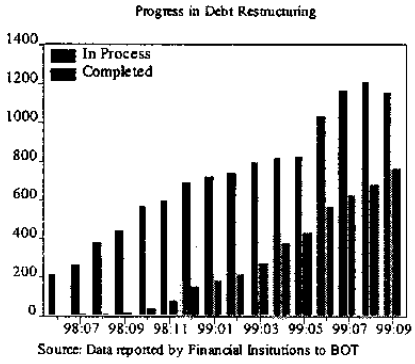
32. **Since the onset of the crisis, there has been some gradual deleveraging of the economy.** Measured at current exchange rates, corporate sector debt (external and mediated through the domestic financial system) has fallen from $153 billion at end-1997 to around $140 billion (116 percent of GDP) in mid-1999.[3] External debt has fallen significantly, the counterpart to lower foreign debt rollover rates, and the consequence of Thailand's move into current account surplus. The subsequent strengthening of the baht, together with significant debt repayment by the private sector, means that the proportion of foreign debt in total corporate debt is now considerably lower.

Table 3. Progress in Debt Restructuring by Financial Institutions

| | Total in process or completed (billions of baht) | | | | Of which, percent completed | | | |
|---|---|---|---|---|---|---|---|---|
| | Jun-98 | Dec-98 | Jun-99 | Sep-99 | Jun-98 | Dec-98 | Jun-99 | Sep-99 |
| Total | 221 | 847 | 1,597 | 1,922 | 2 | 19 | 35 | 40 |
| Thai commercial bank | 155 | 628 | 1,336 | 1,648 | 1 | 22 | 37 | 41 |
| State-owned | ... | ... | 588 | 816 | ... | ... | 18 | 19 |
| Private | ... | ... | 748 | 832 | ... | ... | 53 | 62 |
| Foreign commecial banks and BIBFs | 53 | 113 | 148 | 154 | 5 | 10 | 26 | 34 |
| Finance companies | 13 | 105 | 113 | 119 | 1 | 8 | 24 | 34 |
| Credit foncier | 0 | 1 | 1 | 1 | 0 | 35 | 77 | 79 |

Source: Bank of Thailand.

33. **Part of this deleveraging reflects the gradual progress that financial institutions have made in restructuring debt.** Data reported by financial institutions to the Bank of Thailand show that just over B 1.9 trillion ($50 billion) in credit has entered the restructuring process. Out of this, almost 40 percent of the total has been restructured. This marks considerable progress since June 1998, when statistics on debt restructuring were first collected. Even so, the figures imply that there is considerable debt still to be restructured, particularly when set against total nonperforming loans of around B 2.5 trillion. And arguably the most difficult cases are still to come, as these inherently take the longest time. According to the official data, debt to be restructured has been concentrated in the manufacturing, real estate, services, and wholesale and retail sectors.[4]



Source: Data reported by Financial Institutions to BOT

[3]These figures exclude credit extended by closed finance companies, thus exaggerating somewhat the extent of the debt reduction.

[4]However, this classification should not be taken too literally as it is based on the identity of the borrower, which may be different from the sector in which the project was financed.

34. **State owned banks have been particularly slow in restructuring corporate debt.** As of end-September, less than 20 percent of the debt owed to state banks had completed the restructuring process, as compared with a completion rate of more than 60 percent for private banks. This slow progress in part reflects the fear of state bank employees that they could be held liable for eroding the value of state assets (and thus subject to prosecution).

35. **Evidence from CDRAC's monitoring of its initial 700 target cases also indicates that progress is being made in debt restructuring, albeit slowly.** So far only one-fifth of the total debt under CDRAC's purview has been successfully restructured (excluding the B 160 billion, which remains current), and this includes cases where the debtor still has to sign on the agreement. An even larger amount, roughly one quarter of the debt, has lead to filings of court cases, indicating that the CDRAC process will be supplanted by court resolution or out of court resolution outside the auspices of CDRAC. Thus, resolution of the B 586 billion still in process will be crucial to making decisive progress in debt restructuring; according to the timetables set out in the Inter-Creditor and Debtor-Creditor agreements, results should be expected in the first quarter of 2000.

Table 4. Progress in CDRAC target cases as of November 1999

| | Number of companies | Credit Outstanding (billions of baht) |
|---|---|---|
| Completed restructuring | 99 | 204 |
| Agreement signed by both parties | 41 | 48 |
| Debtors to sign agreement | 58 | 156 |
| Approved by creditors; agreement being drafted | 33 | 138 |
| In process of restructuring | 300 | 586 |
| Steering committee and financial advisor in place | 18 | 43 |
| Draft plan under review | 279 | 533 |
| Awaiting creditor approval of plan | 3 | 10 |
| Cases filed in court | 210 | 413 |
| Companies with loans still current, not needing restructuring | 60 | 160 |
| Total | 702 | 1501 |

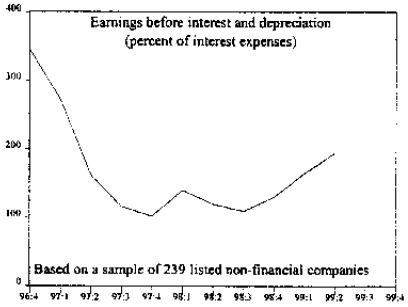
Source: CDRAC, Merrill Lynch.

36. **Though the aggregate data suggest that gradual progress in debt restructuring is being made, evidence on the quality of debt restructuring remains scarce.** Creditors are unwilling to publicize details of restructuring deals, both for reasons of confidentiality, and for fear of setting a "going rate" for debt reduction. The creation of such a rate would weaken the position of creditors in future debt negotiations, and could encourage further strategic loan defaults. Even so, anecdotal evidence suggests that much of the restructuring has essentially taken the form of interest payment rescheduling, with little reported reduction in the net present value of the loan. As a result, an estimated 15 percent of restructured loans end up turning nonperforming again. Such rescheduling often involves maturity extension, a 1-2 year grace period for principal repayment, and temporary interest rate reduction. Thus, in a sample 40 cases monitored by CDRAC there were only 3 cases involving (a very modest amount of) principal reduction, while there were some 33 cases involving maturity

extensions. Banks are also reported to monitor cashflows regularly, and to have the option of modifying restructuring terms as necessary.[5]

37. **Despite this evidence indicating that progress is being made in debt restructuring, headline NPL figures have fallen by much less**. A number of factors explain this. First, exit of NPLs through restructuring has been partially offset by the entry of new NPLs. Second, part of the debt that has been restructured was already performing, but in danger of turning nonperforming. Third, bank reporting of NPLs and of restructured debt may simply be inconsistent. Fourth, part of the restructuring figures may include debts to foreign banks (and, in the CDRAC target cases, to foreign bondholders), whereas the headline NPL figures focus on domestic banks.

38. **The reduction of interest rates and emergence of economic recovery should have helped reduce the headline NPL figures.** Economic indicators have improved steadily through the year—most notably manufacturing production, exports, as well as consumption indicators. With the recovery, the financial results of nonbank corporations have also improved, aggregate sales rising almost 5 percent between the first and second quarter of 1999, the first increase since the onset of the crisis. Similarly, the aggregate margin of EBITDA (earnings before interest, taxation and depreciation) to interest payments for nonbank corporates has increased from 14 percent in 1998q3 to 23 percent in 1999q2—a further indication of corporates' improved debt-servicing capability.




39. **This failure of NPLs to fall significantly despite improvements in profitability could indicate data misreporting, or the existence of "strategic" NPLs.** Finding it difficult to access credit, some companies may have chosen not to repay debts, conserving cashflow to finance operations and investment (so-called "strategic" NPLs). An alternative approach to measuring NPLs suggests that this may be taking place. This alternative approach uses corporate balance sheet data to measure NPLs. Using corporate income statements, a firm can be considered as "NPL prone" if its earnings before interest are lower than interest obligations. On this basis, using a sample of some 240 nonfinancial corporations listed on the SET, staff calculations show that the number of NPL-prone companies rose from 48 immediately before the crisis (already quite high) to a peak of 141 at the end of 1998q2, before falling gradually to 84 a year later. Expressed in terms of share of liabilities, this measure of NPLs peaked at 54 percent in 1998q2 before falling back to 41 percent in mid-1999. Roughly speaking, one would have expected a proportionate decline in reported NPLs (as opposed to a *rise* in the official NPL rate from 36 percent to 51 percent).

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[5]The unwillingness of banks to accept principal reductions raises concerns that restructured debts will need to be renegotiated; if banks retain the right to renegotiate if the company's position improves, this will reduce the incentive of the company to earn profits.

Table 5. Performance of Nonfinancial Private Corporations in Thailand

| Period | Number of Firms | Total Loans of Firms (Billion of Baht) | Profits over 1/ Interest Expenses (%) | Share of Firms with Profits < Interest Expenses | Loans of Companies with Profits< Interest Expenses (% of total loans) | Profits over Liabilities (%) | Debt /Equity Ratio |
|---|---|---|---|---|---|---|---|
| 1999 Q2 | 244 | 1,780 | 1.9 | 34 | 41.1 | 13.6 | 2.9 |
| 1999 Q1 | 244 | 1,809 | 1.6 | 38 | 46.8 | 12.1 | 2.9 |
| 1998 Q4 | 244 | 1,816 | 1.3 | 47 | 46.6 | 9.5 | 2.8 |
| 1998 Q3 | 244 | 1,941 | 1.1 | 50 | 50.3 | 8.6 | 3.3 |
| 1998 Q2 | 244 | 2,036 | 1.2 | 58 | 54.0 | 8.4 | 3.7 |
| 1998 Q1 | 244 | 1,983 | 1.4 | 36 | 40.5 | 9.3 | 3.7 |
| 1997 Q4 | 244 | 2,092 | 1.0 | 25 | 28.2 | 7.4 | 4.6 |
| 1997 Q3 | 244 | 1,711 | 1.2 | 39 | 49.2 | 9.0 | 3.1 |
| 1997 Q2 | 244 | 1,455 | 1.6 | 20 | 16.2 | 15.1 | 2.2 |
| 1997 Q1 | 244 | 1,403 | 2.7 | 18 | 19.0 | 19.5 | 2.1 |
| 1996 | 240 | 1,333 | 3.5 | 10 | 11.3 | 15.3 | 2.0 |
| 1995 | 240 | 1,038 | 4.4 | 7 | 4.9 | 18.9 | 1.7 |
| 1994 | 239 | 776 | 6.1 | 4 | 2.6 | 24.3 | 1.5 |

Source : Data from the Stock Exchange of Thailand and compiled by Merrill Lynch Phatra

1/ Profit is defined as an earning before interest, taxes, depreciation, and amortization(EBITDA).

## Remaining challenges

40. **Though success in debt restructuring is inherently difficult to ascertain, this should not detract from the considerable progress that has already been made in structural reform.** With the decline in interest rates and the emergence of economic recovery, the prospects for corporates have improved significantly. Increased foreign participation has promoted the operational restructuring of corporations. This is most notable in the banking sector, where 6 out of the remaining 13 banks may soon be under foreign ownership (and where foreign participation in the others has also increased). But foreign acquisition and consolidation has also taken place in the insurance, property, construction materials, chemicals, and automobile sectors. Also, major efforts have been made to promote debt restructuring, through enactment of key legal reforms, assistance in recapitalization for banks, tax incentives, and the creation of CDRAC to facilitate out-of-court negotiations.

41. **Many challenges remain, especially in the legal area, where the new framework for bankruptcy has yet to be tested.** The main problem has been that creditors have been unwilling to file bankruptcy cases, other than with the agreement of the debtor.

- Since the enactment of the rehabilitation chapter in April 1998, only 30 rehabilitation proceedings have been successfully commenced (as of November 11, 1999) and all of them have been effectively consensual—typically as a means of using majority power to enforce a pre-packaged bankruptcy agreement.

- Though liquidation proceedings under bankruptcy have been more numerous—around 300 cases have been sent to the new Bankruptcy Court—they are still small compared to the roughly 240,000 NPL cases in the country. Most cases have involved individuals. In those cases where the debtor is an enterprise, they have been limited to circumstances where there is no chance of rehabilitation and the owners of the enterprise have not actively resisted liquidation.

42. **Thus there seem to be no cases where creditors have initiated insolvency proceedings over the objections of a recalcitrant corporate debtor.** The (in)action of CDRAC creditors provide a clear illustration of this. If a debtor refuses to sign the debtor-creditor agreement, creditors are required (under the inter-creditor agreement) to take legal action against the debtor in question. Even though more than 130 debtors have not signed the debtor-creditor agreement, creditors have decided to meet their obligation by filing enforcement actions in civil court (including actions to foreclose on security and execute judgments) rather than by initiating insolvency proceedings. Reasons for avoiding insolvency proceedings are complex, ranging from legal considerations (ambiguities in the criteria under which bankruptcy can be commenced, problems associated with the appointment of planners, inadequate features for converting rehabilitation into liquidation cases), institutional constrains, and deficiencies in bank capital that dissuade financial institutions from carrying out bankruptcy threats for fear of exposing inadequate provisioning (Box 4). However, unless creditors demonstrate their willingness to use the bankruptcy law against recalcitrant debtors, a vital part of the framework for promoting out-of-court debt restructuring is lost.

43. **Notwithstanding these institutional problems, the authorities' hopes for more rapid progress in debt restructuring are pinned on CDRAC.** Specifically, under the timetables agreed to by debtors and creditors when signing their inter-creditor and debtor-creditor agreements, debt restructuring in the first 700 target cases should be largely completed by the first quarter of 2000. This has raised market expectations that a significant breakthrough in corporate debt restructuring may be imminent.

44. **CDRAC's success in promoting debt restructuring will depend crucially on a number of factors.** First, creditors and debtors will need to respect the deadlines set out in their respective agreements. Enforcement of these deadlines will depend crucially on CDRAC's powers of moral suasion and its willingness to levy fines. Second, there needs to be trust in the mediation and arbitration services provided for in the CDRAC agreements. However, there have been delays in finding and financing mediation services, and in providing the technical expertise, on which the arbitration panel can draw when making its findings. Third, even if the timetables are adhered to, there is always the possibility that in the end no agreement is reached. Creditors are then required to file court cases: either a joint petition for collection of all their credits, or reorganization under new management or liquidation of the debtor. But this means the debt restructuring will fall to the courts, a lengthy process that has its own problems.

**Box 4. Why is Progress on Corporate Debt Restructuring So Slow?**

**Despite the measures that have been introduced to promote corporate debt restructuring, discussions with creditors, debtors, and practitioners point to a number of factors that continue to slow the debt restructuring process:**

**Legal obstacles**

- **Lack of objective criteria for commencing bankruptcy proceedings.** In many legal systems, failure to service debt is sufficient to establish debtor insolvency. However, Thailand's courts also recognise balance sheet tests of insolvency. This allows debtors to not service their debts and yet claim solvency through judicious use of asset valuations.
- **Uncertainties in the planner process.** In many countries, the courts appoint planners to rehabilitate companies. In Thailand the appointment of planners is more adversarial: unless three quarters of creditors can agree, the debtor appoints the planner. This uncertainty may dissuade both creditors and debtors from filing for bankruptcy. In addition, potential criminal liability for "excessive" fees and the possibility that planners might not be paid at all if their plan fails to secure necessary creditor approval impedes the planning process, and may impair the quality of debt restructuring.
- **Difficulties in converting unsuccessful rehabilitation into liquidation proceedings.** The risk is that a nonviable debtor can use delays under rehabilitation to delay liquidation. Even worse, if the rehabilitation fails, all insolvency proceedings terminate, allowing the debtor to resume activities.
- **Foreclosure.** Though the process has been speeded up, debtors can still challenge the results of the auction, by citing official prices established by the Land Department. In addition, different assets require different foreclosure procedures.
- **Securitization.** The absence of a register of corporate security, and the narrow range of securitizable assets limits scope for the future extension of credit and, by making loans more risky, leads to unnecessarily high interest rates on loans.

Again, the point is not to use the legal system to restructure corporations. Rather it is to set clear rules so that outcomes are quick and predictable, which can then be used as a clear reference point for out of court negotiations.

**Economic and institutional obstacles**

- **Conflicts of interest between creditors—secured versus unsecured, domestic versus foreign, large (steering committee members) versus small—by their nature have the potential to delay agreement on debt restructuring plans.** The introduction of inter-creditor agreements has been the main attempt to overcome this problem.
- **State owned financial institutions.** Under current law, state employees have potential criminal liability for eroding the value of state assets. This makes it difficult for them to accept reductions in the value of their debt claims (even though in the end this might maximise recovery for the state).
- **Insufficient bank capital.** Given inadequate provisioning, resulting from the heavy reliance on possibly overvalued collateral, banks are unwilling to restructure debts or to foreclose on assets, out of fear that the resulting write-down may expose their weak underlying capital position. As a result, domestic creditor-led restructurings are generally reschedulings, but with returns below cost of capital this may erode bank profitability in the future. Increased bank capital is thus a necessary—though not sufficient—condition for effective corporate debt restructuring.

Finally, creditors may be waiting for economic recovery to take hold before taking decisive action on restructuring. Recovery may improve the outlook for firms, reducing the size of the haircut (and the impairment of capital) that banks have to take; recovery should also raise asset prices, increasing the value that banks can recover from their loan collateral.

## D. Conclusion

45. **The authorities have made important steps in designing legal and institutional reforms that will promote corporate debt restructuring.** Perhaps more important, if successful, the legal reforms will strengthen market relations in Thailand and increase the efficiency of credit allocation. The CDRAC process will soon face its first crucial test, as the deadlines for debt restructuring in its first 700 target cases come due. With economic recovery, the corporate situation has clearly improved. The key now is to ensure that this improvement in ability is matched by an increased willingness to pay by debtors, i.e., by enforcement of property rights.

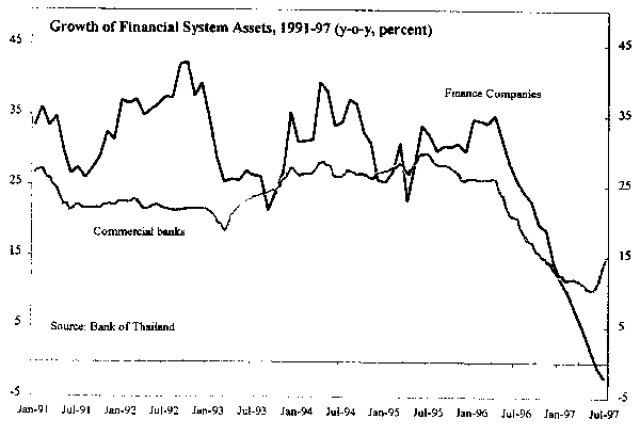
## III. Financial Sector Restructuring[1]

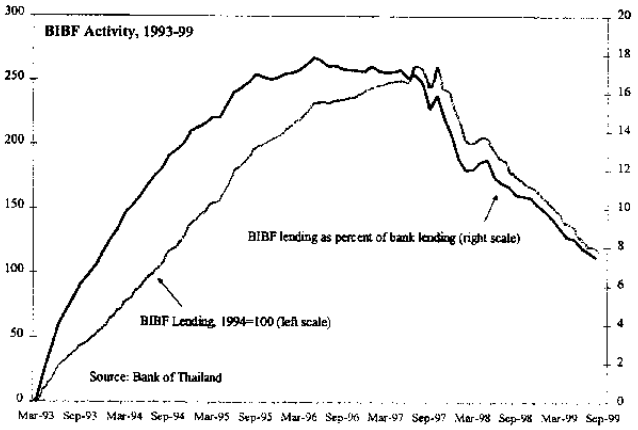
46. **Thailand's financial sector has experienced a deep crisis unprecedented in scope and magnitude.** Several years of strong economic growth underwritten by rapid credit expansion and large capital inflows exposed underlying structural weaknesses in the conduct of banking and the regulatory framework. Growing confidence problems in the financial sector were brought to a head by the currency crisis in mid-1997, which exacerbated underlying solvency problems in finance companies and weaker banks. The adverse effects of the depreciation and subsequent economic contraction on corporate balance sheets led to a rapid build-up in non-performing loans and concomitant decapitalization throughout the whole financial system. This chapter discusses the development of the crisis in the financial sector and the steps taken to normalize the situation.

### A. Prelude to the Crisis

#### Financial sector developments

47. **The financial system grew rapidly in the 1990s, driven especially by expansion in the activities of finance companies and the offshore banking sector**. The investment-led growth of the Thai economy was largely debt financed, which was reflected in the rapid growth



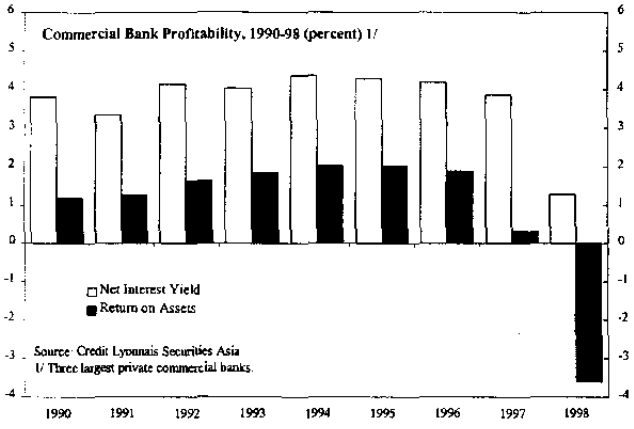



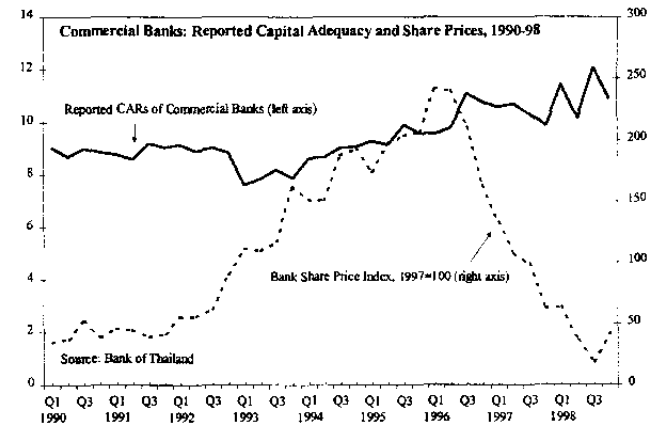

of financial system assets. Simultaneously, easier licensing requirements for finance companies contributed to their expansion. Finance companies tended to focus more on consumer and real estate financing, while banks leaned more toward investment financing, particularly in the manufacturing sector. Meanwhile, Bangkok International Banking Facilities (BIBFs) were established in 1993 to promote Bangkok as a center of international finance, competing with Hong Kong and Singapore. The long-standing stability of the exchange rate, relatively high

[1]Prepared by Vikram Haksar, with input from Lorenzo Giorgianni (both APD).

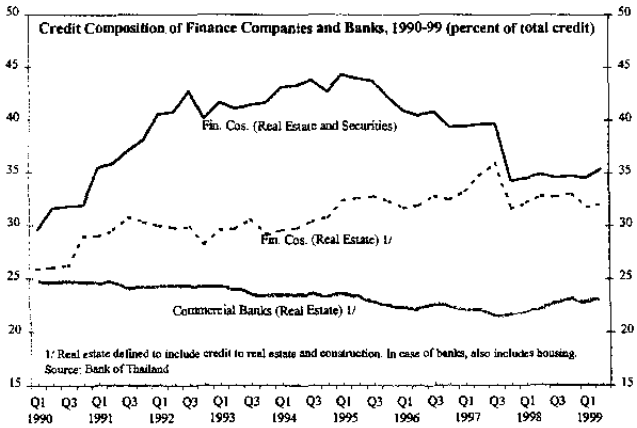
baht lending rates and substantial tax breaks led to a rapid growth in the activities of BIBFs. Contrary to initial hopes that these activities would focus on investments in South-East Asia, BIBFs rapidly became a major channel for foreign capital flows into the domestic Thai economy.

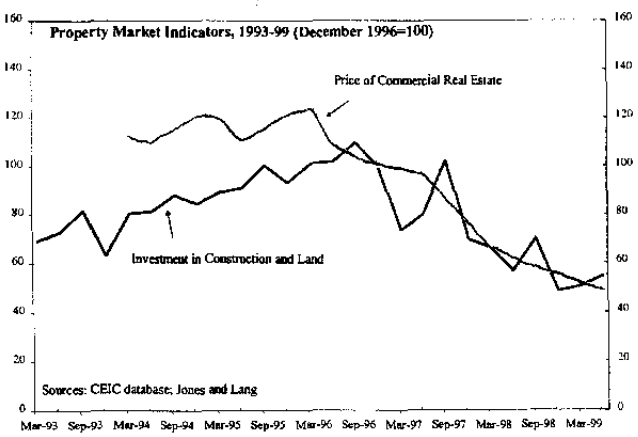
48. **Banks appeared profitable and adequately capitalized throughout this period, while bank share prices quadrupled.** Banks' reported lending spreads averaged about 6.3 percent in the period 1993-97, as restrictions on new entry dampened competition, while rapid corporate income growth accommodated high bank lending spreads. These in turn supported bank profitability with returns on assets averaging 1.6 percent in this period. Simultaneously, the capital position of commercial banks appeared adequate, with reported capital adequacy ratios hovering around 9 percent through 1997. At the same time, bank share prices boomed in the pre-crisis period, quadrupling between 1992–96.



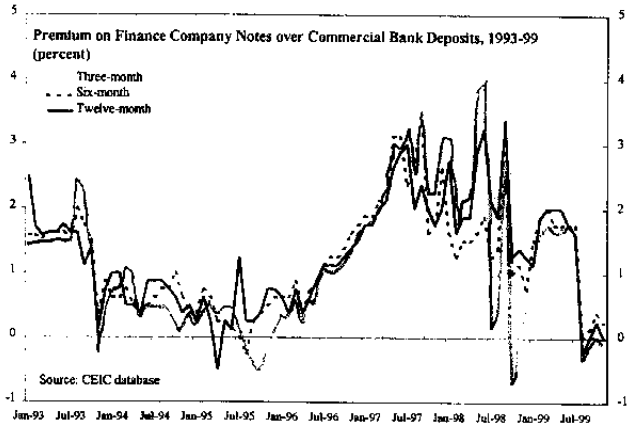

49. **However belying this positive picture, indications of underlying weakness in the financial system continued to mount**. Both banks and finance companies were heavily exposed to the property sector, but the exposure was most acute in the case of finance companies. This was particularly worrisome in light of the mounting evidence of over-investment in the property sector, which accounted for a large share of the already rapid pace of

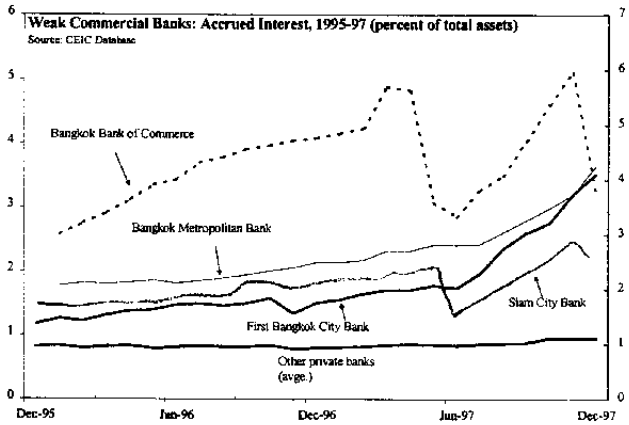


overall investment. Available information on property values also suggests that these (while volatile) were also trending up before reaching a plateau in 1996. Additionally, substantial shares of finance company credit were being channeled into the stock market, leading to a rapid growth of risk.

50. **Meanwhile, the liquidity of finance companies was coming under increasing strain and accrued interest levels in weak commercial banks rose further.** Spreads on finance company borrowing (relative to commercial bank deposits of the same maturity) began to climb from mid-1996 as the economy slowed and confidence in their prospects began to weaken. More severe liquidity problems emerged in early 1997 in response to which the authorities provided support to select finance companies. At the same time, while the reported level of overall nonperforming loans (NPLs) was relatively low (12 percent of total loans at end-1996) accrued interest levels in several banks were higher than average and growing, suggesting that true NPLs were actually higher and rising as well.




## Weaknesses in the banking and regulatory framework

51. **Bank capital was substantially overstated, reflecting insufficient provisioning and reliance on collateral of uncertain value**. Anecdotal evidence suggests that banking practices in Thailand focussed heavily on "name" based lending, relying on personal guarantees and collateral—frequently tracts of rural land and partially completed real estate projects—to secure loans. Extensive credit risk analysis was not often carried out, and collateral was mostly valued in-house (not by independent appraisers). Further, bank balance sheets were particularly opaque, given insufficient recognition of the extent of impairment of assets and resulting income. Indeed, while reported bank NPLs in May 1997 amounted to 11.6 percent of assets, this figure largely included loans that had been non-performing for one year and over, and thus did not capture the more recent deterioration in asset quality. Many private market analysts at the time conservatively estimated NPLs to be at least 15 percent of total loans for banks.

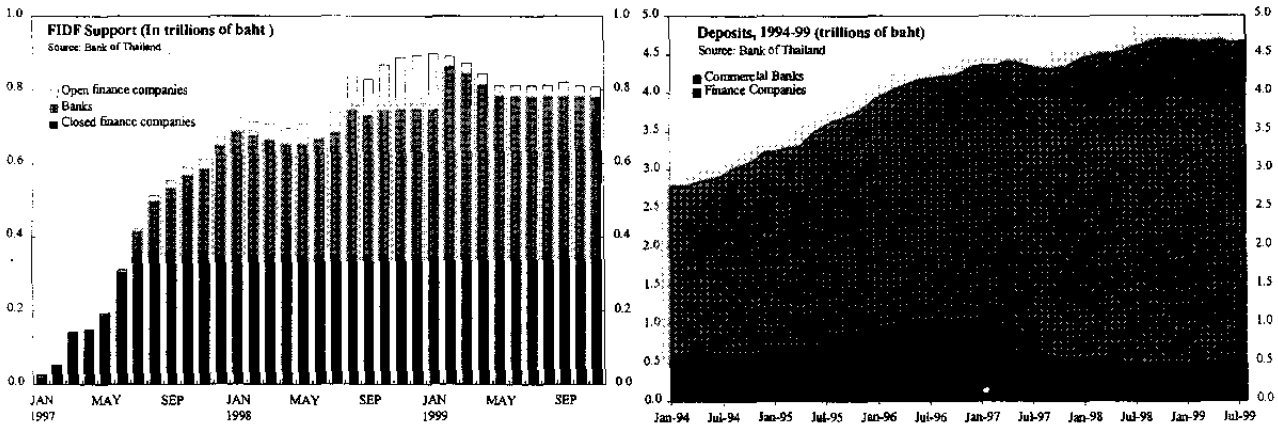
52. **Problems in the regulatory framework arose particularly in the rules governing loan classification and interest accrual**. Loan classification rules were too generous—secured

loans had to be in a non-accrual state for 12 months before they were classified as nonperforming. The implied provisioning shortfall was exacerbated by the common overvaluation of collateral such that reported capital adequacy ratios were substantially misleading. In addition to the long period of time that banks could accrue interest on nonperforming loans—thereby effectively overstating the banks' income—rules on reversal of accrued interest were also not sufficiently stringent.

## B. Crisis and Initial Response

### Finance companies

53. **The finance companies were the first domino to fall in the Thai financial crisis.** Excess exposure to sectors sensitive to the asset-price inflation of the 1990s, coupled with weak underlying capitalization had left them particularly vulnerable to the slow-down in economic activity and asset price decline that began in late 1996. Underlying solvency problems first manifested themselves at 10 finance companies early in 1997 (Box 1). During the spring of 1997 the broader finance company sector began to experience a large-scale withdrawal of deposits, prompting massive and secret support from the Financial Institutions Development Fund (FIDF),[2] that peaked in August at about $10 billion, some 8 percent of 1997 GDP. The deposit withdrawal represented more a flight to quality, as households and businesses moved their savings out of finance companies and into the larger commercial banks.




54. **To contain the crisis, the authorities suspended insolvent finance companies and introduced a blanket deposit guarantee.**[3] In mid-1997, 58 out of 91 finance companies,

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[2]The FIDF is a legally distinct agency established within the BOT to rehabilitate distressed financial institutions.

[3]The guarantee covers deposits and credits (excluding subordinated credits) of Thai financial institutions (including banks, finance companies and foreign bank branches, but excluding BIBFs). It also covers interbank credits, but excludes creditors that did not act in good faith,

(continued...)

accounting for about 14 percent of the total financial sector, were suspended and a due diligence process to assess their solvency was initiated. All of the suspended finance companies had received FIDF support far in excess of their capital, and their solvency was suspect. However, the due diligence process took substantially longer than planned, partly on account of political pressure, during which time the assets of the suspended companies deteriorated. Several announcements were made at various points in time to the effect that the government would guarantee the deposits of all operating financial institutions. However, a lack of coordination adversely affected public confidence in the credibility of the guarantee, compounded by concerns over the legal ability of the Bank of Thailand (BOT) to effectively honor the guarantee. These issues were laid to rest by the introduction in October of the first comprehensive financial sector reform package under the Fund-supported program. Under this, the state-owned Financial Restructuring Authority (FRA) was established to resolve the problems in finance companies. Simultaneously, a state-owned Asset Management Corporation (AMC) was also created to manage assets acquired by FIDF in the process of financial sector restructuring. In the second half of 1997, the due diligence of the suspended finance companies was conducted under the auspices of the FRA and 56 were ultimately determined to be insolvent and closed at the end of the year. From this point on, the FRA's focus shifted to asset resolution including the liquidation of finance company assets through public auction in which the public AMC was to participate as the bidder of last resort. In 1998, twelve additional finance companies that were deemed insolvent were intervened and merged with a state-owned finance company into a new bank.[4]

**Commercial banks**

55. **The confidence problems which had first affected finance companies, spread next to commercial banks, exacerbated by the exchange rate crisis in July**. While rollover rates for external credit lines were reduced to banks in general, the weaker commercial banks began to experience deposit withdrawals thus squeezing their liquidity. As a result, the FIDF also started providing support to these banks as well, with FIDF credit outstanding to banks reaching $8 billion, about 6 percent of GDP, by the end of the year. At the same time, overall commercial bank asset quality began to deteriorate sharply in mid–1997, with reported NPLs rising from 11½ to 18½ percent of all loans between May and June. By the end of the year, NPLs exceeded 22½ percent of all loans (about $35 billion, some 27 percent of GDP).

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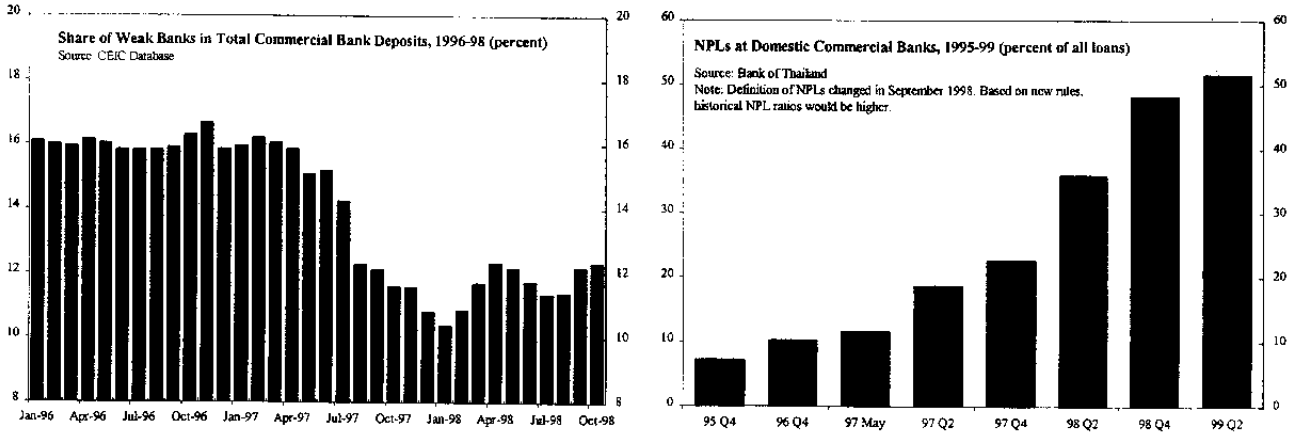
credits held by directors and management of failed institutions, and credits provided by offshore head offices, in the case of foreign bank branches.

[4]This was reflected in the switch in FIDF support from open finance companies to banks in early 1999 with the commencement of operations by Bank Thai.

## BOX 1: TIME-LINE OF CRISIS IN THE FINANCE COMPANIES

| | |
|---|---|
| **March 1997** | ▸ First explicit sign of trouble as BOT and MOF announce that 10 as yet unnamed finance companies would need to raise capital (following a strong denial of problems in earlier months). Deadline to raise capital is within the shortest period allowed under the law, failing which FIDF would effectively take over these institutions. |
| **March–June, 1997** | ▸ Public confidence in finance companies erodes. Deposit withdrawals lead to massive and secret liquidity support from FIDF to 66 finance companies. |
| **June 1997** | ▸ BOT suspends 16 finance companies (7 from the March list and 9 others). Those that cannot produce a realistic rehabilitation plan in 30 days to be closed and merged with KTT (a large government owned finance company). Also announced that creditors of the 16 are expected to bear part of any losses. |
| | ▸ Government announces as well that it would not suspend additional finance companies (beyond the 16 already suspended) and that it would guarantee all domestic and foreign depositors and creditors, of all finance companies other than those suspended. However, credibility of these measures is damaged by multiple inconsistent official statements over the exact extent of the guarantees. |
| **August 1997** | ▸ In the context of Fund program negotiations, BOT and MOF issue a joint statement detailing measures to strengthen confidence in the financial system. |
| | ▸ An additional 42 finance companies have their operations suspended (for a total suspended of 58 out of 91 finance companies) and are given 60 days to present rehabilitation plans to the authorities. Treatment of depositors and creditors in the suspended companies is clarified. Decision made to take no action as yet against commercial banks. |
| | ▸ Government announces blanket guarantee of banks and remaining finance companies backed by unlimited FIDF support (in baht). However, major uncertainties continue to haunt the guarantee, including the legality of BOT liquidity support to honor the guarantee. |
| **October 1997** | ▸ To resolve concerns about the credibility of the guarantees and address other institutional arrangements, emergency decrees are passed to: (i) amend the BOT act to explicitly empower the FIDF to lend to intervened financial institutions with or without collateral, and make explicit the government's financial support of the BOT; (ii) amend the Commercial Banking and Finance Company Acts to empower the BOT to request changes in capital or management in troubled institutions; (iii) establish the FRA to resolve the intervened finance companies; (iv) establish a public AMC to deal with impaired assets of financial institutions taken over by FIDF. |
| **December 1997** | ▸ FRA and MOF announce closure of 56 of 58 finance companies, giving a clear indication of government resolve. Focus of FRA shifts to asset management and disposition. |
| **March 1998** | ▸ FRA auctions of finance company assets commence, starting with cars and securities. Agreement on compensation reached with creditors of 42 finance companies intervened in August. |
| **May 1998** | ▸ Additional 7 finance companies are intervened by FIDF and merged with KTT. |
| **August 1999** | ▸ Final large FRA auction of 15 percent of finance company assets yields a recovery of 25 percent. |
| **November 1999** | ▸ Further asset sales, mainly to the state-owned Asset Management Company. |




56. **The authorities announced their strategy for dealing with commercial banks in October 1997**. The key principles included:

- Up-front recognition of existing losses, which were then to be written off against equity capital;
- Preparation of recapitalization plans by individual banks to be completed by the first quarter of 1998;
- In the event banks could not raise capital within the stipulated time frame, the BOT would have the right to demand a legally binding Memorandum of Understanding, extending the deadline for raising capital;
- Banks were encouraged to seek foreign partners given the limited resources then available in Thailand. Shareholders in those banks ultimately unable to raise capital would lose their equity stakes, and the banks would then be recapitalized by FIDF as a prelude to subsequent merger or privatization.

57. **While initially the BOT had been reluctant to intervene banks, three banks were finally taken over in January 1998 (Box 2)**. The BOT's initial reluctance to intervene banks reflected uncertainties about the BOT's legal authority to actually do so. In addition, there were concerns that intervention of commercial banks at that point might widen the crisis. The final decision to intervene was taken in light of analysis that showed the three banks were clearly insolvent. The recent amendments to the Commercial Banking Act provided the basis for the BOT to write down capital and change management in these troubled banks. Subsequently, the authorities hired a financial advisor for developing a strategy to deal with these banks, as well as with the Bangkok Bank of Commerce that had been recapitalized by the FIDF in 1996. Eventually, a number of other small banks were intervened such that by the summer of 1999, the authorities had taken over a total of six (of fifteen) commercial banks.

**BOX 2: TIME-LINE OF CRISIS IN THE COMMERCIAL BANKS**

| | |
|---|---|
| **March 1996** | ▸ Bangkok Bank of Commerce is recapitalized and place under control of FIDF. |
| **December 1997** | ▸ Bangkok Metropolitan Bank (BMB) is intervened, capital of existing shareholders is written down, management is changed, and the bank is recapitalized by FIDF via a debt-equity swap. |
| **January 1998** | ▸ First Bangkok City Bank (FBCB) and Siam City Bank (SCIB) are intervened and dealt with in the same fashion as BMB the previous month. BMB, FBCB, and SCIB together account for about 10 percent of banking system deposits. |
| | ▸ A new state-owned commercial bank, Radanasin (RAD), is established. |
| | ▸ A majority stake in Thai Danu Bank is acquired by foreign investors (Development Bank of Singapore). |
| **March-April 1998** | ▸ Banks start to recapitalize with many foreign deals. New loan classification and provisioning rules are introduced. |
| **June 1998** | ▸ Bank of Asia acquired by ABN-AMRO. |
| **August 1998** | ▸ Union Bank of Bangkok (UBB) and Laem Thong Bank (LTB) are intervened. |
| | ▸ LTB is merged with RAD. |
| | ▸ UBB together with 12 intervened finance companies merged with Krung Thai Thanakit (KTT), the state-owned finance company and subsidiary of the state owned Krung Thai Bank (KTB). |
| | ▸ FBCB is merged with KTB. |
| | ▸ BBC is converted into an AMC, while its good assets are spun-off to KTB. |
| | ▸ BMB and SCIB are to be recapitalized consistent with the end-year 2000 LCP rules and offered for privatization. |
| **April 1999** | ▸ Bank Thai formed from merger of UBB and 12 finance companies with KTT. |
| **May 1999** | ▸ Siam Commercial Bank raises over $1½ billion in new capital, half of which through participation in the Tier-1 capital support scheme. |
| **July 1999** | ▸ Nakornthon Bank is intervened. |
| **September 1999** | ▸ Nakornthon is sold to Standard Chartered Bank. |
| **November 1999** | ▸ The sale of RAD to United Overseas Bank of Singapore is finalized. |

## C. Comprehensive Financial Sector Reform

58. **After stemming the initial crisis, the authorities focussed on revamping the prudential and legal framework and introduced a scheme to support private bank recapitalization.** In this context, the key principles underlying financial sector reform in Thailand have been:

- No bailout of private share-holders or holders of subordinated debt;
- Intervention of those institutions that were unable to raise sufficient capital and meet prudential norms;
- A strong bias toward private-market based recapitalization and restructuring of the financial sector.

### Initial changes to the regulatory framework

59. **Revamping the prudential framework focussed on bringing capital adequacy, and loan classification and provisioning rules in line with international best practices.** A decision was made that it would be better to implement the new rules at the outset, but allow banks some time to conform with the new and more stringent guidelines. New loan classification, loss provisioning and interest accrual rules were introduced in March 1998, after consultation with the banking industry, and took effect from July that year. Details of the new rules are presented in the following Table 1. The new rules require that all accounts, both on-balance sheet and off-balance sheet, be classified into five categories. The classification is to be done primarily using qualitative criteria such as the prospects of the business or borrower, cash flow, and payment capability. However, if such information is missing or insufficient for assessing a borrower's repayment capacity, the time a loan has been overdue is used. Previously, secured loans had to be twelve months overdue to be classified as nonperforming (six months if unsecured). Simultaneously, interest continued to be accrued on secured loans for twelve months (six months if unsecured—though in January 1998, the interest accrual period was reduced to six months irrespective of collateral). More importantly, there was no requirement to reverse accumulated accrued interest once a loan moved to non-accrual status, as a result of which bank capital was grossly overstated. Under the new rules, banks must cease accruing interest after three months of missed payments. Further, from January 2000 onwards, banks will also have to immediately reverse interest accrued in the three months prior to loans being shifted to non-accrual status. Also, rules on collateral valuation were changed to require yearly appraisals by independent appraisers for collateral above a certain threshold so as to set appropriate safeguards. Under the new rules, up to 90 percent of the appraised value of collateral can be deducted from the loan principal prior to forming provisions (50 percent if the collateral has not been re-appraised within the year).[5] To facilitate the process of debt

[5]The shortage of qualified appraisers combined with the illiquid and depressed property market, highlight the substantial risks and uncertainties associated with current collateral valuations.

(continued...)

restructuring, rules governing the classification and provisioning of restructured loans were also issued. Finally, capital adequacy ratios for finance companies were increased from 8 percent to 8.5 percent of risk assets, the same ratio which applies to commercial banks.

**Table 1. Loan Classification and Provisioning Requirements Introduced in July 1998**

| | Time overdue (In months) | | Provisioning requirement (In percent of loan principal) | |
|---|---|---|---|---|
| | **Old** | **New** | **Old** | **New** |
| **Performing loans** | **< 12** | **< 3** | **General provisions** | |
| Pass | ... | 0-1 | 0% | 1% 1/ |
| Special Mention | ... | 1-3 | 0% | 2% 1/ |
| **Non-performing loans** | **> 12** | **> 3** | | |
| Substandard | ... | 3-6 | 15-20% | 20% |
| Doubtful | ... | 6-12 | 100% | 50% |
| Loss | ... | > 12 | 100% or writeoff | 100% or writeoff |
| **Implementation of new provisioning rules:** | | | (In percent of end-2000 provisioning requirement) | |
| By end-1998 | | | ... | 20% |
| By mid-1999 | | | ... | 40% |
| By end-1999 | | | ... | 60% |
| By mid-2000 | | | ... | 80% |
| By end-2000 | | | ... | 100% |

1/ The 1 percent general provision counts towards Tier-2 capital. The rules for computing general provisions were changed in late 1999. Previously general provisions had been formed on all outstanding performing loans. They are now to be formed on all performing loans, *net* of existing collateral.

60. **In order to avoid a credit squeeze and substantial nationalization of the banking system, the authorities allowed banks to phase in these new rules.** While the new norms took effect from July 1998, financial institutions were allowed to phase in the provisioning rules over a 2½-year period to be concluded by end-2000 (Table 1). Similarly, the new rules on accrual of interest were introduced in January 1999, to be completely phased in by January 2000. This was done to give banks time to raise capital reserves as these rules represented a substantial tightening compared to the previous regime. A crucial feature of the process was the very transparent fashion in which the forbearance was exercised with the announcement of an explicit timetable for raising additional provisions.

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These risks have been heightened by the lengthening—in mid–1999—of the period before which collateral must be re-appraised, from six to twelve months.

61. **The authorities also effectively allowed foreigners to take control of existing Thai commercial banks.** Previously, foreign ownership of Thai banks had been legally capped at 25 percent. The BOT relaxed this limit for a period of 10 years from 1998. During this time, foreigners may—subject to BOT approval—acquire more than a 50 percent stake in Thai commercial banks. After 10 years, the share of foreign ownership cannot be increased but can legally remain at the same level in excess of 49 percent, effectively grand-fathering foreign control of any banks acquired in this period.[6] This change has proved particularly important in facilitating the sale of intervened banks, and will lead to increased competition in the Thai banking system over the medium term.

**August 1998 financial sector restructuring package**

62. **In order to support bank recapitalization, given the rapid growth of NPLs, the authorities announced a new and more comprehensive financial sector restructuring package in August 1998.** In the first half of 1998, as the economic slow-down intensified, NPLs continued to mount steeply going from 22½ percent of all bank loans at the end-1997 to more than 35 percent of all loans by the middle of 1998. While several banks, including the two largest, had been able to successfully raise private capital in early 1998, it was clear that bank's would need to raise much more, while it remained uncertain as to whether they would be able to do so. As such, the new package announced included two state-funded schemes to facilitate the recapitalization of private banks (Box 3). The recapitalization schemes were tied into an overall strategy of advancing debt-restructuring to bring NPLs down and allow banks to restart lending. The schemes came with strong safeguards for the use of public funds, including, in the case of the Tier-1 scheme, full up-front recognition of losses by existing shareholders before the injection of state capital, and the right for the government to make changes to management and the board at the bank. To date, one commercial bank has accessed the Tier-1 scheme, and as such the schemes have fulfilled their minimum purpose of acting as a safety net to ensure the viability of the core banking system.

63. **As part of the focus on debt restructuring, the August package also introduced rules governing the establishment of privately-owned Asset Management Companies (AMCs).** Under these guidelines, private banks can set up AMCs which specialize in asset recovery and securitization, including as joint ventures with outside investors. This was expected to accelerate the clean up of bank balance sheets. The measures also included safeguards, including requiring consolidation of the bank's and AMC's balance sheets when the exposure of the bank to the AMC is substantial. In October this year, the authorities issued additional tax measures applying to private AMCs that ensured that the transfer of NPLs to an AMC was tax-neutral from the banks' point of view. Also, some regulations that limited

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[6]In the event that foreign-owned banks require additional capital after the 10 year grace period is over, they must secure a substantial portion of this from Thai investors, which over time would lead to a dilution of foreign ownership.

**Box 3: Public Capital Support Facilities**

**Two public capital support schemes were introduced. The first was aimed at catalyzing new private Tier-1 capital to provide institutions with the resources necessary for adequate provisioning and new lending. The second provided resources to accelerate restructuring of NPLs and support new lending.**

**Tier-1 Capital Scheme**: Here the government makes available Tier-1 capital in the form of tradable government bonds on a preferred basis, pari passu with private investors. Conditions and safeguards include that: (i) institutions advance and implement end-2000 loan classification and provisioning rules; (ii) existing share-holders bear associated losses; (iii) viable restructuring plans are approved by the BOT; and (iv) the government or new investor will have the right to change existing management. If needed, solely public resources could be used to bring the institutions CAR up to 2.5 percent. Thereafter, the government matches any new capital provided by new shareholders, at least up to the regulatory minimum.

**Tier-2 Capital Scheme**: Here the government subscribes to a bank's subordinated debt, with payment in the form of non-tradable government bonds. The injection is based on the magnitude of: (i) the write-down resulting from corporate debt restructuring, net of previous provisioning; and (ii) the net increase in lending to the private sector. Resources made available by the government cannot exceed 2 percent of risk assets, of which 1 percent is the limit related to new lending. The government bonds issued in the Tier-2 scheme are nontradable as the transaction is reversible (subordinated debt that must ultimately be returned to the government). The benefit to the bank from the Tier-2 scheme is that its debenture pays a lower interest rate than the market rate, giving the bank additional income as well as counting towards the Tier-2 capital ratio.

the size of AMCs that banks could set up were modified to allow banks to transfer a critical mass of NPLs to AMCs.

64. **The authorities also announced the intervention of two additional banks and five finance companies in August 1998**. Subsequently, a number of intervened banks were merged with existing state banks, while 12 finance companies taken over by KTT were merged with another intervened bank to form a new state owned bank (see Box 2).

**Changes to the legal framework**

65. **The authorities are in the process of preparing laws that will introduce a new regulatory framework for financial institutions.** Three closely related laws are in an advanced stage of preparation and are expected to be presented to parliament in the first half of 2000. These include: (i) the Financial Institutions Law which will unify the existing Commercial Banking and Finance Company Laws; (ii) a Deposit Insurance Law that will eventually supersede the existing blanket guarantee of the financial system; and (iii) a new

Central Bank Law which will aim to enhance the authority, independence and accountability of the BOT.

66. **The new Financial Institutions Law aims to comprehensively modernize and strengthen the prudential framework for regulating and supervising deposit taking institutions.** In particular, the law will (i) concentrate supervisory responsibilities with the BOT, including for specialized financial institutions (currently under MOF supervision) and limit the power of BOT to grant individual exceptions; (ii) codify prudential rules with respect to capital adequacy, large exposure and credit to insiders and related parties; (iv) provide the BOT with an adequate legal framework to regulate and undertake consolidated supervision of credit institutions and their subsidiaries; (iv) introduce clear exit policies, including with regard to (a) actions to be taken by BOT when a financial institution does not meet supervisory standards; (b) conditions that should trigger mandatory intervention by BOT; and (c) the legal regime applicable to the intervention of financial institutions (the provisions of the law in this area will be consistent with the provisions contained in the law establishing the deposit insurance agency which is currently also being drafted); (vi) review and rationalize penal provisions (penalties, fines, terms of imprisonment, etc.); (vii) introduce new provisions to permit the control of money laundering.

## D. Progress on Financial Sector Restructuring

### Financial sector consolidation

67. **The restructuring of the financial sector has led to the consolidation of the system and a temporary increase in the role of the state (Table 2).** There has been a shift from finance companies to banks, and the number of state-owned commercial banks has increased from one to four. Moreover, this has been reflected in a three-fold increase in financial system assets under state control, which rose from 10 percent in mid-1997, to over 23 percent by late 1999. This has also been mirrored in an increase in foreign equity participation in the Thai banking system, with the number of foreign owned commercial banks increasing sharply since mid-1997, from zero before the crisis (excluding foreign branches), to four today with the takeover of two small Thai banks by foreign banks in early 1998 and the sale of two of the intervened banks to foreign investors that was completed late this year.

68. **However, the increase in the role of the state is expected to be temporary with the core of the banking system expected to remain in private hands.** Of the seven intervened banks, two have been privatized and another two are in the process of being privatized (with sales expected to be finalized by early 2000), one bank has been closed, and another two have been merged with existing state-owned institutions. In addition, two state banks (Krung Thai Bank and Bank Thai) have begun operational restructuring in preparation for their partial privatization over the medium term. The recapitalization and resolution of the bad assets of the state banks, and the loss protection for the banks which are to be privatized, will impose a large burden on public finances. The public injections of equity into state (and intervened) banks has thus far amounted to about $12 billion.

**Table 2. Consolidation of the Financial Sector 1/**

| | Finance companies | | Commercial banks | |
|---|---|---|---|---|
| | Number | Share of Assets | Number | Share of Assets |
| **June 1997** | **91** | **18** | **15** | **60** |
| Total assets of $240 billion | State share less than 1 percent of total assets | | State share 8 percent of total assets<br>Majority foreign-owned: 0 percent of total assets | |
| **Closures** | **56** | **11** | **1** | **2** |
| **BOT interventions** | **12** | **2** | **5** | **10** |
| **Mergers** | **13** | **13** | **5** | **3** |
| **December 1999 2/** | **23** | **4** | **13** | **71** |
| Total assets of $236 billion | State share less than 1 percent of total assets | | State share 23 percent of total assets 3/<br>Majority foreign-owned: 3 percent of total assets 4/ | |

Source: Bank of Thailand

1/ Dollar figures are at constant exchange rates of 37 baht per dollar. Other financial institutions (foreign bank branches and BIBFs) account for the residual 22-25 percent of total assets.

2/ Figures on assets as of end-September, 1999.

3/ This is projected to decline to 15 percent after the privatization of the two remaining intervened banks.

4/ Further, the three largest private banks, with over 1/3 of total assets, have high foreign ownership (30-49 percent).

## Bank recapitalization

69. **The authorities' objective of minimizing the state's role in the financial system has been facilitated by the success of Thai banks in raise private equity capital (Table 3).** Thai commercial banks have been able to raise substantial amounts of new equity capital from private markets. It is estimated that private banks will have raised about $7 billion in new Tier-1 capital from the market by end-1999 (about 50 percent of their June 1997 capital base). This includes common equity but also the more recent issuance's of hybrid and other capital instruments (i.e., SLIPS and CAPS) that has amounted to some $3 billion (Box 4). One of the larger private banks raised over $1½ billion, half of which through the public Tier-1 support scheme. In any event, the success in raising private capital is encouraging given that it was achieved against the backdrop of falling stock prices, rising nonperforming loans, and large operating losses, and it is in stark contrast to the experience of other Asian crisis countries.

70. **The periodic signing of forward-looking memoranda of understanding (MOUs) with the Bank of Thailand has provided additional impetus to the recapitalization process of banks.** After examining the capital needs of all financial institutions earlier in 1999, the Bank of Thailand signed MOUs with the seven banks and nine finance companies needing to raise capital during the first half of 1999. Of the seven banks, two are privately-owned and raised additional capital, including one in part through the Tier-1 scheme. The remaining five banks are state-owned and were recapitalized directly by FIDF in conjunction with their plans

for operational restructuring (Krung Thai Bank and Bank Thai), or as part of the privatization process (Radanasin, Siam City, and Bangkok Metropolitan Bank).

**Table 3. Progress in Bank Recapitalization**
(Tier-1 capital raised since July 1997; in billions of US dollars 1/)

| | 1998 | 1999 | Total |
|---|---|---|---|
| Private banks | 2.6 | 5.5 | 8.1 |
| State banks | 8.3 | 4.3 | 12.6 |
| **Total** | **10.9** | **9.9** | **20.7** |

Source: Bank of Thailand
1/ Calculated at a constant exchange rate of 37 baht per dollar.

71. **The six other banks also made progress in raising capital in 1999.** Among these banks (all privately owned and accounting for 54 percent of total banks deposits), three have raised some $2.8 billion in Tier-1 capital in 1999, which should allow at least two of them to advance the stricter end-2000 provisioning rules and still meet the minimum capital adequacy requirement. Another bank is majority foreign owned, and has adequate access to capital. The remaining two banks also raised capital earlier in 1999.

**Box 4: Hybrid Capital Instruments**

**Hybrid capital instruments consist of non-voting preferred stock and, inseparably stapled to it, a subordinated debt component.** In Thailand these have been issued in the form of so-called SLIPS (Stapled Limited Preferred Securities) and CAPS (Capital Augmented Preferred Securities) comprising equity and debt in equal shares. For banks, the share component is attractive because it prevents dilution of ownership; for investors, the debt component provides a minimum return when losses preclude dividend payments. The share component of SLIPS/CAPS is recognized by the Basel Committee as core capital.

**However, these instruments become very costly once profitability returns, because the bank pays out dividends and interest.** The debt component of the instruments issued in Thailand pays an interest rate in most cases of over 20 percent. While currently banks pay no dividends—such that the effective funding cost of these instruments is about 10 percent— it is likely that well within the life of these instruments banks will be under pressure to declare dividends which will substantially push up their funding cost. As such, banks are likely to use these instruments only on a temporary basis, and replace them with common stock when profitability returns to normal levels.

72. **Nevertheless, the recapitalization plans of the private banks remains subject to a number of risks**. Market sentiment remains volatile following the decline in share prices in the second half of 1999. Additional risks arise from the possibility that a stagnation of the recovery may further raise the level of nonperforming loans, depress collateral values, and prolong corporate debt restructuring (and hence the exit from nonperforming loan status). Also, given the likely future costs associated with the hybrid instruments that have recently been issued by banks, their demand for more traditional equity instruments is likely to intensify again after a few years.

**Asset resolution and debt restructuring**

73. **Asset resolution has focussed on the FRA process, debt restructuring through coordinated creditor activity (CDRAC), and the nascent decentralized AMCs**. The process of liquidating the assets of the 56 closed finance companies is coming to an end, with the last FRA auction likely to be completed in early 2000, and the imminent distribution of the sale proceeds. Thus far, the FRA has auctioned 80 percent of the roughly $23 billion of assets seized from the closed finance companies, with an average recovery rate of 28 percent of the principal amount. About $5 billion (or 30 percent of the total assets on sale) have been acquired by the state-owned AMC. From the perspective of the financial system itself, the authorities have as far as possible favored a decentralized approach to asset resolution, and have encouraged the establishment of private bank owned AMCs. Supporting changes in tax regulations have accompanied this emphasis, and the BOT has introduced several regulations clarifying the process and treatment of debt restructuring, including how losses and write-offs should be accounted for, and how restructured loans should be classified for prudential purposes.

**Table 4. Progress in FRA Auctions (November 1999)**
(Billions of baht)

| | Principal | Recovery Rate (auction value/principal) |
|---|---|---|
| **Liabilities of the 56 closed finance companies** | **855** | ... |
| **Of which: FIDF claims** | **703** | ... |
| (in percent of total assets) | 82 | ... |
| **Total assets sold thus far** | 666 | 28% |
| **Core assets** | 602 | 25% |
| Auto Hire Purchase Contracts | 52 | 48% |
| Residential Mortgage Loans | 25 | 47% |
| Business Loans | 377 | 21% |
| Construction Loans | 1 | 12% |
| Commercial and Other Loans | 147 | 25% |
| **Non-core assets** | 65 | 53% |
| **Core assets sold to:** | | |
| Local investors | 301 | 23% |
| o/w AMC | 197 | 17% |
| International investors | 301 | 28% |

Source: FRA

74. **In early 1999, the BOT relaxed the regulations on re-classification of restructured loans.** Previously, BOT regulations had required receipt of payment for three consecutive payment periods (months) before reclassification of an NPL as performing. The amendment, in April 1999, allows a restructured loan that meets any one of five conditions to be immediately classified as a "pass" asset (thus requiring only 1 percent general provisions) regardless of whether the bank has actually received any new repayments on the loan.[7] While early uncertainties regarding interpretation of some aspects of the regulation resulted in banks being slow to reclassify restructured NPLs, recent clarifications have given renewed impetus to this process of NPL reclassification.

## E. Conclusion

75. **The Thai authorities have made impressive progress toward resolving the problems in the financial sector.** Banks have raised substantial amounts of new capital, the core banking system remains in private hands, and foreign entry should stimulate competition and improvements in technology and service. At the same time, the stubbornly high level of NPLs and slow progress in enforcing property rights highlight the risks that banks continue to face. While banks have created substantial provisions against loan losses, the full extent of likely losses remains hard to predict. The key challenges for the future include optimizing the conditions for debt restructuring so that private banks can return to focus on their core business, and ensuring the swift restructuring and early privatization of the remaining state-owned banks.

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[7]The conditions include: (a) the restructuring is consistent with "normal restructuring practices" and at least two of the creditors agree to the terms of the restructuring; or (b) losses must equal 20% or more of the original book value of the loan and the financial institution has made full provisions for these losses. In addition, an analysis of the debtor's business status and future cash flow, based upon realistic assumptions and supporting documents from creditors, must show that the debtor will be able to service the restructured debt; or (c) in the restructured loan contract, the loan interest rate is at least equal to the market interest rate and no grace period is granted for interest repayments; or (d) in cases where CDRAC or the BOT have approved the restructuring carried out by the financial institution; or (e) in cases where the financial institution has filed in court for collection and where the financial institution and debtor agree to undergo restructuring and obtain a court settlement or where the financial institution has filed a bankruptcy petition against the debtor and the court approves the restructuring or reorganization plan.

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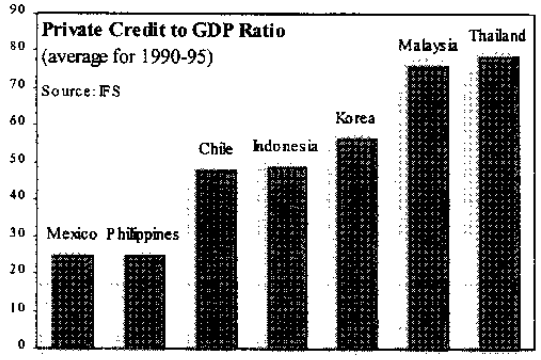
# IV. Credit Growth Before and After the Crisis[1]

## A. Introduction

76. **The recent combination of a sharp output decline and sluggish credit growth has focussed attention on the existence of a "credit crunch."** Citing data showing a decline in credit, and bolstered by anecdotal evidence that firms—especially in the early stages of the crisis—were having difficulty securing loans, many observers have concluded that a credit crunch exists in Thailand (see, for example, Domac and Ferri, 1999). According to this view, the *capacity* and *willingness* of banks to lend were diminished through an erosion of bank capital and a deterioration in firms' balance sheets. To some, policies supported under the Fund arrangement—in particular, the use of high interest rates to stabilize the currency and the tightening of prudential regulations—only exacerbated the credit crunch, thereby deepening the recession and prolonging the period of economic turmoil (Ito and Pereira da Silva, 1999).

77. **However, a slowdown in credit growth is not, by itself, evidence of a credit crunch; what matters is whether the slowdown is primarily demand or supply driven (Box 1).** As discussed below, there is evidence that *both* supply and demand factors have been at work. In particular, the *demand* for credit has declined in line with the steep fall in aggregate demand and associated high rates of excess capacity. On the *supply* side, banks have become more risk averse, with many indicators pointing to a tightening of credit conditions. What is less clear is which factor has dominated. In practice, disentangling these effects is difficult, given limitations in data availability and methodological problems in identifying the respective roles of supply and demand factors.

78. **Setting aside the question of whether a credit crunch exists in Thailand, a decline in credit is not entirely unexpected, nor even undesirable.** Rather, the credit slowdown may reflect a beneficial process of de-leveraging, as the economy undergoes an adjustment from over-indebtedness and inflated asset prices. In this respect, it may be part of the economy's external adjustment, reflected in the sharp reversal of the external current account and corresponding decline in private external debt. Additionally, with indications of nonbank financing picking up, it may also reflect a shift in firms' relatively heavy, and perhaps excessive, reliance on bank lending. (As seen in the accompanying chart, Thailand's credit-to-GDP ratios are high by emerging market




[1]Prepared by Stephen Schwartz (APD).

standards). Finally, with a recovery now underway, the aggregate credit figures may hide an underlying shift in the *allocation* of credit, from over-indebted and unproductive sectors of the economy, to more productive ones.

**Box 1. What is a Credit Crunch?**

**The term "credit crunch" has been used loosely in the literature, with a range of meanings.** The broadest, and perhaps most popularly used, definition refers to *any* situation of tight credit conditions, brought on by such factors as a tightening of monetary policy, an increase in the perceived riskiness of lending, or a reduction in the ability of financial institutions—for whatever reason—to extend credit. The most narrow definition, on the other hand, refers to a situation of credit rationing, whereby at prevailing interest rates, the available supply of credit is insufficient to meet demand.

**In the context of Thailand's economic crisis, the most meaningful definition would seem to be a leftward shift in the supply curve for bank loans.** In theory, several factors could give rise to such a shift:

- The existence of a "capital crunch" (Syron, 1991), which could arise, for example, in the aftermath of an asset price bubble financed by bank credit. When asset prices fall, banks may be forced to use up capital in order to write off loans. To meet capital adequacy ratios, they might respond by reducing assets and cutting back lending. A similar situation could arise if regulatory standards, or their enforcement, are tightened.

- An exogenous increase in risk aversion by lenders arising, for example, from fears of a pending recession. Risk aversion may also increase due to factors associated with a weakening of bank capital (as mentioned above).

- Monetary policy tightening can also give rise to a leftward shift of lending supply curves, through a balance sheet (net worth) or bank lending channel (Bernanke and Gertler, 1995 and Bernanke and Blinder, 1988). In the first case, a rise in interest rates directly weakens firms' balance sheets by increasing debt service burdens and reducing asset prices (and hence collateral values). As a result, firms may face more stringent lending conditions. In the second case, a tightening dries up bank reserves and deposits, leading to a decline in the supply of loanable funds.

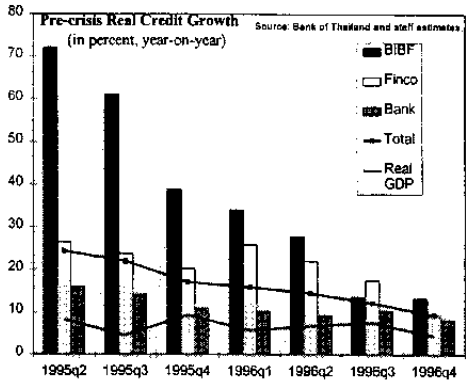
**Credit rationing, though not inconsistent with a leftward shift in lending supply curves, need not be present for there to be a credit crunch** (Bernanke and Lown, 1991). For a credit crunch to exist, all that matters is that the effective cost of credit to borrowers increases (measured by the spread between lending rates and the safe rate of return). This can occur either because of problems in the banking sector or due to weaknesses in borrowers' balance sheets.

79. **The remainder of this chapter discusses the recent evolution of credit and its components, with a view to assessing the factors behind the credit slowdown.** Section B looks at the evolution of credit and its sectoral breakdown. Section C presents the available evidence on the role of supply and demand factors in explaining the credit slowdown. The final section draws some conclusions.

## B. The Evolution of Private Credit

80. **As in the case of Thai corporations, the current difficulty faced by banks and finance companies has its roots in the pre-crisis period, when lending grew rapidly.**

From mid-1995 through the end of 1996, the growth rate of real private credit (year-on-year) averaged well above 15 percent, or twice the rate of real GDP growth. While commercial





Source: Bank of Thailand and Fund staff estimates.

banks and finance companies extended credit at a rapid pace averaging, respectively, above 10 percent and 20 percent on an annual basis, BIBFs—whose "out-in" lending is entirely foreign currency denominated—expanded credit at the fastest pace, recording average annual growth rates over 35 percent.[2] A classic boom-bust cycle was thus set in motion, so that when asset prices and firm profitability began to decline, so too did the outlook for banks.[3]

81. **The stock of private credit outstanding has fallen since the beginning of the crisis.** After peaking in April 1997, the level of real private credit (seasonally adjusted, and after correcting for changes in valuation due to exchange rate fluctuations) declined steadily through end-1998, as seen in the chart below, but by *less* than the fall in manufacturing output. Thereafter, the stock of credit leveled off, even as manufacturing output recovered strongly. Thus, by September 1999, while manufacturing output had recovered to above pre-crisis levels, credit remained some 13 percent below the peak reached in mid-1997. This suggests two, not mutually exclusive, possibilities. First, that the credit-intensity of production has fallen as firms rely increasingly on retained earnings and other sources of

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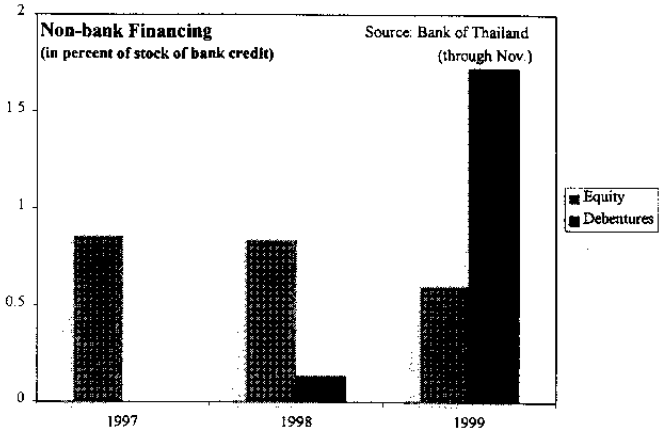
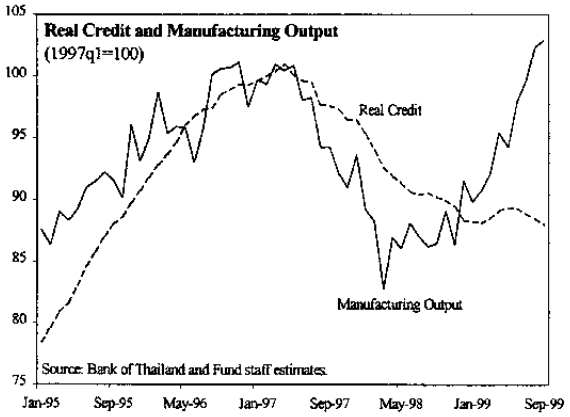
[2]The Bangkok International Banking Facility (BIBF) was set up in 1993 to enhance capital inflows and promote Thailand as a regional financial center. Tax incentives were granted for BIBF operations, with the bulk of activity consisting of "out-in" transactions (borrowing from abroad and lending domestically).

[3]In this respect, the experience of Thai banks is reminiscent of what happened to U.S. banks in New England in the mid-1980s and early-1990, when a collapse of a real estate bubble forced banks to use up capital in order to write down loans. To meet regulatory capital standards, which were being phased in under the Basle Accord, they responded by shrinking their assets and cutting back lending. (See Bernanke and Lown, and Syron.)

nonbank financing or, second, that there has been a shift in the allocation of credit.[4] There is evidence, as seen in the accompanying chart, of an upward trend in nonbank financing, particularly of corporate bond issues. As seen in the table below, there is also evidence of a reallocation of credit, as the share of lending to the manufacturing sector has risen significantly since end-1996 for all categories of creditors. This has come about through a reduction in the share of credit for personal consumption, construction, and real estate.




**Sectoral Credit Shares**

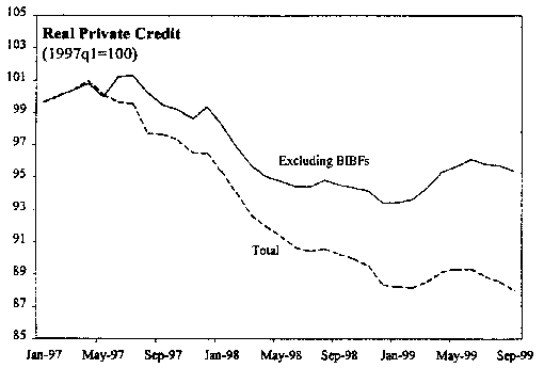
| | end-1996 | | | June 1999 1/ | | |
|---|---|---|---|---|---|---|
| | Banks | BIBFs | Finance Companies | Banks | BIBF | Finance Companies |
| | (in percent of credit outstanding) | | | | | |
| Manufacturing | 23 | 48 | 15 | 27 | 61 | 21 |
| Personal Consumption 2/ | 15 | 2 | 26 | 13 | 1 | 22 |
| Construction | 5 | 3 | 4 | 5 | 2 | 3 |
| Real Estate | 9 | 3 | 24 | 11 | 1 | 23 |
| Other | 48 | 44 | 31 | 45 | 35 | 32 |

Source: Bank of Thailand.
1/ end-August for non-BIBF.

82. **Much of the decline in overall private credit can be explained by an outflow through offshore banks (BIBFs), corresponding to the economy's external adjustment.** In large part, the outflow occurred as Japanese banks, which account for the bulk of Thailand's maturing obligations, contracted their external assets in light of growing problems at home. Although this withdrawal was partially offset through an increase in capital—a substitution of debt for equity—by foreign firms and joint ventures, the broader regional

[4]A contributing, though less benign, factor may be that some firms have suspended servicing their loans, thereby "obtaining credit" by generating NPLs. For further discussion of developments in NPLs, see Chapter III.

capital flight exacerbated the outflow. Thus, while overall private credit declined by about 13 percent in real terms from April 1997 through the end of 1998, *excluding* BIBFs the decline amounted to a more modest 7 percent. Since the beginning of 1999, moreover, non-BIBF credit has partially recovered, up by about 2 percent in real terms through September (2.8 percent at an annualized rate).[5] In part, this reflects a substitution from foreign currency lending by BIBFs to domestic currency lending by commercial banks, as the recent decline in domestic interest rates has made borrowing in baht relatively more attractive. Banks, for example, commonly report that the lower domestic interest rates have prompted their customers to switch from foreign to domestic currency loans. Large corporations have also issued domestic bonds, using the proceeds to pay off their relatively costly foreign currency denominated debt.




## C. The Contributions of Supply and Demand Factors

### Supply

83. **While there is evidence that the supply of credit has been constrained, particularly early in the crisis, the indicators are at best, mixed.** Evidence of a supply shift includes:

- **An observed decline in credit *in conjunction with* an increase in real lending rates.** As seen in the accompanying chart, real lending rates increased by more than 13 percentage points from July 1997 through June 1998.[6] This occurred at a time when the level of credit outstanding declined by 14 percent in real terms. Thereafter, however, real lending rates declined as tight monetary policy—arguably a factor reducing credit supply— was eased. The subsequent period during which lending rates declined but credit growth remained flat or negative, may suggest that during the latter period

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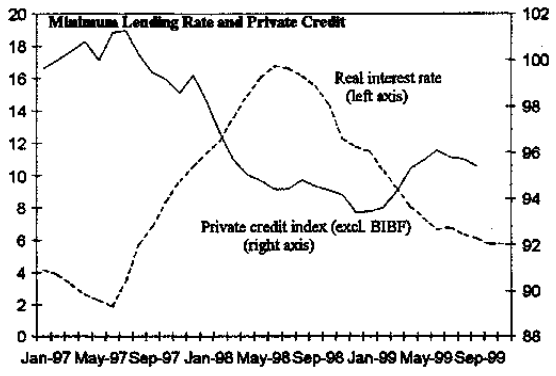
[5]Partly as a result of this trend, there has been a shift in the source of credit. At end-1996, commercial banks accounted for 63 percent of total private credit, finance companies accounted for 25 percent, and BIBFs accounted for 12 percent. By end-September 1999, the shares had changed to 84 percent, 9 percent, and 7 percent, respectively.

[6]Real lending rates are measured by using *actual* one-year ahead inflation. The magnitude of the rise and subsequent decline in real lending interest rates is broadly similar when using a shorter inflation time horizon (i.e., 3-months ahead), though the timing of the steep rise is delayed by several months.

shrinking credit demand, rather than supply, has played a more important role in the evolution of credit. While the behavior of these price and quantity variables are suggestive of supply and demand curve shifts, two caveats are worth noting. First, the lending rates used here are *prime* rates, and may not reflect the true *average* lending rate (for which data are unavailable). Second, and more importantly, the interest rate pattern is sensitive to the measure of forward-looking inflation. For example, when contemporaneous 12-month inflation rate is used as a proxy for expected inflation, real interest rates are seen to have *declined* gradually through mid-1998.

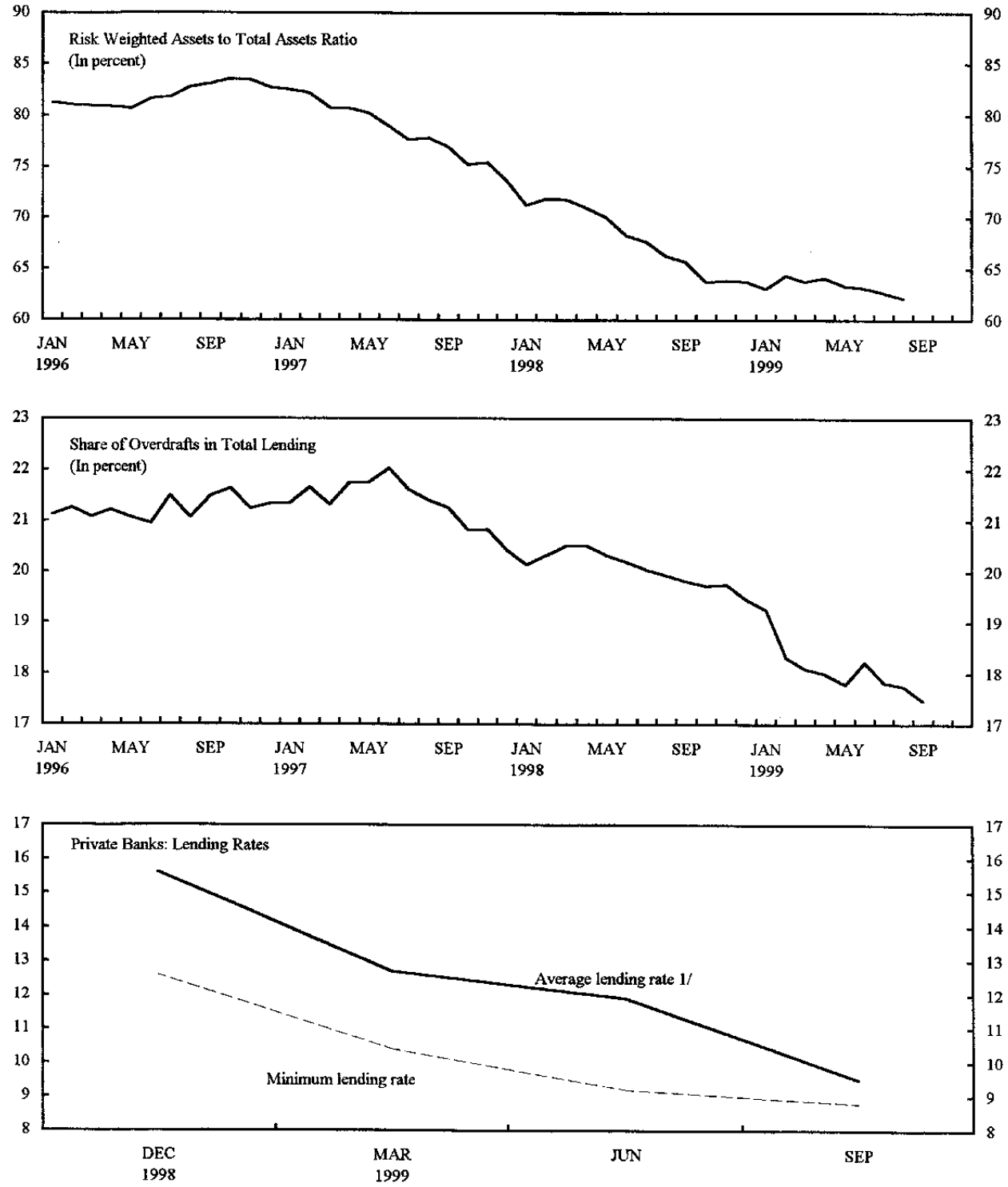



- **A number of indicators pointing to increased risk aversion by banks** (see Chart 1): (i) the ratio of risk weighted assets (i.e., loans) to total assets has fallen steeply (about 20 percentage points) since the beginning of 1997; (ii) the share of overdrafts in total lending has declined since mid-1997 (about 5 percentage points), suggesting that banks have sought greater control over their lending; and (iii) there is evidence that average lending rates have moved closer to prime rates since end-1998, suggesting that banks have increasingly shifted their lending to relatively safe customers.[7]

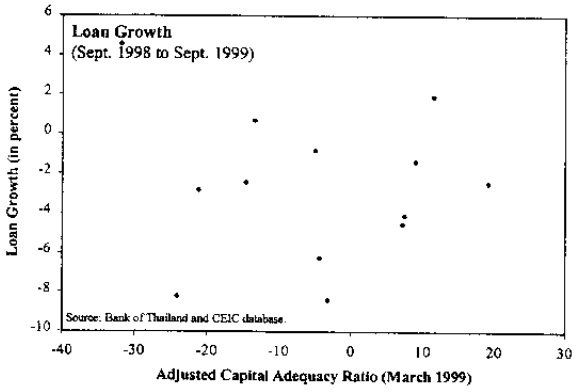
84. **On the other hand, there is no correlation between lending and measures of bank strength, as would be expected in a supply-driven credit crunch.** As seen below, an analysis of loan growth by Thailand's 13 commercial banks from September 1998 to September 1999 does not reveal a positive correlation, as the "capital crunch" view would predict, between the rate of growth and banks' capital adequacy ratios at end-March 1999 (adjusted for additional provisions needed to bring banks in line with end-2000 LCP rules). Similarly, as seen in the accompanying chart, there is no (negative) correlation between loan growth and banks' NPL levels.

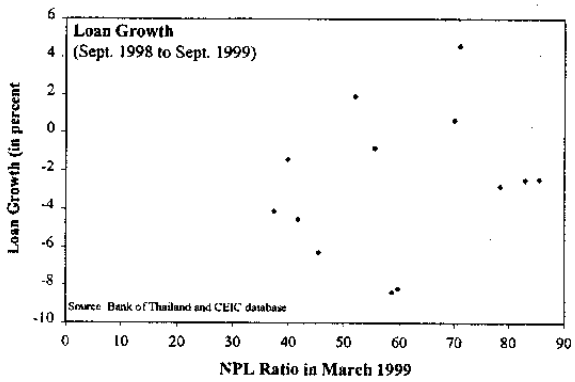
[7]The behavior of these indicators, however, could equally be explained by *demand* and statistical factors. For example, the decline in the ratio of risk weighted to total assets could reflect a decline in the demand for loans; the decline in the share of overdrafts could reflect a decline in demand for that type of credit; and the decline in wedge between average and prime lending rates could simply reflect the low interest rates being granted on restructured loans.

## Chart 1. Indicators of Risk Aversion by Banks




Source: Bank of Thailand and staff estimates.
1/ Imputed from bank income statements.




## Demand

85. **Notwithstanding evidence that lending supply curves have shifted, a number of other indicators suggest that demand, rather than supply, has been the constraining factor behind sluggish credit growth:**

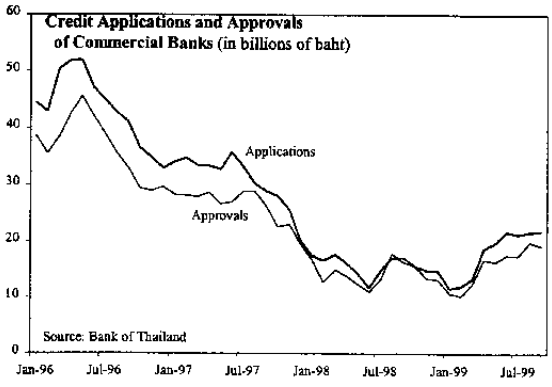
- **Survey data suggests that weak demand, rather than insufficient access to credit, has been the most important factor behind firms' output declines and liquidity problems.**[8] Based on a survey of 659 Thai firms from November 1998 to February 1999, Dwor-Frecaut et. al. conclude that limited access to working capital and suppliers' credit ranks low on a list of the reasons for firms' output declines. In particular, access to credit ranked behind such factors as weak domestic demand, high input costs associated with exchange rate depreciation, and high labor costs. Even here, however, the results are mixed. In particular, over half of Thai firms reported having liquidity problems and, while lower revenue was cited as the most significant source, a large number of firms also sighted lack of loans as a problem.

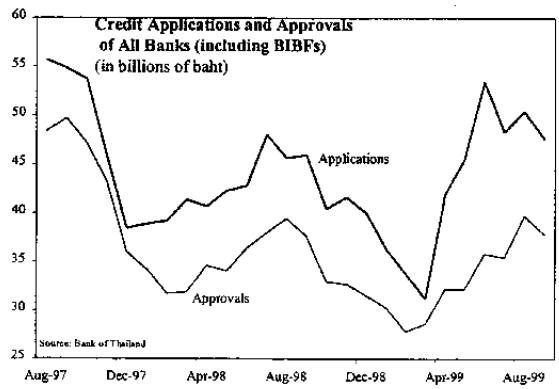
- **Available data on loan applications and approvals do not reveal a widening gap between supply and demand.**[9] This is particularly true for commercial banks (i.e., excluding BIBFs), where the gap between applications and approvals is *low* by historical standards (data on BIBFs is not available prior to June 1997). The significant decline in the demand for loans is evident by the sharp drop in loan applications, a trend that began in early 1996. Data for all banks, including BIBFs, is more difficult to interpret given

[8]The survey was undertaken by the Bank of Thailand in collaboration with the World Bank, as part of a larger project covering Indonesia, Korea, Malaysia, and the Philippines. See also Waiquamdee et. al. (1999).

[9]Comprehensive data on applications and approvals are not available. In particular, the series reported here excludes applications below B 30 million (about $0.8 million), and for many reporting banks also excludes applications for loans to finance working capital requirements.

limited data availability (the series only begins in mid-1997). While the gap between applications and approvals is larger than for non-BIBF banks, it is not clear that there has been a persistent widening of the gap. In any event, if there is evidence of a credit crunch from loan applications and approvals, it is from BIBFs rather than domestic banks.




- **Econometric results suggest that the decline in credit demand has outpaced the decline in supply.** In estimating credit supply and demand functions in the context of a disequilibrium framework, Ghosh and Ghosh (1999) find little evidence of persistent credit rationing at the aggregate level in Thailand. Although the real credit supply declined significantly in early 1998, they find that credit demand declined by even more.[10]

## D. Conclusions

86. **Evidence on the existence of a supply-driven "credit crunch" in Thailand is mixed, though there is little doubt that the supply of credit has contracted.** Tightened credit conditions, particularly at the beginning of the crisis, are evidenced by rising real interest rates, declining credit aggregates and indicators of increased risk aversion by banks. More recently, however, there is evidence that supply side constraints may have eased. Real lending rates have declined, domestic bank lending has risen, and output growth has resumed.

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[10]As noted by the authors, these results do not rule out the possibility of a credit crunch for individual firms or sectors of the economy. There are also a couple of shortcomings of their approach, which suggest a direction for further research. First, their data is based on the monetary survey, which excludes finance companies. Second, it is possible that their credit supply function may overstate the true willingness of banks to lend, since it does not incorporate measures of banking sector distress (such as NPLs and bank net worth).

87. **Given the existence of demand side factors and only mixed evidence on the supply side, it is difficult to establish that there has been a generalized credit crunch.** In view of the high rates of over-capacity, investment, and hence credit demand, are weak. Survey results and evidence from loan applications and approvals, supported by recent econometric work, also suggest that demand, rather than supply, may have played the largest role behind the decline in credit. This does not mean, however, that supply factors have been unimportant; for given demand levels, the inward shift in credit supply curves have reduced credit and economic activity.

88. **While the credit slowdown—demand or supply driven— is associated with the economic contraction, it is nevertheless part of Thailand's de-leveraging process.** In this respect, the slowdown has its roots in the pre-crisis period, when lending, driven by large capital inflows and rising asset prices, grew rapidly. The unwinding of this boom entails a withdrawal of credit, both domestically and externally.

89. **Looking ahead, however, supply side factors could begin to dominate as credit demand starts to recover.** As the demand for investment inevitably picks up, an expansion in bank credit will be needed. Although stronger corporations have been able to raise funds in the commercial paper market, the vast majority of Thai firms will continue to depend on bank credit. Thus, the ability and willingness of banks to meet this demand will be key to sustained growth.

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## V. Measuring Fiscal Stimulus in Thailand[1]

90. **This section analyzes the role of fiscal policy in the years leading up to the 1997 crisis, and the subsequent policy response.** The focus in this chapter is on macroeconomic aggregates, and the extent to which expenditure and revenue policies helped to cushion the impact of the crisis on demand and output.

91. **The fiscal stance and fiscal impulse are useful and simple indicators of the impact of fiscal policy on aggregate demand.** These aim to provide a measure of fiscal policy adjusted for changes induced by cyclical or transitory movements in economic activity. A positive value for the fiscal *stance* indicates that fiscal policy is exerting an expansionary impact on the economy and that the deficit, therefore, is larger than what would arise solely from the cyclical or transitory change in economic activity. Similarly, a negative value indicates that fiscal policy is exerting a contractionary impact. The fiscal *impulse*, which measures the change in the fiscal stance, indicates the direction and amount of new fiscal stimulus. In what follows, it does not matter whether the change in the deficit is discretionary (the direct result of policy decisions) or non-discretionary (due to the operation of automatic stabilizers). Largely as a by-product of their simplicity, these indicators should not be viewed as a providing a comprehensive assessment of fiscal policy, but rather as a more-or-less objective means of gaining insights into the evolution of fiscal policy.

92. **Methodological considerations suggest that the fiscal *impulse* is a more useful indicator than the fiscal *stance*.** While a technical discussion of the methodology is provided at the end of this section, the basics are summarized below.[2] The fiscal stance compares the actual balance to a neutral balance, which is the balance adjusted for the impact of cyclical or transitory changes in economic activity. The neutral balance assumes that (neutral) revenue is a fixed share of *actual* nominal GDP and that (neutral) expenditure is a fixed share of *potential* nominal GDP. The fiscal stance, therefore, crucially depends on the assumptions about the neutral balance, and therefore is more akin to an index that shows the stance relative to a base year. The fiscal impulse is much less susceptible to this problem since it measures the change in the fiscal stance and would, for the most part, not be impacted by a change in the base year. Finally, the revenue and expenditure impulses are measured as the change in the revenue and expenditure stance respectively (e.g., the difference between actual expenditure and neutral expenditure) such that a positive value indicates an expansionary impulse.

93. **The analysis below looks at both the consolidated public sector and the central government.** The central government is defined to include the extrabudgetary funds, but not the costs of financial sector restructuring. Since the central government is the level primarily responsible for macroeconomic management, developments at this

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[1]Prepared by Steven Barnett (FAD).

[2] Also, see Heller, Haas, and Mansur, "A Review of the Fiscal Impulse Measure," *Occasional Paper*, 44, IMF, 1986.

level are key for understanding the stance of fiscal policy. However, the activities of the rest of the public sector—local governments, non-financial public enterprises (PEs), and interest costs of financial sector restructuring (principal costs are excluded)—also influence aggregate demand, and are therefore also of interest. Nonetheless, the activities at these levels of government are usually not intended as tools of demand management. For the public sector, the revenue and expenditure impulses are measured on an aggregate—rather than a consolidated—basis. This means, for example, that transfers from the central to the local governments are counted both as central government expenditure and as local government revenue.

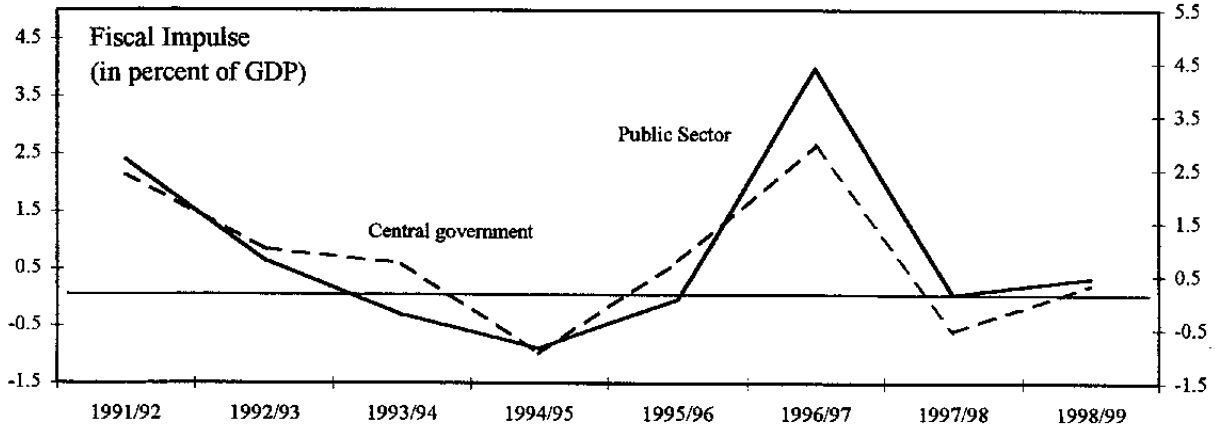
### A. Pre-Crisis Period

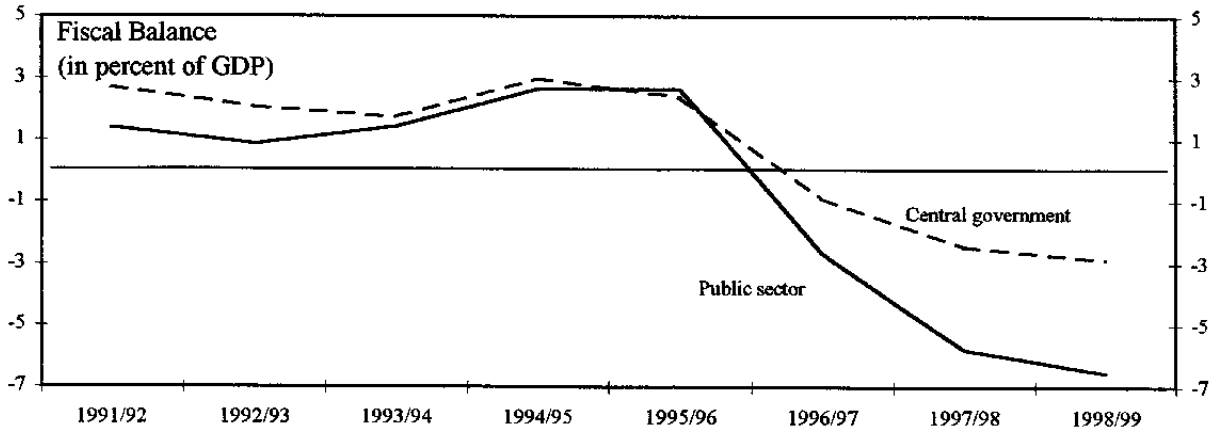
94. **Even though the central government ran a surplus during the pre-crisis period, the impulse analysis suggests that fiscal policy was mildly expansionary (Figure 1).** Taking the pre-crisis period to be 1991/92 to 1995/96, the central government ran a surplus in all of these years, which on average was 2½ percent of GDP. Nonetheless, the impulse during this period averaged ½ percent of GDP and was positive in each year except 1994/95. The impulse is mostly explained by an expenditure impulse, which in turn was due mainly to rising expenditure (from 15½ percent of GDP in 1991/92 to 17 percent in 1995/96). Thus, even though the deficit was only modestly smaller in 1995/96 than in 1991/92, the analysis suggests that the fiscal stance was around 1 percent of GDP more expansionary. This added to the economic overheating resulting from the higher rate of investment growth during the pre-crisis years.

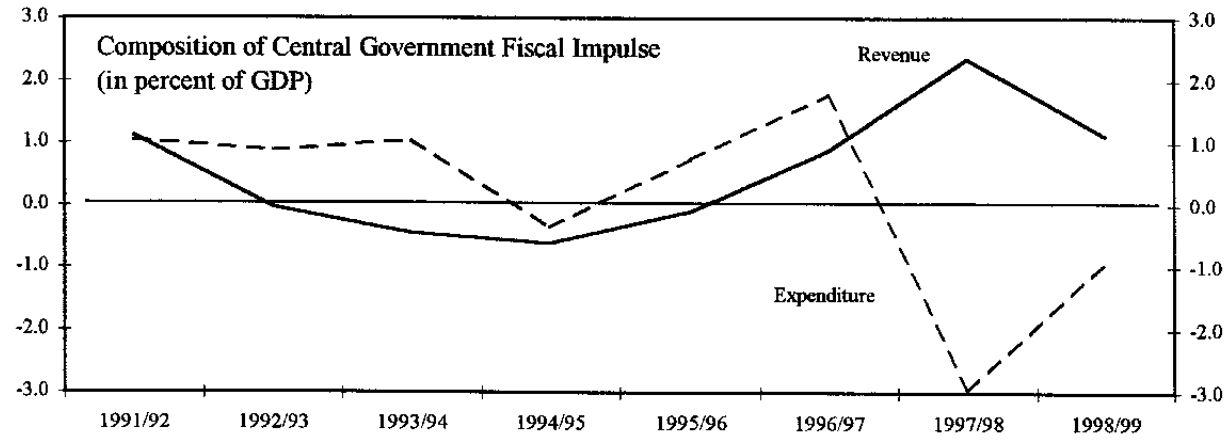
95. **The fiscal impulse and stance of the aggregate public sector is qualitatively similar to that of the central government.** Again, although the public sector balance was in surplus throughout the 1991/92-1995/96 period, the impulse was on average expansionary and just slightly less expansionary than that of the central government. The difference is due to the PE sector, which averaged a negative impulse during this period of around 0.2 percent of GDP, which is explained by a more contractionary stance during 1993/94-1995/96. This, in turn, is related to the decline in PE capital expenditure from more than 4 percent of GDP in the early 1990s, to 3 percent of GDP in 1995/96. Finally, the local governments, which ran modest surpluses throughout this period, are relatively small, and contributed very little to changes in the fiscal stance.

96. **The pronounced decline in the overall balance of the central government in 1996/97 translated into a significant expansionary fiscal impulse.** While the overall balance declined by 3.3 percentage points of GDP relative to 1995/96, the impulse was a somewhat smaller 2½ percent of GDP as the neutral balance declined by 0.7 percent of GDP. The expenditure impulse was double that of the revenue impulse and was largely due to a surge in capital expenditure, which rose by almost 2 percent of GDP. On the revenue side, there were declines as a share of GDP for most revenue categories, but the decline in trade taxes was especially large (0.6 percent of GDP less than in 1995/96).

Figure 1. Thailand: Fiscal Impulse, 1991/92-1998/99 1/




Source: Thai authorities; and staff estimates.

1/ Central government excludes costs of financial sector restructuring.

97. **For the aggregate public sector, the fiscal impulse was even stronger in 1996/97.** The overall balance fell from a *surplus* of 2½ percent of GDP in 1995/96 to a *deficit* of over 2½ percent of GDP, with the additional decline related to a deterioration in the PE balance and the emergence of financial sector restructuring costs.[3] The PE balance fell by 1½ percentage points of GDP from 1995/96, divided about equally between increases in capital expenditure and declines in retained income. Interest costs of financial sector restructuring amounted to around ½ percent of GDP, but while these contribute to the measured aggregate public sector impulse, their expansionary effects are different from more traditional expenditure stimuli. Interest payments (in general) would not be expansionary to the extent that the recipients of the interest would have been able to receive a similar return by investing in a different type of asset.

## B. Reponse to the Crisis

98. **Despite the widening of the central government deficit, the fiscal impulse was actually contractionary in 1997/98, reflecting a shortfall in public spending relative to budgeted levels.** The large decline in economic activity causes the neutral balance to deteriorate by more than the actual balance. Thus the 1½ percentage point increase in the deficit actually coincided with a contractionary impulse of ½ percent of GDP. This is, in turn, due to a strong contractionary expenditure impulse (3 percent of GDP) that followed from the reduction in central government expenditure (again in the acquisition of fixed assets) at a time when neutral expenditure was increasing sharply. Despite the increase in the VAT rate to 10 percent (from 7 percent), which contributed to an increase of ½ percentage points in VAT revenue, the revenue impulse was expansionary as other components of tax revenue—especially corporate income tax receipts, which fell by 1½ percent of GDP—were off sharply.

99. **The aggregate public sector impulse was slightly positive owing to the pickup in financial sector restructuring costs.** While interest payments associated with financial sector restructuring increased by nearly 2 percent compared to 1996/97, this was partially offset by negative impulses at the PE and local government level. After years of running near balanced budgets, the local governments incurred a more sizeable surplus of ½ percent of GDP. The surplus, in turn, translated into an equal sized contractionary fiscal impulse, which is largely explained by a contractionary expenditure impulse (actual expenditure declined by a more modest ¼ percent of GDP). The PE sector also exerted a contractionary impulse of similar magnitude, led by an increase in retained income. Capital expenditure was actually higher, but nonetheless grew by less than neutral expenditure and thus contributed to the negative impulse. Overall, therefore, the aggregate public sector impulse excluding the interest costs of financial sector restructuring was quite contractionary.

100. **The outturn in 1998/99 is complicated by missing data, but the preliminary indication is that there was a net expansionary impulse.** At the central government

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[3]Since financial sector restructuring costs were zero in the base year, all financial sector restructuring costs are considered to be an expenditure impulse.

level, the impulse is slightly positive (¼ percent of GDP), but this figure is likely to be revised downward as the data for the extrabudgetary funds is incorporated. These funds, for which data are not yet available, are typically in surplus, but the current estimates assume for simplicity that they were in balance for 1998/99. Similarly, the local government outturn is not yet reported and also assumed to be in balance, which implies a fiscal impulse of around ½ percent of GDP given the large local government surplus in 1997/98. The PE sector contributed an expansionary impulse of a similar magnitude as retained income was 0.7 percent of GDP lower than in 1997/98. Finally, a decline in interest costs of financial sector restructuring contributes a contractionary impulse, leaving the aggregate public sector with an estimate expansionary impulse of ½ percent of GDP.

**Methodological note**

101. **The first steps in calculating the fiscal impulse are to determine the level of neutral revenue and expenditure**. For the above analysis 1991/92 is chosen as the base year and it is assumed that the balance in this year was neutral. Neutral revenue is then defined to be $rY(t)$, where $r$ is the GDP share of revenue in 1991/92 and $Y(t)$ is actual nominal GDP in year $t$. In contrast, neutral expenditure is defined to be $gP(t)$, where $g$ is expenditure in 1991/92 as a share of potential nominal GDP and $P(t)$ is potential nominal GDP in period $t$. Although actual and potential GDP were similar in 1991/92, there were not identical so $g$ is defined as a share of potential rather than actual GDP in the base year to ensure that the fiscal stance in the base year is zero. The fiscal stance in period $t$, $S(t)$, is then calculated as the difference between the neutral and the actual balance, or $[rY(t) - gP(t)] - [T(t) - G(t)]$ where $T(t)$ and $G(t)$ are revenue and expenditure in period $t$ respectively.

102. The fiscal impulse is calculated as the change in the fiscal stance. Formally, the fiscal impulse in period $t$, $I(t)$, is defined as: $I(t) = [S(t)/Y(t)] - [S(t-1)/Y(t-1)]$. Similarly, the revenue impulse is defined as $[(rY(t) - T(t))/Y(t)] - [(rY(t-1) - T(t-1))/Y(t-1)]$ and the expenditure impulse as $[(G(t) - gP(t))/Y(t)] - [(G(t-1) - gP(t-1))/Y(t-1))]$.

Table 1. Thailand: Fiscal Impulse, 1991/92 to 1998/99

| | 1991/92 | 1992/93 | 1993/94 | 1994/95 | 1995/96 | 1996/97 | 1997/98 | 1998/99 | Average 1991/92-95/96 |
|---|---|---|---|---|---|---|---|---|---|
| | (In percent of GDP) | | | | | | | | |
| **Central government (incl. extrabudgetary) 1/** | | | | | | | | | |
| Actual balance | 2.7 | 2.1 | 1.7 | 3.0 | 2.4 | -0.9 | -2.4 | -2.9 | 2.4 |
| Neutral balance | 2.7 | 2.9 | 3.2 | 3.4 | 3.5 | 2.8 | 0.7 | 0.4 | 3.1 |
| Fiscal stance | 0.0 | 0.8 | 1.4 | 0.4 | 1.1 | 3.7 | 3.1 | 3.3 | 0.8 |
| Impulse (change in fiscal stance) | 2.2 | 0.8 | 0.6 | -1.0 | 0.6 | 2.6 | -0.6 | 0.2 | 0.6 |
| Revenue impulse | 1.1 | 0.0 | -0.5 | -0.6 | -0.1 | 0.9 | 2.4 | 1.1 | 0.0 |
| Expenditure Impulse | 1.0 | 0.9 | 1.0 | -0.4 | 0.7 | 1.8 | -3.0 | -0.9 | 0.7 |
| **Non-financial public enterprises** | | | | | | | | | |
| Actual balance | -1.3 | -1.3 | -0.4 | -0.4 | 0.1 | -1.3 | -1.4 | -2.0 | -0.6 |
| Neutral balance | -1.3 | -1.2 | -1.2 | -1.1 | -1.1 | -1.3 | -1.9 | -1.9 | -1.2 |
| Fiscal stance | 0.0 | 0.0 | -0.8 | -0.7 | -1.2 | 0.0 | -0.5 | 0.0 | -0.5 |
| Impulse (change in fiscal stance) | 0.4 | 0.0 | -0.8 | 0.1 | -0.5 | 1.3 | -0.5 | 0.5 | -0.2 |
| Revenue impulse | 0.1 | 0.2 | -0.2 | -0.2 | 0.1 | 0.7 | -0.4 | 0.7 | 0.0 |
| Expenditure Impulse | 0.3 | -0.2 | -0.6 | 0.3 | -0.6 | 0.6 | -0.2 | -0.2 | -0.2 |
| **Local governments** | | | | | | | | | |
| Actual balance | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.6 | 0.0 | 0.1 |
| Neutral balance | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | -0.2 | -0.2 | 0.0 |
| Fiscal stance | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.7 | -0.2 | 0.0 |
| Impulse (change in fiscal stance) | 0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.6 | 0.5 | 0.0 |
| Revenue impulse | 0.0 | 0.0 | 0.0 | 0.1 | -0.5 | -0.2 | -0.1 | 0.0 | -0.1 |
| Expenditure Impulse | 0.1 | -0.1 | 0.1 | 0.0 | 0.4 | 0.1 | -0.5 | 0.5 | 0.1 |
| **Interest cost of financial sector restructuring (- is cost)** | | | | | | | | | |
| Actual balance | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.6 | -2.5 | -1.7 | 0.0 |
| Neutral balance | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Fiscal stance | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 2.5 | 1.7 | 0.0 |
| Impulse (change in fiscal stance) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.9 | -0.8 | 0.0 |
| Revenue impulse | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Expenditure Impulse | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.9 | -0.8 | 0.0 |
| **Aggregate Public Sector** | | | | | | | | | |
| Actual balance | 1.4 | 0.9 | 1.4 | 2.6 | 2.6 | -2.7 | -5.8 | -6.6 | 1.8 |
| Neutral balance | 1.4 | 1.7 | 2.0 | 2.4 | 2.5 | 1.6 | -1.4 | -1.7 | 2.0 |
| Fiscal stance | 0.0 | 0.8 | 0.6 | -0.3 | -0.2 | 4.2 | 4.4 | 4.8 | 0.2 |
| Impulse (change in fiscal stance) | 2.7 | 0.8 | -0.2 | -0.9 | 0.1 | 4.4 | 0.2 | 0.5 | 0.5 |
| Revenue impulse | 1.2 | 0.2 | -0.7 | -0.7 | -0.5 | 1.4 | 1.8 | 1.8 | -0.1 |
| Expenditure Impulse | 1.5 | 0.6 | 0.5 | -0.1 | 0.6 | 3.0 | -1.7 | -1.3 | 0.6 |

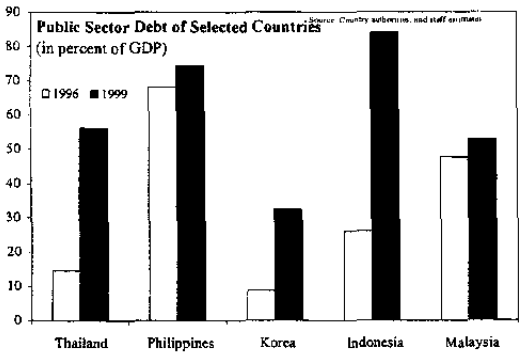
Sources: Thai authorities; and staff calculations

1/ Excludes interest and principal costs of financial sector restructuring.

## VI. Public Debt Dynamics in the Aftermath of the Crisis[1]

103. **Public sector debt has risen sharply in recent years, but an analysis of the medium-term debt dynamics indicates that the debt to GDP ratio should soon begin to decline.** The crisis-related expansion in government deficits and financial sector restructuring costs have contributed to a rapid increase in public sector debt over the last several years. Gross public sector debt has increased from just under 15 percent of GDP in 1995/96 to 56 percent of GDP at end 1998/99. The rapid increase in public sector debt has in turn focused more attention on the medium-term fiscal outlook. The following analyzes the medium-term debt dynamics, concentrating on a relatively conservative baseline scenario that is based on a continuation of existing policies (which build in a number of revenue-raising and expenditure-reducing measures). Under this scenario, the debt to GDP ratio is projected to peak at just under 64 percent in 2000/01 and then revert to 57 percent by 2004/05. Two alternative scenarios are also considered. Overall, the prospects remain good for a reduction in debt levels in the future, while the historical record also supports a tendency to keep public debt levels under control (Box 1).

104. **Compared with other countries affected by the Asian crisis, the increase in public debt in Thailand has been relatively large.** Indonesia is the only country that had a more pronounced increase in the debt-to-GDP ratio than Thailand. Korea, similar to Thailand and Indonesia, also experienced a significant increase in debt, much of which is related to financial sector restructuring costs. Philippines and Malaysia had higher pre-crisis debt ratios, but also appeared to have suffered less severe increases in public debt. These cross-country comparisons, however, need to be interpreted with great caution as the coverage of the public sector is not uniform across countries and, perhaps more importantly, the treatment of financial sector restructuring costs also differs. Caution is warranted in comparing both the absolute levels of public debt as well as the crisis-related change in public debt.



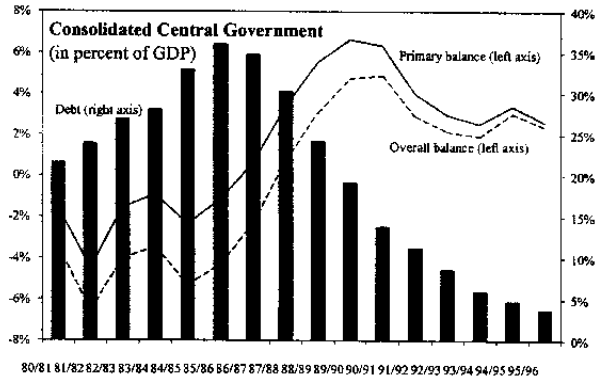

105. **The following analysis focuses on gross public debt and thus excludes other significant components of government net worth.** Gross public debt is defined as the sum of central government debt, nonfinancial public enterprise (PE) debt, and debt related to financial sector restructuring. Public debt, however, is not the same as public net worth, which is conceptually an equal if not better indicator of fiscal prospects. For example, the existence of sizeable public sector deposits in the banking system, which in Thailand amounted to 10 percent of GDP at end-1998/99, is not factored into the analysis. In addition, the stock of public enterprise sector debt needs to be interpreted carefully as the PEs are estimated to have positive net worth and the government, as

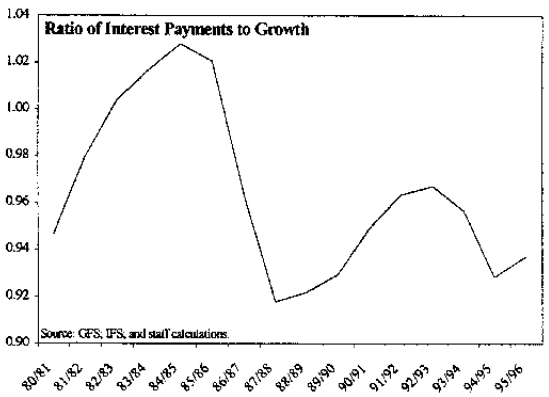
[1]Prepared by Steven Barnett (FAD).

## Box 1. Debt and Deficits in the Past

*In the decade prior to the crisis, fiscal policy in Thailand was characterized by rapidly declining debt-to-GDP ratios and overall surpluses.*

The ratio of central government debt to GDP fell precipitously from its peak of 36 percent in 1985/86 to a low of less than 4 percent in 1995/96. The debt ratio was driven down by a succession of sizeable fiscal *surpluses* that peaked at over 5 percent of GDP, with the primary balance reaching a peak of more than 6 percent of GDP. In contrast, the first half of the 1990s were characterized by rising debt to GDP and overall *deficits* on the order of 4 percent of GDP, with the overall deficit reaching as high as 6 percent of GDP.




Despite the period of sustained deficits, the debt-to-GDP ratio was kept in check by a favorable relationship between interest rates and growth. Even though Thailand was incurring relatively large overall and primary deficits in the first half of the 1990s, the debt-to-GDP ratio grew by only around 20 percentage points of GDP. The debt was restrained by the growth rates that far exceeded the interest rate on debt. The ratio in the adjacent figure indicates the impact of interest rates and growth on the evolution of the debt-to-GDP ratio: a value less than one means that the impact is toward a reduction in the ratio (e.g., a value of 0.9 means that the debt-to-GDP ratio would have been only 90 percent of its value in the prior year had the government run a primary balance of zero). Because of this favorable relationship, the government was able to run primary deficits averaging 2.8 percent of GDP for the 1975/76-79/80 period, but even so the debt-to-GDP ratio increased by an average of only 0.6 percent of GDP during this period.

owner of the PEs, could actually be viewed as owning equity equivalent to PE net worth.[2] In the other direction, any contingent liabilities of the public sector are also excluded from the debt stock, but these, with the exception of those associated with financial sector restructuring (most of which are already incorporated into the debt stock), are believed to be quite small.

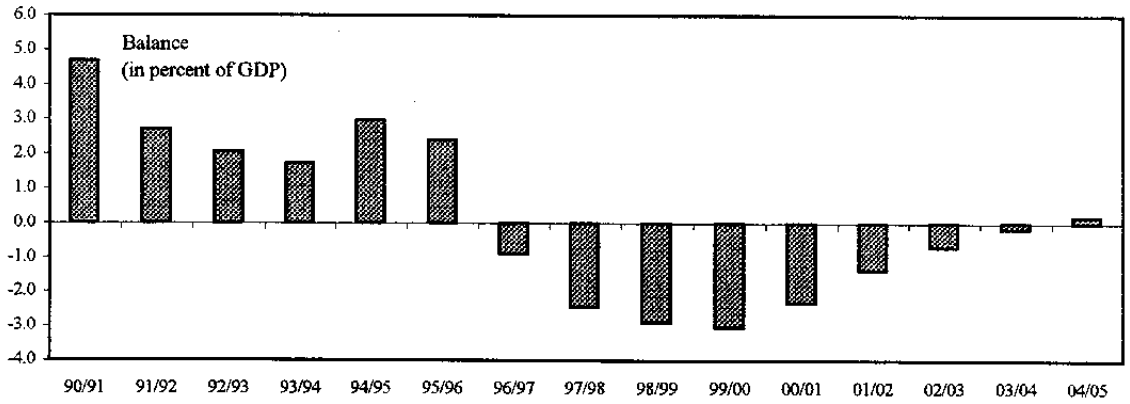
106. **Assumptions about the future path of macroeconomic variables are an important determinant of the medium-term debt dynamics.** The baseline scenario assumes a gradual pickup in real GDP growth rates to 5.5 percent (Table 1), fueled largely by a projected recovery in private consumption. Private consumption, therefore, is projected to increase from 54.7 percent of nominal GDP in 1998/99 to 59.3 percent of GDP in 2004/05. Average real interest rates on public debt are expected to decline over the medium term, converging to around 3.3 percent of GDP (roughly, the pre-crisis average). The assumption that real GDP growth exceeds the real interest rate on debt contributes significantly to a reduction in the debt-to-GDP ratio. Theoretical reservations notwithstanding, sustained periods of real growth rates exceeding real interest rates are common. In addition, the sensitivity of the results to assumptions about growth is explored below.

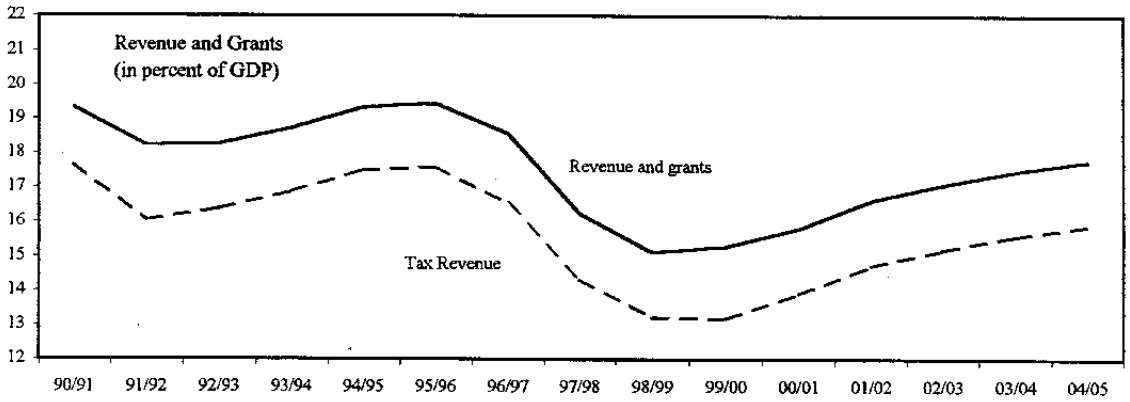
## A. Baseline Scenario

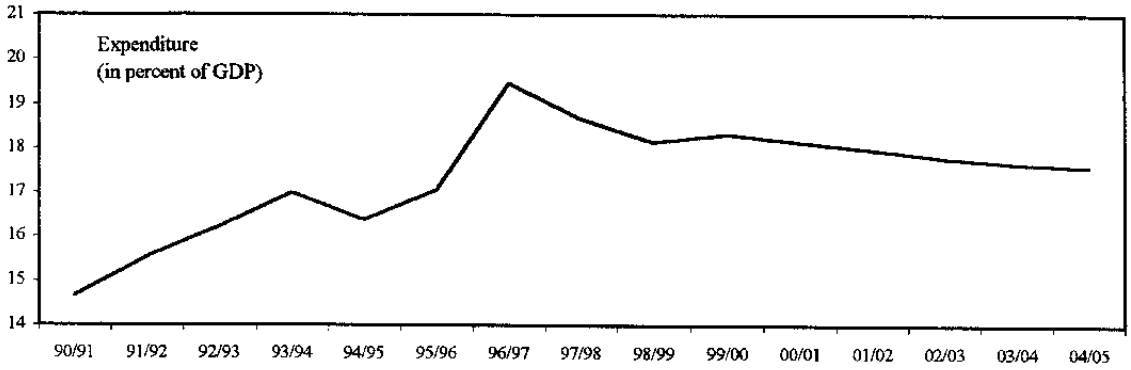
107. **The public sector debt-to-GDP ratio is projected to peak in the next few years and then decline back to the current level (Table 1, and Figures 1 and 2).** The turnaround in public debt is driven by a consolidation in the public sector deficit and the favorable impact of GDP growth. The consolidation in the public sector deficit follows from a steady but gradual turnaround in the fiscal position of the central government, which is projected to switch to an overall surplus by 2004/05 and primary surplus by 2002/03. Modest reductions in the PE balance and costs of financial sector restructuring also contribute to the public sector consolidation. Favorable growth and exchange rate projections, however, are the primary contributor to the reduction in the debt-to-GDP ratio. These factors combine to reduce the ratio by around 5 percentage points in each of the last four years of the projection period (at the same time interest payments amount to

[2]The implications arising from the exclusion of government assets and inclusion of PE debt is highlighted by instances of privatization. For example, if the government privatizes a PE and uses the proceeds to reduce government debt, then public debt would fall by (1) the amount of the sale proceeds, and (2) the reduction in PE debt following from the exclusion of the debt of the given enterprise (if assumed by the purchaser). Provided the sale price was fair, government net worth—other things equal—would not change, yet observed public debt would decline, and by a potentially non-trivial amount.

Figure 1. Thailand: Central Government Fiscal Data and Projections 1/




Source: Thai authorities; and staff estimates.
1/ Excludes costs of financial sector restructuring.

only 2–3 percent of GDP).[3] Moreover, this is primarily explained by the impact of GDP growth; keeping the exchange rate constant throughout the projection period would result in an increase of less than 1 percent of GDP in the 2004/05 debt stock. Finally, for simplicity, privatization receipts are ignored.

108. **The revenue assumptions are relatively conservative, but are still the main force behind the consolidation in the central government balance.** Revenue increases average around ½ percent of GDP over the medium term, but nonetheless would result in both total revenue and tax revenue in 2004/05 being below the GDP ratios prevailing in the pre-crisis 1990s. The revenue increase is fueled by the planned return of the VAT rate to 10 percent in March 2001, by growth in private consumption (which boosts consumption tax revenue), and by modest improvements in collection of other taxes associated with the turnaround in economic activity. (The item "tax revenue buoyancy" in Table 1 is comprised of the latter two effects.)

109. **The projections also incorporate conservative assumptions regarding the future path of non-interest central government expenditure.** Total non-interest expenditure and net lending is assumed to be greater in 2004/05 than the levels prevailing in the pre-crisis 1990s. With the exception of foreign financed expenditures, non-interest expenditure is projected to remain constant at the 1999/2000 level. Foreign financed expenditures, however, are expected to gradually decline as crisis related programs unwind. The decline is projected to be less than 1 percent of GDP relative to 1999/2000 and would leave foreign financed expenditures as a ratio of GDP slightly above the 1996/97–1997/98 average.

110. **The public enterprise balance is projected to stabilize relatively quickly at a deficit of 1 percent of GDP.** While it is difficult to project the future balances of the PEs, especially retained income, the assumed consolidation would still entail a deficit that is larger than the 0.7 percent of GDP average for the 1990/91–1995/96 period. In addition, for the reasons highlighted above, the inclusion of the PE sector debt and deficits needs to be interpreted carefully. The PE sector, however, accounts for only a quarter of the 5½ percentage point decline in the debt-to-GDP ratio.

111. **The bulk of the public costs of financial sector restructuring have already been incorporated into the debt stock, although some uncertainty about future costs remains.** The debt stock as of 1999/2000 includes the costs associated with financial sector restructuring regardless of whether these have been explicitly fiscalized through the issuance of government bonds; for example, as of end-1998/99 B 500 billion or around 10 percent of GDP had been fiscalized through the issuance of bonds. In addition, the associated interest costs, again regardless of whether they have been fiscalized, are also added to the costs of

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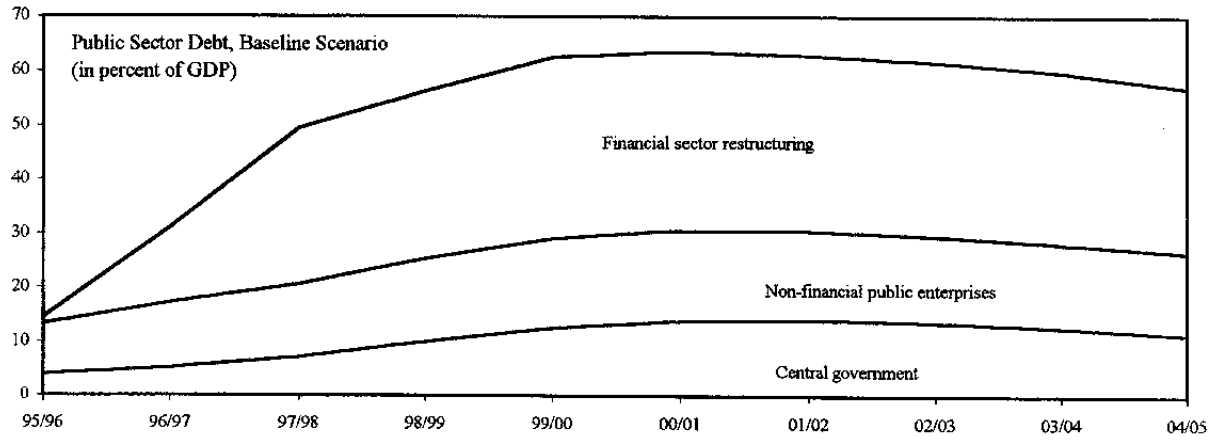
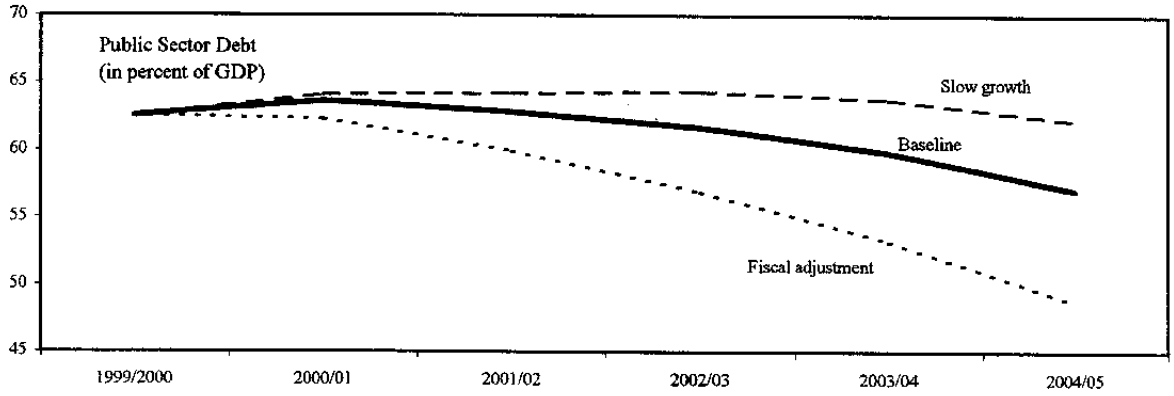
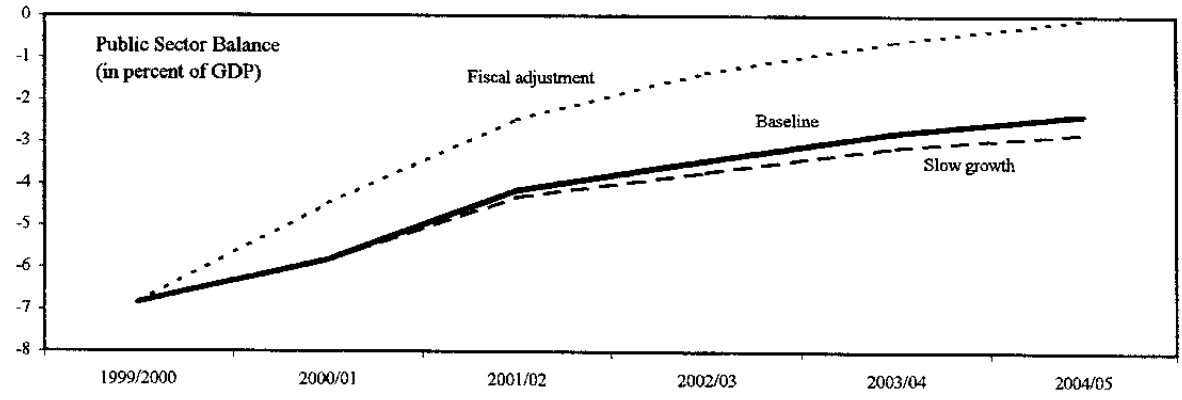
[3]See the row labeled "Debt impact of nominal GDP growth and exchange rate" in Table 1. This row measures how much the debt to GDP ratio would have fallen if the overall balance in the given period was zero.

Figure 2. Thailand: Medium-term Public Sector Debt and Balances




Source: Staff projections.

financial sector restructuring—fiscalized interest costs amounted to 0.7 percent of GDP in both 1997/98 and 1998/99. In addition to the future interest costs, the medium-term projections assume that the net present value of restructuring the state-owned banks is around 6 percent of GDP and that there are no additional costs associated with restructuring the private banks.

### B. Sensitivity Analysis

112. **In a scenario with lower real GDP growth, the medium-term debt dynamics are less favorable largely as a result of the mechanical effect of lower GDP (Table 2 and Figure 2)**. Instead of peaking in 2000/01 as in the baseline, the debt to GDP ratio peaks at 64 percent of GDP in 2002/03 and by 2004/05 is projected to be roughly the same as in 1999/2000. Mechanically, the lower growth rate of real and therefore nominal GDP explains the bulk (about three-quarters) of the higher 2004/05 debt stock in the low-growth scenario. Compared with roughly 5 percentage points a year in the baseline scenario, the reduction in the debt to GDP ratio from growth in this scenario is just over 4 percentage points in the outer years of the projection. Since the lower real GDP growth is assumed to be fueled by a more modest increase in private consumption growth, there is also reduced buoyancy on consumption taxes and therefore slower central government fiscal consolidation.

113. **An illustrative adjustment scenario demonstrates that quick, yet feasible, adjustment efforts could significantly improve the medium-term debt dynamics (Table 3)**. The adjustment scenario adds to the baseline scenario (1) a sustained reduction of 1 percent of GDP in domestic non-interest expenditure beginning in 2000/01 and (2) a phased implementation of a simplification of the personal income tax reform that eventually yields an additional 1 percent of GDP of revenue. The addition of these two policies would lead to a central government surplus by 2001/02 and a debt stock of just under 49 percent of GDP by 2004/05. Moreover, these policies would lead to the public sector being roughly in balance by 2004/05, compared with public sector deficits of more than 2 percent of GDP in the other scenarios.

## Table 1. Thailand: Medium-term Debt Dynamics

(Baseline scenario)

| | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
|---|---|---|---|---|---|---|
| | (In percent of GDP) | | | | | |
| **I. Flow deficits** | | | | | | |
| Public sector balance | -6.8 | -5.8 | -4.2 | -3.4 | -2.8 | -2.3 |
| Central government and extrabudgetary | -3.0 | -2.3 | -1.4 | -0.7 | -0.2 | 0.2 |
| Non-financial public enterprises | -2.0 | -1.5 | -1.0 | -1.0 | -1.0 | -1.0 |
| Interest costs of financial sector reforms 1/ | -1.8 | -2.0 | -1.8 | -1.8 | -1.7 | -1.6 |
| Principal payments for financial sector (e.g., recapitalization) 1/ | -2.0 | 0.1 | 0.0 | -0.6 | -0.5 | 0.2 |
| **II. Privatization** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **III. Debt stocks** | | | | | | |
| Total public debt | 62.6 | 63.6 | 62.8 | 61.7 | 59.9 | 57.0 |
| Central government | 12.6 | 13.9 | 14.1 | 13.7 | 12.7 | 11.4 |
| Non-financial public enterprises | 16.6 | 16.8 | 16.4 | 15.9 | 15.5 | 15.1 |
| Financial sector | 33.4 | 33.0 | 32.3 | 32.1 | 31.7 | 30.5 |
| **IV. Contributions to deficit reduction** | | | | | | |
| Total change in public sector balance | -0.3 | 1.0 | 1.6 | 0.7 | 0.7 | 0.4 |
| A. Change in primary balance | 0.1 | 1.5 | 1.5 | 0.7 | 0.5 | 0.3 |
| Central government primary balance | 0.1 | 1.0 | 1.0 | 0.7 | 0.5 | 0.3 |
| Increase in revenue | 0.2 | 0.5 | 0.8 | 0.5 | 0.4 | 0.3 |
| Tax revenue buoyancy | 0.1 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 |
| Policy changes (mainly VAT rate) | -0.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 |
| Other revenue | 0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Decrease in primary expenditure | 0.0 | 0.5 | 0.2 | 0.2 | 0.1 | 0.0 |
| Foreign financed expenditure | -0.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 |
| Other expenditure | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Increase in state enterprise balance | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| B. Decrease in interest payments | -0.4 | -0.5 | 0.1 | 0.0 | 0.2 | 0.1 |
| Memo items: | | | | | | |
| Primary central government balance | -2.5 | -1.5 | -0.5 | 0.2 | 0.6 | 0.9 |
| Primary public sector balance | -4.5 | -3.0 | -1.5 | -0.8 | -0.3 | 0.0 |
| Debt impact of nominal GDP growth and exc. rate | -2.6 | -4.6 | -4.9 | -5.1 | -5.1 | -4.9 |
| Real GDP growth (FY in percent) | 4.3 | 4.3 | 4.9 | 5.4 | 5.5 | 5.5 |
| Average real interest rate on debt (in percent) | 5.0 | 3.5 | 3.4 | 3.4 | 3.4 | 3.3 |

Source: Staff estimates

1/ A minus sign indicates a cost (i.e., a transaction that increases debt). Includes all financial sector interest and principal costs regardless of whether they are fiscalized.

Table 2. Thailand: Medium-term Debt Dynamics
(Low growth scenario)

| | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
|---|---|---|---|---|---|---|
| | (In percent of GDP) | | | | | |
| **I. Flow deficits** | | | | | | |
| Public sector balance | -6.8 | -5.8 | -4.3 | -3.7 | -3.1 | -2.8 |
| Central government and extrabudgetary | -3.0 | -2.4 | -1.5 | -0.9 | -0.4 | -0.1 |
| Non-financial public enterprises | -2.0 | -1.5 | -1.0 | -1.0 | -1.0 | -1.0 |
| Interest costs of financial sector reforms 1/ | -1.8 | -2.0 | -1.9 | -1.9 | -1.8 | -1.7 |
| Principal payments for financial sector (e.g., recapitalization) 1/ | -2.0 | 0.1 | 0.0 | -0.6 | -0.5 | 0.3 |
| **II. Privatization** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **III. Debt stocks** | | | | | | |
| Total public debt | 62.5 | 64.1 | 64.2 | 64.3 | 63.8 | 62.2 |
| Central government | 12.5 | 14.0 | 14.5 | 14.5 | 13.9 | 13.1 |
| Non-financial public enterprises | 16.6 | 16.9 | 16.7 | 16.5 | 16.3 | 16.2 |
| Financial sector | 33.4 | 33.2 | 33.0 | 33.4 | 33.6 | 32.9 |
| **IV. Contributions to deficit reduction** | | | | | | |
| Total change in public sector balance | -0.3 | 1.0 | 1.5 | 0.6 | 0.6 | 0.3 |
| A. Change in primary balance | 0.1 | 1.5 | 1.4 | 0.6 | 0.5 | 0.3 |
| Central government primary balance | 0.1 | 1.0 | 0.9 | 0.6 | 0.5 | 0.3 |
| Increase in revenue | 0.2 | 0.5 | 0.7 | 0.4 | 0.4 | 0.3 |
| Tax revenue buoyancy | 0.0 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |
| Policy changes (mainly VAT rate) | -0.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 |
| Other revenue | 0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Decrease in primary expenditure | 0.0 | 0.5 | 0.2 | 0.2 | 0.1 | 0.0 |
| Foreign financed expenditure | -0.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 |
| Other expenditure | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Increase in state enterprise balance | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| B. Decrease in interest payments | -0.4 | -0.5 | 0.1 | 0.0 | 0.1 | 0.1 |
| Memo items: | | | | | | |
| Primary central government balance | -2.5 | -1.5 | -0.6 | 0.0 | 0.5 | 0.7 |
| Primary public sector balance | -4.5 | -3.0 | -1.6 | -1.0 | -0.5 | -0.2 |
| Debt impact of nominal GDP growth and exc. rate | -2.6 | -4.1 | -4.2 | -4.2 | -4.2 | -4.1 |
| Real GDP growth (FY in percent) | 4.3 | 3.9 | 4.0 | 4.0 | 4.0 | 4.0 |
| Average real interest rate on debt (in percent) | 5.0 | 3.5 | 3.4 | 3.4 | 3.4 | 3.3 |

Source: Staff estimates

1/ A minus sign indicates a cost (i.e., a transaction that increases debt). Includes all financial sector interest and principal costs regardless of whether they are fiscalized.

Table 3. Thailand: Medium-term Debt Dynamics
(Adjustment scenario)

| | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 |
|---|---|---|---|---|---|---|
| | (In percent of GDP) | | | | | |
| **I. Flow deficits** | | | | | | |
| Public sector balance | -6.8 | -4.5 | -2.5 | -1.3 | -0.6 | -0.1 |
| Central government and extrabudgetary | -3.0 | -1.0 | 0.3 | 1.4 | 2.0 | 2.5 |
| Non-financial public enterprises | -2.0 | -1.5 | -1.0 | -1.0 | -1.0 | -1.0 |
| Interest costs of financial sector reforms 1/ | -1.8 | -2.0 | -1.8 | -1.8 | -1.7 | -1.6 |
| Principal payments for financial sector (e.g., recapitalization) 1/ | -2.0 | 0.1 | 0.0 | -0.6 | -0.5 | 0.2 |
| **II. Privatization** | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| **III. Debt stocks** | | | | | | |
| Total public debt | 62.6 | 62.3 | 59.9 | 56.9 | 53.3 | 48.7 |
| Central government | 12.6 | 12.6 | 11.2 | 8.9 | 6.1 | 3.1 |
| Non-financial public enterprises | 16.6 | 16.8 | 16.4 | 15.9 | 15.5 | 15.1 |
| Financial sector | 33.4 | 33.0 | 32.3 | 32.1 | 31.7 | 30.5 |
| **IV. Contributions to deficit reduction** | | | | | | |
| Total change in public sector balance | -0.3 | 2.4 | 2.0 | 1.1 | 0.7 | 0.5 |
| A. Change in primary balance | 0.1 | 2.8 | 1.8 | 1.0 | 0.4 | 0.3 |
| Central government primary balance | 0.1 | 2.3 | 1.3 | 1.0 | 0.4 | 0.3 |
| Increase in revenue | 0.2 | 0.9 | 1.1 | 0.8 | 0.3 | 0.3 |
| Tax revenue buoyancy | 0.1 | 0.4 | 0.4 | 0.5 | 0.3 | 0.3 |
| Policy changes (mainly VAT rate) | -0.1 | 0.7 | 0.7 | 0.3 | 0.0 | 0.0 |
| Other revenue | 0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Decrease in primary expenditure | 0.0 | 1.5 | 0.2 | 0.2 | 0.1 | 0.0 |
| Foreign financed expenditure | -0.1 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 |
| Other expenditure | 0.1 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Increase in state enterprise balance | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| B. Decrease in interest payments | -0.4 | -0.5 | 0.2 | 0.1 | 0.3 | 0.2 |
| Memo items: | | | | | | |
| Primary central government balance | -2.5 | -0.2 | 1.1 | 2.1 | 2.5 | 2.8 |
| Primary public sector balance | -4.5 | -1.7 | 0.1 | 1.1 | 1.6 | 1.9 |
| Debt impact of nominal GDP growth and exc. rate | -2.6 | -4.6 | -4.8 | -4.9 | -4.7 | -4.4 |
| Real GDP growth (FY in percent) | 4.3 | 4.3 | 4.9 | 5.4 | 5.5 | 5.5 |
| Average real interest rate on debt (in percent) | 5.0 | 3.5 | 3.4 | 3.4 | 3.4 | 3.3 |

Source: Staff estimates

1/ A minus sign indicates a cost (i.e., a transaction that increases debt). Includes all financial sector interest and principal costs regardless of whether they are fiscalized.

# VII. Export Performance[1]

*Thailand's export growth, which had been very strong during 1985-95, fell sharply ahead of the crisis, mainly reflecting declining competitiveness, but also structural factors. Currency depreciation associated with the crisis has helped restore competitiveness and export growth. However, looking ahead, structural bottlenecks will need to be resolved if exports are to remain an engine of growth.*

## A. Export Performance Before the Crisis

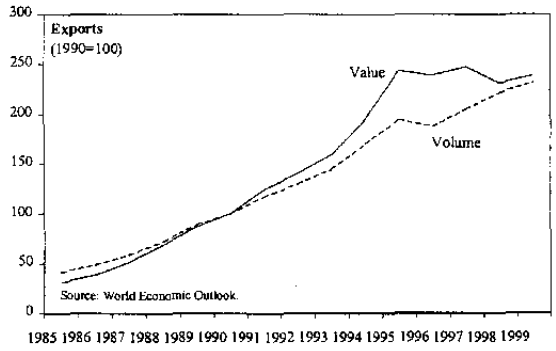
114. **The years of high economic growth in Thailand were also associated with rapid export growth.** In the period 1985-95, Thailand's exports grew on average by 23 percent per year. For much of this time, Thai export growth exceeded the average of its regional competitors (Indonesia, Korea, Malaysia, and the Philippines). Manufactured exports grew particularly strongly, partly reflecting rising foreign direct investment in this area (as more advanced Asian economies—Japan, Taiwan Province of China (POC), and Singapore—transferred the production of lower end manufactured goods). However, rapid export growth came to an abrupt halt in 1996—the first warning sign that the Thai economy was vulnerable to a disruption. Export growth in 1996 turned negative in both value and volume terms, falling across the board, but especially hard for exports to Japan.

**Average Export Growth, 1985-95 1/**

(in percent)

| | Value | Volume |
|---|---|---|
| Korea | 16 | 14 |
| Malaysia | 21 | 17 |
| Philippines | 14 | 9 |
| **Thailand** | **23** | **17** |

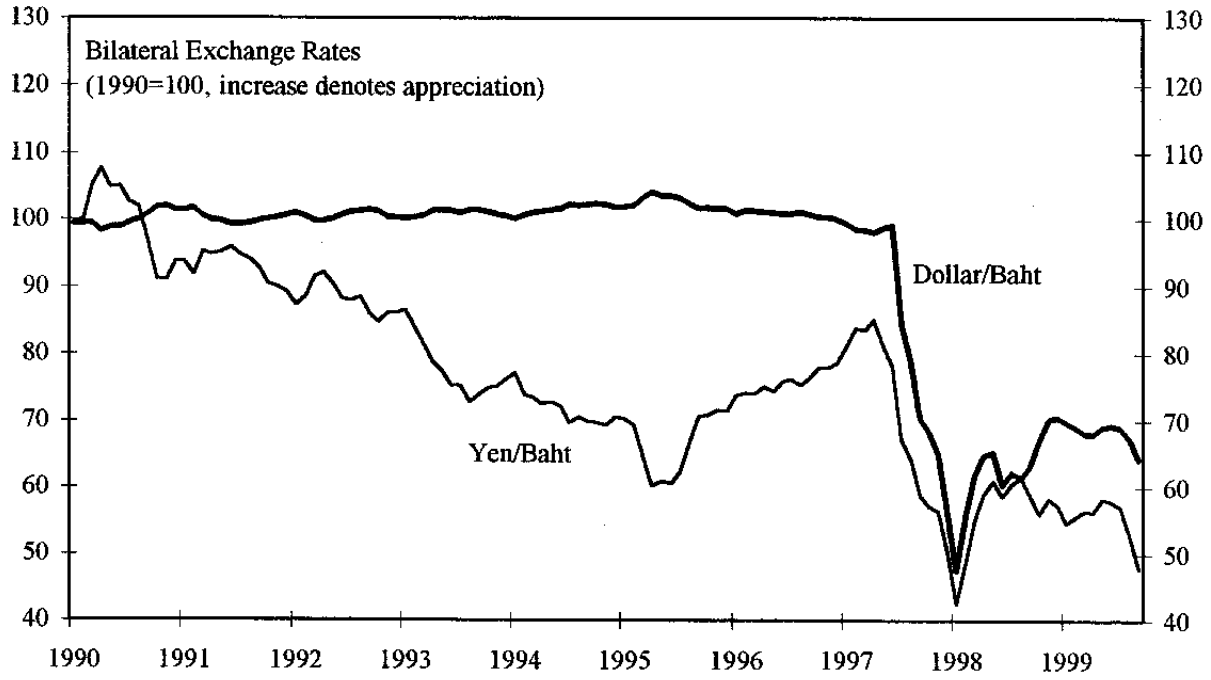
1/ Non oil exports.
Source: WEO.

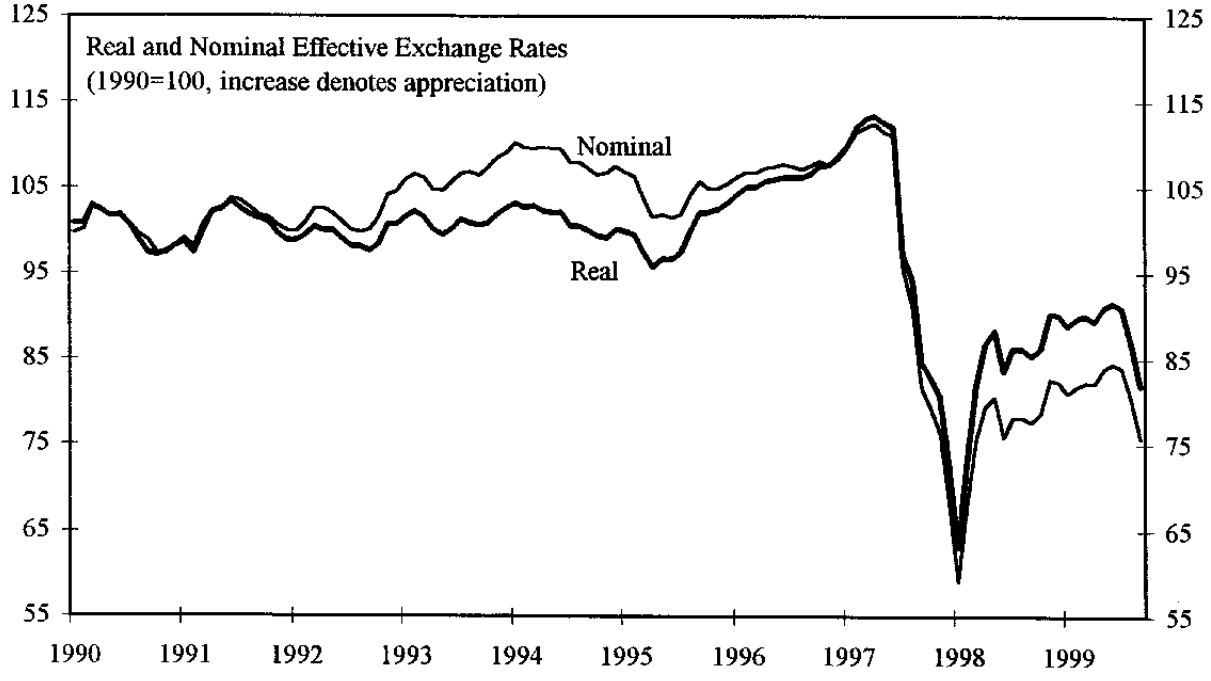



115. **The main factors behind the fall in exports in 1996 were declining competitiveness and slower demand growth in partner countries.** A key factor was exchange rate appreciation starting in early 1995. With the currency effectively pegged to the (appreciating) U.S. dollar, the baht appreciated by 8½ percent in real effective terms between end-1994 and end-1996 (Figure 1). Indeed, insofar as the weights used to calculate the real effective rate were somewhat dated, the real appreciation was probably greater than suggested by the standard index. In particular, the baht's gradual depreciation vis-a-vis the Japanese yen was sharply reversed—and that at a particularly inopportune time, given the economic weakness in Japan. Thus competitiveness was lost in a major export market, accounting for almost one-fifth of Thai exports. Using estimated elasticities, roughly two-thirds of the 15 percent slowdown in the growth of non-oil exports can be attributed to demand and price factors.

[1]Prepared by Il Houng Lee (PDR).

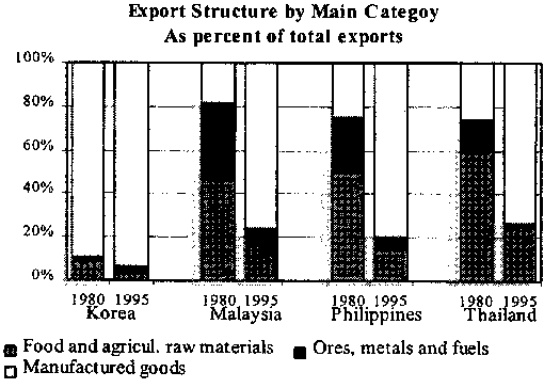
Figure 1. Thailand: Exchange Rates




Source: Information Notification System.

116. **However, structural factors also played a role in the export slowdown, including slow adjustment toward more capital-intensive and high-end products.** On the low end, Thailand lost market share in labor-intensive products, such as garments and footwear, to lower-wage countries within Asia, including China and India.[2] As a result, the volume of labor-intensive exports declined by 21 percent in 1996. Meanwhile, higher technology products such as computers and parts, and electric motors (mostly SITC group 7 products), faced increasing competition from Korea, Singapore, Taiwan POC, Malaysia and Hong Kong. Export volumes for these goods fell 8 percent in 1996. Greater competition from other Asian economies partly reflected a greater convergence in export structures. By 1994-95, the export structures of Korea, Malaysia, and Thailand (and, to a lesser extent, the Philippines) were broadly similar. Thus, goods accounting for over 50 percent of Thai exports (at the three-digit SITC level) were also produced by regional competitors.




**Common Export Products (SITC 3-digit level) 1/**

| | Korea | Malaysia | Philippines | Thailand |
|---|---|---|---|---|
| | (in percent of total exports) | | | |
| Common exports | 58.5 | 58.7 | 25.7 | 53.3 |
| Machinery & transport | 39.9 | 50.2 | 19.7 | 30.0 |
| Manufactured articles 2/ | 7.7 | 6.2 | 4.6 | 16.8 |
| Other | 10.9 | 2.4 | 1.3 | 6.5 |

Source: UNCTAD 1996/97

1/ Average of 1994-95.

2/ Includes goods such as furniture, garments, footware, and jewelry.

## B. Export Performance in the Post-Crisis Period

117. **The large depreciation of the baht led to an increase in export volumes.** In the aftermath of the crisis, Thailand's real effective exchange rate depreciated by 35 percent in the second half of 1997, but subsequently recovered.[3] Export volumes responded by increasing 8-9 percent in each of 1997 and 1998, despite a sharp drop in partner country demand. The impact of the real exchange rate depreciation is most visible for labor intensive products, which saw an improvement in competitiveness relative to other

[2]At the time, many observers attributed the loss in competitiveness to the 1994 devaluation by China. On a trade-weighted basis, however, the impact appears small, since the majority of Chinese trade had already been taking place at the (more depreciated) market, rather than official, rate.

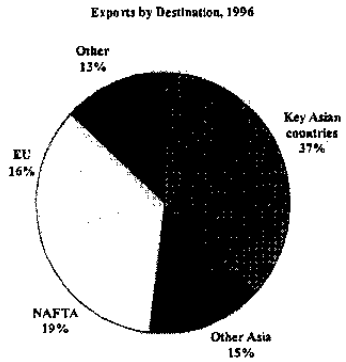
[3]As of end-1999, the cumulative real effective depreciation was 25 percent.

markets producing low-tech products. As a result, the volume growth of labor-intensive exports improved from *minus* 6 percent in 1996 to *plus* 4 percent in 1998.

118. **Nevertheless, three factors dampened the impact of the baht's depreciation:**

- **First, Thailand's major competitors also depreciated their currencies.** Insofar as Indonesia, Korea, Malaysia, and the Philippines all underwent depreciations of roughly similar magnitudes, the gain in export competitiveness has been commensurately smaller.[4]

- **Second, Thai exports suffered from their greater dependence on regional markets.** Thailand has long been a more "Asian-centric" exporter. More than half of its exports are destined to the economically depressed Asian region. Exports to key Asian markets (e.g., Japan, Singapore, Taiwan, and Hong Kong SAR) alone accounted for 37 percent of total exports.[5]




- **Third, there was a sharp decline in export prices.** Thailand's average export unit value fell by about 17 percent during 1997-98—significantly more than the 11 percent decline in world average prices of manufactures and non-fuel commodities (weighted by Thailand's exports). Prices of agricultural products fell by 34 percent during the same two-year period, largely reflecting the decline in world commodity prices (28 percent). These effects were exacerbated by the large share of exports to other Asian markets, including to Japan, where both demand and prices fell.

119. **Overall, Thailand has gained market share since the crisis, and its export performance has kept pace with other Asian crisis countries.** From 1997 through September 1999, export volumes rose 7 percent faster than the increase in world trade volumes. On average, Thai exports performed better than those of advanced countries, with export volumes growing about twice as fast as the average of developing countries. However, in nominal terms, Thailand's market share shrank marginally during the same period, reflecting the decline in its export prices. Relative to other crisis countries, export value growth since the second quarter of 1997 is comparable to that in Korea and Malaysia. The Philippines, however, has outperformed all other countries, reflecting its relatively large share of exports to the U.S. (which rose from 32 percent of exports in 1996 to more than 50 percent of exports by the first half of 1999), as well as its high concentration of electronics sector exports.

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[4]The INS-based real effective exchange rate captures this effect, but perhaps only partially, as the weights used in its construction are based on trade patterns dating to the early 1990s (when third-country competition among the regional competitors may have been smaller).

[5]For example, nearly 20 percent of Thai exports were destined for Japan in 1995, as compared to just 6–8 percent in Korea, Malaysia, and the Philippines.