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Balance Sheets and Economic Recovery

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สิงหาคม 2546

บทสรุป

ข้อคิดเห็นที่ปรากฏในบทความนี้เป็นความเห็นของผู้เขียน ซึ่งไม่จำเป็นต้องสอดคล้องกับความเห็นของธนาคารแห่งประเทศไทย

บทวิจัยนี้ได้ทำการประเมินความแข็งแกร่งของฐานะทางการเงินในปัจจุบันของภาคธุรกิจและภาคครัวเรือน ซึ่งภาคเศรษฐกิจดังกล่าวมีบทบาทสำคัญต่อการลงทุนและการบริโภคของภาคเอกชนคิดเป็นกว่าร้อยละ 70 ของเศรษฐกิจไทย การศึกษาบนพื้นฐานของข้อมูลที่มีในปัจจุบันเพื่อมุ่งที่จะหาคำตอบของ 3 ประเด็นหลัก กล่าวคือ (1) ฐานะทางการเงินของภาคธุรกิจและภาคครัวเรือนได้ฟื้นตัวอย่างสมบูรณ์ภายหลังได้รับผลกระทบจากวิกฤติเศรษฐกิจการเงินแล้วหรือยัง (2) ความเสี่ยงต่อฐานะทางการเงินของภาคเศรษฐกิจดังกล่าวที่ทางการต้องติดตามดูแลอย่างใกล้ชิดในช่วงที่เศรษฐกิจกำลังฟื้นตัวคืออะไร และ (3) แนวทางการจัดการกับความเสี่ยงดังกล่าวตลอดจนการดำเนินนโยบายการเงินที่เหมาะสม เพื่อเอื้อต่อการขยายตัวอย่างยั่งยืนของเศรษฐกิจในระยะปานกลางควรเป็นเช่นไร

นอกจากนี้ บทวิจัยนี้ยังวิเคราะห์ถึงบทบาทที่สำคัญของภาคการเงินในการเป็นตัวกลางจัดสรรทรัพยากรระหว่างภาคธุรกิจและภาคครัวเรือน และเน้นย้ำความสำคัญของหลักธรรมาภิบาลและการพัฒนาตลาดการเงิน อันจำเป็นอย่างยิ่งต่อการฟื้นตัวอย่างยั่งยืนของเศรษฐกิจต่อไป

ผู้เขียนขอขอบคุณ ดร. บัณฑิต นิจถาวร ที่ให้คำแนะนำ และขอขอบคุณเป็นพิเศษสำหรับเจ้าหน้าที่ของสำนักงานคณะกรรมการพัฒนาเศรษฐกิจและสังคมแห่งชาติและสำนักงานสถิติแห่งชาติสำหรับความช่วยเหลือในส่วนของข้อมูลภาคครัวเรือน และคุณคธาฤทธิ์ สิทธิกูลและคุณพงษ์ศักดิ์ สุขเสวกจากทีมวิเคราะห์เงินทุนธุรกิจ สายนโยบายการเงิน ธปท. สำหรับการจัดทำข้อมูลภาคธุรกิจ และขอขอบคุณ ดร. ปิติ ดิษยทัต จากทีมกลยุทธ์นโยบายการเงิน สายนโยบายการเงิน สำหรับคำแนะนำในการเรียบเรียงบทความ และเพื่อนพนักงานสายนโยบายการเงินที่ให้กำลังใจและการสนับสนุนอย่างดียิ่ง

BOT Symposium 2003

Balance Sheets and Economic Recovery

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Abstract

This paper assesses the current strength of balance sheets of the corporate and household sectors that together account, through private investment and consumption, for over 70 percent of the Thai economy. On the basis of the available data, it seeks to answer three questions. First, have the balance sheet conditions of corporations and households recovered fully from the crisis? Second, what are the risks associated with these sectoral balance sheets that should be monitored closely as the economy recovers? Third, how should such risks be managed and monetary policy conducted in order to facilitate medium-term sustainable growth?

This paper also analyzes the important role of the financial sector in intermediating resources between corporations and households, and highlights the importance of good governance and financial market development in sustaining the economic recovery.

The authors are grateful to Dr. Bandid Nijathaworn for his support and guidance. Special thanks go to staffs at NESDB and NSO for their kind assistance on the household data and to Khatharit Sitthikul and Pongsak Sooksawak, Economists of Business Finance Analysis Team, Monetary Policy Group, BOT, for their initiatives and efforts in constructing the corporate sector data. We would also like to thank Dr. Piti Disyatat, Economist, Monetary Policy Strategy Team, for his editorial comments and our colleagues in the Monetary Policy Group for their technical and moral supports.

Contents

Tables

Figures

I. Introduction

The 1997 economic and financial crises brought a significant shock to Thailand's external sector and the domestic economy. As a result, substantial adjustments took place in spending and savings, as well as stock of assets and liabilities. These adjustments have varied in both degree and form across households, corporations, government, and financial institutions, with important implications for economic recovery, fiscal sustainability, and financial system soundness.

At this juncture, the Thai economy has strengthened markedly on the external front, with sustained current account surpluses, strong international reserves, and much reduced external debt. Despite the increase in total public debt following the fiscal stimulus and fiscalization of financial sector adjustment costs, the progress of fiscal consolidation has been faster than expected, driven by buoyant revenue in tandem with the momentum of overall economic recovery. Indeed, the external and public sectors accounted for about 23 percent on the demand side of nominal GDP at end-2003 Q1.

In managing the challenges of the recovery, policy makers need to have a good grasp of what had been the adjustments of consumption and investment, which made up 73 percent of GDP. In assessing the prospects of private consumption and investment, it is essential to analyze key financial variables influencing consumption and investment, and thus to examine the adjustment of corporations and households. To this end, this paper analyses the adjustment in financial conditions of the corporate and household sectors in Thailand from the 1997 crisis up to the present. Our task focuses on exploring how corporations and households, after reducing assets and restructuring liabilities in response to the crisis, have expanded assets during the recovery process. Now that the growth momentum is solidifying, we also examine how these two sectors re-accumulate liabilities, particularly debt, and assess their debt service capacity.

The paper aims to answer three key questions pertinent to medium-term macroeconomic and monetary policy formulation. First, are current financial conditions of Thai households and corporations supportive of the present economic recovery process? Second, over the medium term, what are the risks associated with these sectoral balance sheets that should be monitored closely? Third, how could such risk management as well as monetary policy be carried out effectively?

The paper is organized in six sections. After this introduction, **Section II** traces the adjustments of the non-bank corporate sector to assess whether its financial conditions have sufficiently improved to support the economic recovery, and to identify remaining pockets of weaknesses. **Section III** focuses on changes in the financial conditions of households, particularly their responses to changes in nominal and real income and wealth in terms of adjustments in spending, saving, and financing behaviours, and how these behaviours could be affected by continuing economic growth.

Section IV highlights three areas of policy implications. First is the implication of the outlook financial conditions of corporate and household sectors on the prospects of economic recovery. This is followed by policy considerations relating to the management of risks associated with the growth process and on financial market development, focusing also on implications on the financial intermediary function of banks. Finally, the paper discusses the challenges posed by the expansion of corporate and household balance sheets to the conduct of monetary policy over the medium term. The paper closes with **Section V and VI,** for conclusion and data appendices, respectively.

II. Balance Sheet Adjustments of Thailand's Corporate Sector

After six years of restructuring in response to the 1997 crisis, the aggregate balance sheet of non-bank companies[1] listed in the SET has improved considerably, particularly in terms of profitability and liquidity. Our key findings are that (1) operational and financial improvements were primarily driven by overall economic growth that helped accelerate sales and earnings, as well as declining interest rates that encouraged firms to switch to cheaper debt sources; but (2) there remain pockets of weaknesses that could constrain corporate balance sheet expansion. To elaborate on these findings, this section of the paper first reviews developments in corporate profitability and solvency from 1997 Q2 up to 2003 Q1. It then focuses on the asset and liability adjustment and prospects for expansion, paying particular attention to four key sectors, namely commerce, manufacturing, construction, and real estate, chosen for mapping balance sheet adjustments with broader developments in consumption, investment, and property markets, respectively.

In analyzing these sectors, SET data were reclassified according to the International Standard Industrial Classification (ISIC) to reassign firms, particularly those classified as rehabilitation companies, in accordance with core business functions. As a result, profitability and solvency measures, as well as assets and liabilities of listed non-bank firms presented in this section are different from those reported by the SET.

2.1 Overview of Adjustments

Prior to the 1997 crisis, non-bank companies listed in the SET diversified from core businesses, which had become less competitive, and turned to the rising asset prices. From 1994 to 1997 Q2, they increased debt to expand asset base despite the moderating growth in sales and gross profit and the rising average borrowing cost **(Figure 2.1A)**. Although the ratio of earnings before interest and tax (EBIT) to sales was relatively stable, the operating asset turnover had been falling **(Figure 2.1B)**. When the 1997 crisis hit, the profitability and solvency strengths of Thailand's corporate sector were already weak. Following the crisis, gross profit and interest rate coverage dropped sharply as interest expenses jumped, owing to sharp exchange rate depreciation and interest rate increases **(Figure 2.1C)**. Indeed, interest expenses remained at high levels throughout 1998-2000.

In adjusting to the crisis, Dupont-type ratios (definitions in Part VI) namely the operating asset turnover, the ratio of EBIT over sales, and the return on assets, showed noticeable improvements as the country's growth momentum strengthened since 2001. This was in contrast to the marked deterioration of these indicators from 1997 Q2, before stabilizing in 1999 and improving somewhat from then to 2000 Q4. During these same periods, liquidity conditions, as represented by the Quick and Cash ratios, changed in line with profitability performance and the economy's overall growth. Together with the downtrend of lending rates, the reduction in total corporate liabilities, and substitution away from bank loans towards cheaper debt sources, the debt service capacity of the corporate sector improved significantly. This was evidenced by higher interest coverage and interest to sales ratios **(Figure 2.1D)**, which measure the ability of firms to use gross profit for interest expenses and proportion of sales used for interest payments, respectively.

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[1] Excluding banks, finance and securities companies, insurance companies, warehouse and silo companies.

Figure 2.1A: Growth of Sales, Cost of Sales, and Gross Profit of Non-bank Listed Companies

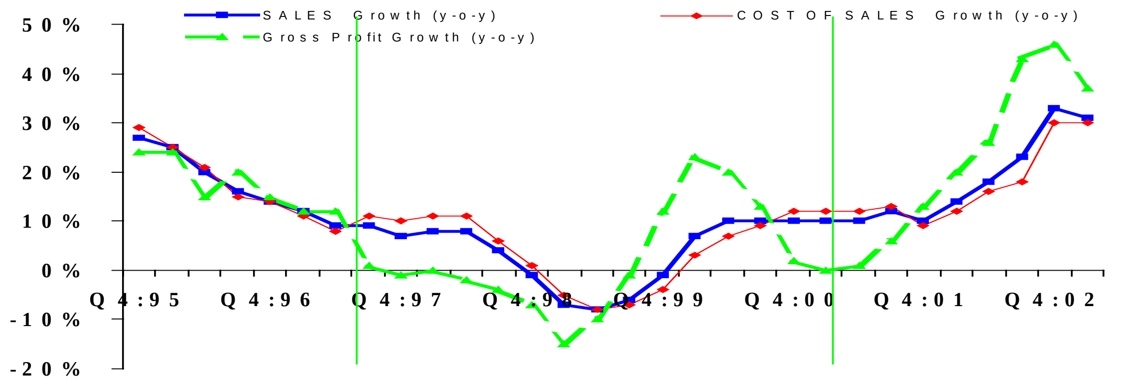


Figure 2.1B: Operating Assets, Total Assets Turnover, and Adjusted EBIT/Sales of Non-bank Listed Companies

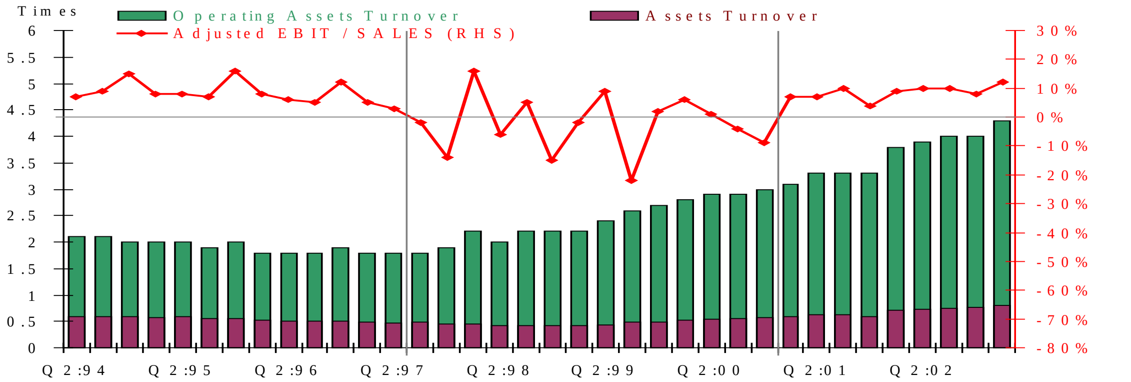


Figure 2.1C: Interest Expense and Interest/Sales of Non-bank Listed Companies

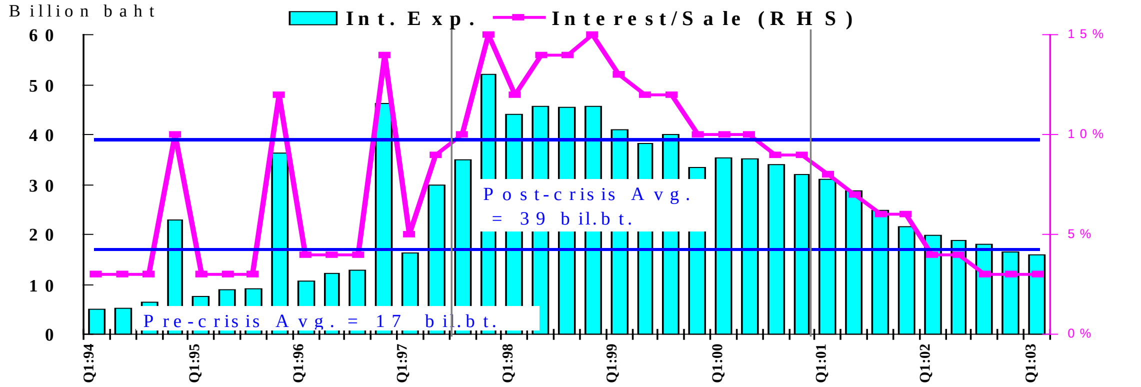


Figure 2.1D: Liquidity and Interest coverage ratio of Non-bank Listed Companies

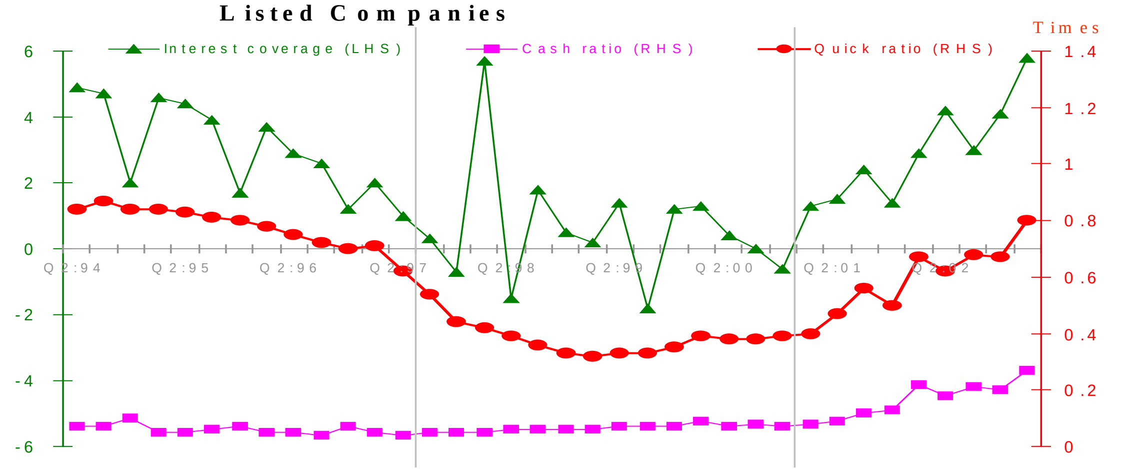


Figure 2.1E: Asset Component of Non-bank Listed Companies

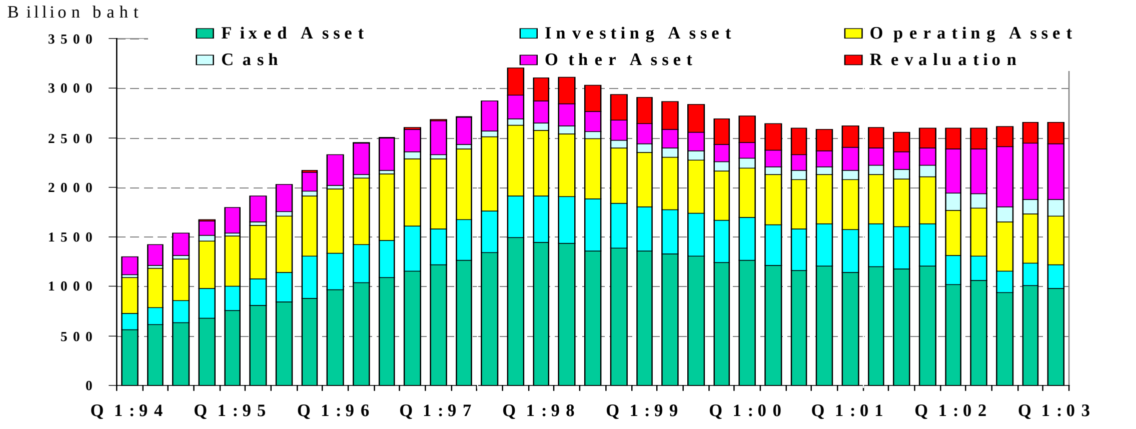
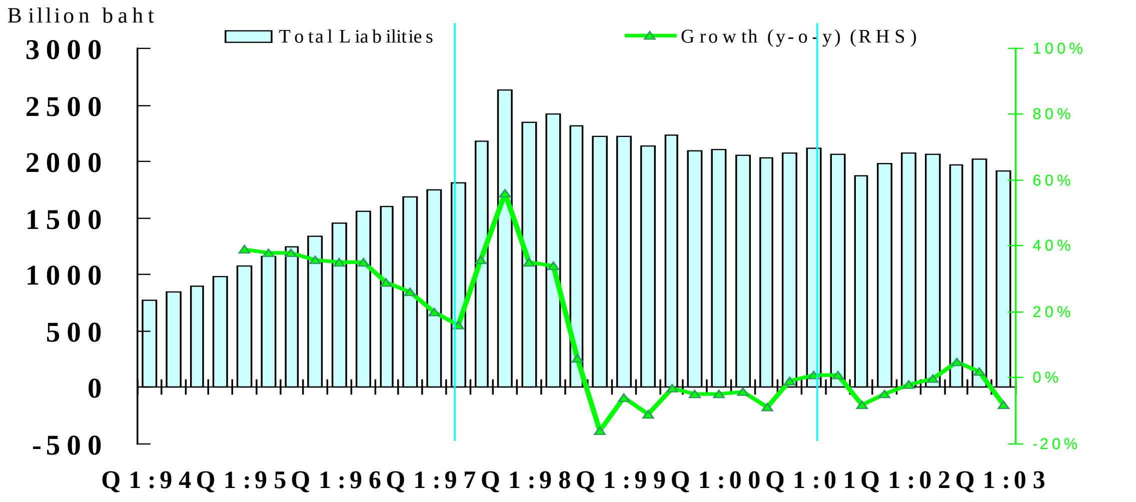


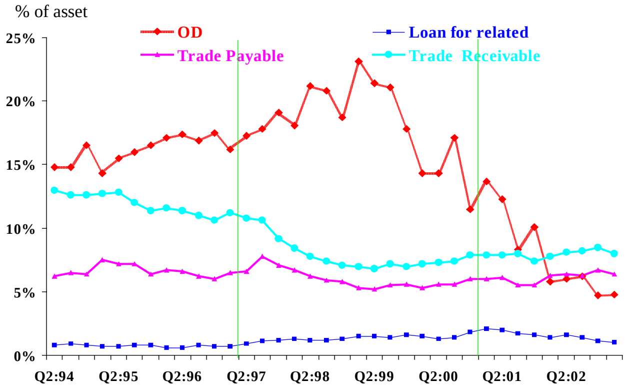
Figure 2.1F: Total Liabilities of Non-bank Listed Companies



The key developments underlying these ratio changes were:

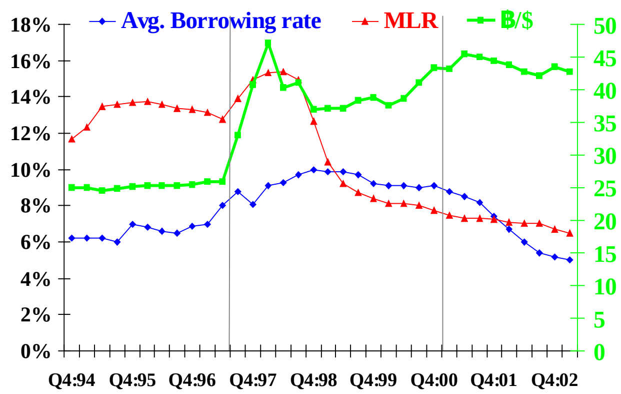
(1) Firms had to utilize a leaner asset base **(Figure 2.1E)**, thus helping to accelerate operating asset turnover from the first quarter of 1998.[2] In fact, this improvement seemed to be forced upon firms, rather than a voluntary action, following a sudden reduction in short-term financing as trade payables (cash outflow) and trade receivables (inflow) halved as percent of total asset compared with that before crisis **(Figure 2.2)**.

Figure 2.2: Non-bank Listed Companies' Source of Short-term Financing



(2) Firms' balance sheets remained highly leveraged since non-operating assets were not reduced significantly owing to plummeting asset prices following debt restructuring measures and asset sales **(Figure 2.1F)**. Moreover, the average cost of borrowing remained higher than MLR -- a benchmark for prevailing costs of borrowing from domestic banks, on average by 0.8 percent per annum during the years 1999-2000 **(Figure 2.3)**.[3] This suggested that firms were not able to switch fast and large enough from foreign borrowing to domestic borrowing, in order to lessen the impact of exchange rate depreciation on their existing foreign debt. This was since domestic banks were increasingly unwilling to lend to the corporate sector, as uncertainties heightened regarding the prospects of economic recovery and institutional arrangements relating to debt restructuring and bankruptcy.

Figure 2.3: Financial Condition



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[2] Firms did not reduce their asset base until the beginning of 1998, which coincided with the big jump in other income for the whole of that year particularly in Q1.

[3] Between 1994 and 1997 Q2, non-bank listed companies were able to borrow on average at the rate of 6.67 percent per annum, compared with the minimum lending rate (MLR) of large banks in Thailand that averaged 13.16 percent per annum, reflecting the perceived creditworthiness of these firms and their ability to borrow abroad. Indeed, loans together with borrowing by issuing debt instruments, a large share of which was believed to be bills of exchange (B/E), comprised about 60 percent of total corporate financing before the crisis.

(3) By end-2000, the ratio of debt to common equity stood at 2.8 times compared with the pre-crisis average of 2.5 times (**Figure 2.4**), while the debt to shareholders' equity ratio was about 4.5 times compared with the pre-crisis average of 1.7 times. Disaggregating shareholders' equity showed that, since 1997 Q3, the net asset reappraisal gain had been significant in helping to offset the negative retained earnings. Without this positive factor, debt divided by shareholders' equity would have been noticeably higher as the denominator shrank (**Figure 2.5 and 2.6**).

Figure 2.4: D/E of Non-bank Listed Companies

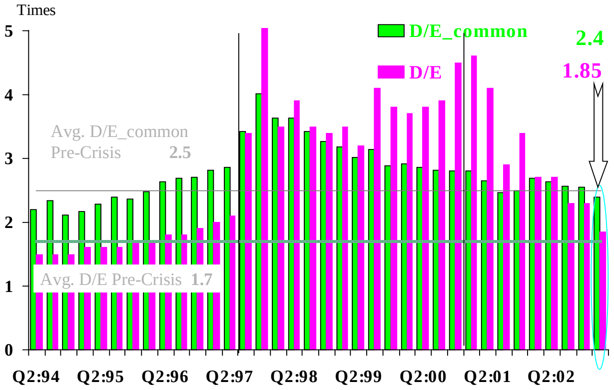
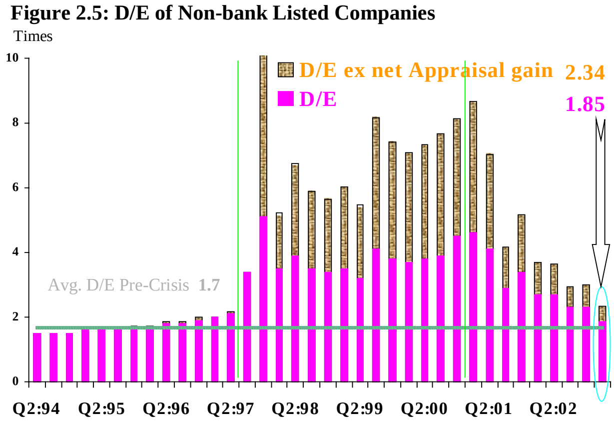
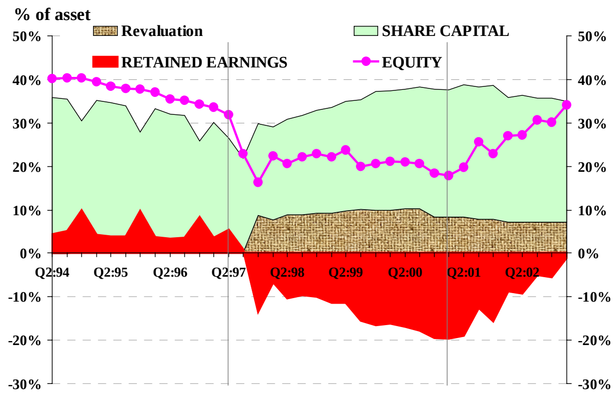


Figure 2.5: D/E of Non-bank Listed Companies



(4) This solvency weakness was quite worrisome as it was accompanied by an average cost of borrowing that continued to exceed MLR, suggesting partly that firms had not benefited from lower interest rates as debt was rescheduled rather than restructured. Nevertheless, as of 2003 Q1, the ratios of debt to common equity and to shareholders' equity fell to 2.4 and 1.85, respectively. As retained earnings improved, the debt to shareholders' equity ratio excluding net asset reappraisal gain also converged to the ratio excluding net asset reappraisal gains.

Figure 2.6: Non-bank Listed Companies' Component of Equities



2.2 Adjustments of Four Key Sectors

Despite the pick up in economic growth, starting from 2001 with continuing momentum witnessed in 2002 and 2003 Q1, corporate balance sheets, on aggregate, did not expand correspondingly, raising concern about the impact of debt and excess capacity overhang on the emergence of a new investment cycle. We therefore focus on the developments of commerce, construction, real estate, and manufacturing in order to trace how these sectors performed relative to consumption and private investment.

In terms of ***profitability and liquidity*** performances, all four sectors fared equally well whereas equity improvements varied among sectors. As percent of total assets, ***shareholders' equity*** increased most significantly in the commerce sector followed by real estate, manufacturing, and construction sectors in descending order (**Figure 2.7**). This ranking is consistent with the recovery path led by consumption, particularly a pick-up in real estate purchases, while production growth has been more moderate, resulting in gradual expansion in investment and construction as firms reduce excess capacity.

Figure 2.7: Sectoral Development (1)

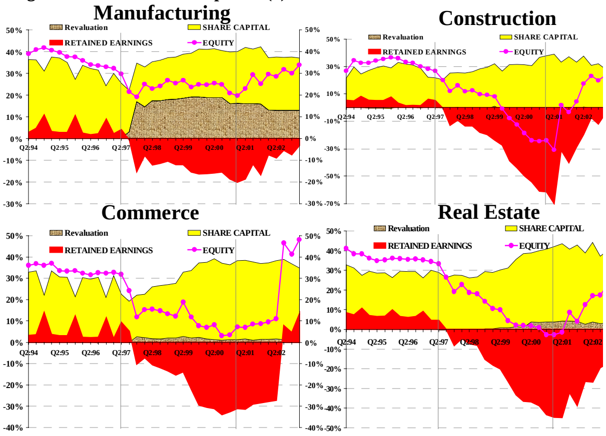
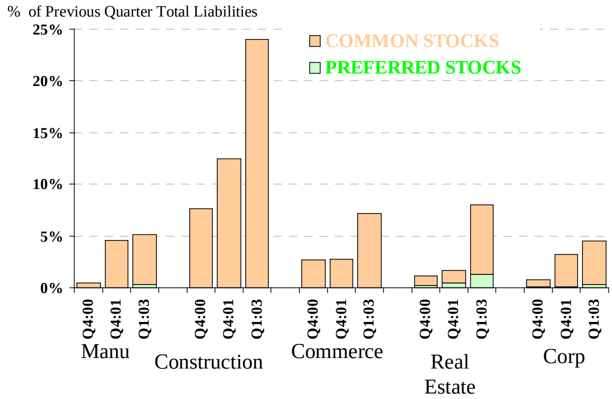
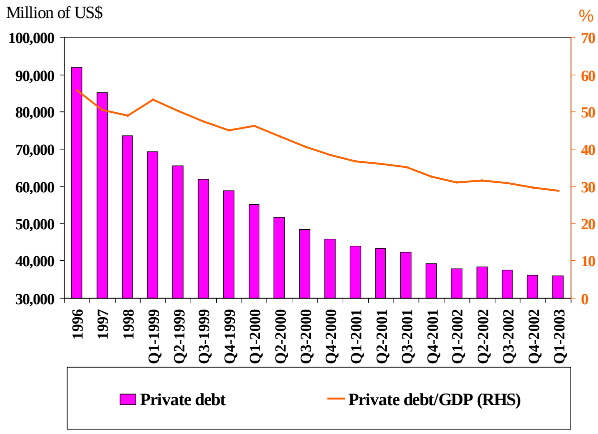


Figure 2.8: Accumulated Debt – equity swap from debt restructuring



The two important factors contributing to equity improvements were the debt-equity swap and changes in retained income net of gains from asset reappraisal, which in our view were partly linked. In terms of accumulated debt-equity swap, measured as percent of total liabilities as of the previous quarter before the swap occurred, the construction sector was the most active, followed by commerce and real estate, and manufacturing as the least active. The former three sectors found it particularly necessary to reduce debt following persistent large negative retained earnings and in the absence of significant offset from asset reappraisal gains to help shore up shareholders' equity (**Figure 2.8**).[4]

Figure 2.9: Private External Debt



Even after debt restructuring progress, retained earnings for three out of four sectors continued to be negative. This was with the exception of commerce, which turned positive in 2002 Q3, in line with buoyant consumption growth. For others, smaller negative retained earnings helped generate positive source of funds for companies. Nevertheless, the manufacturing sector continued to depend on asset reappraisal gain in supporting shareholder's equity.

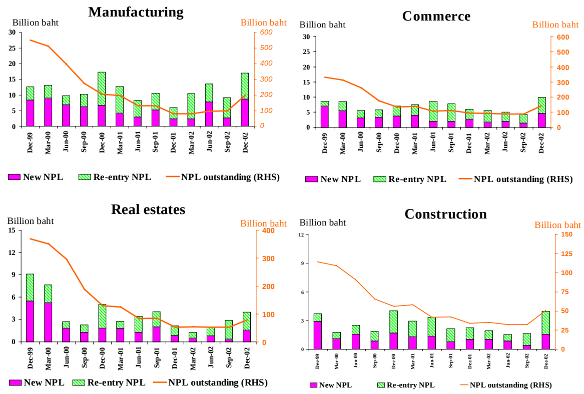
By and large, the progress of financial restructuring had continued to be constrained by the reluctance of banks to lend. As a result, firms held on to existing

[4] Effective July 2001, amendments to the Public Company Act allow companies to use legal reserves, accounted for in shareholders' equity, to offset negative retained earnings.

assets and neither banks and nor firms were prepared to write-off debt and bore the associated losses. This was understandable as profitability had just only recently improved and retained earnings remained poor. Nevertheless, average borrowing costs of the three sectors had fallen below MLR[5] since 2002 Q1, except for the construction sector where average borrowing cost fell below MLR in Q2. This implied that listed companies were able to restructure their financing more progressively, partly owing to the continued repayment of foreign borrowing and lower interest rates (**Figure 2.9**).

On asset adjustment, commerce, construction, and real estate sectors were early in reducing assets. As of 2003 Q1, total assets of these respective sectors reduced by 28, 48, and 45 percent from their peaks, respectively. By comparison, the manufacturing sector made less progress. Including net gain from asset reappraisal, its asset base was reduced by some 3 percent from its peak at end -1997. Indeed, asset adjustment also mirrored the trends of new NPL and reentry NPL, which showed the manufacturing sector continuing to drag the debt restructuring progress (**Figure 2.10**).

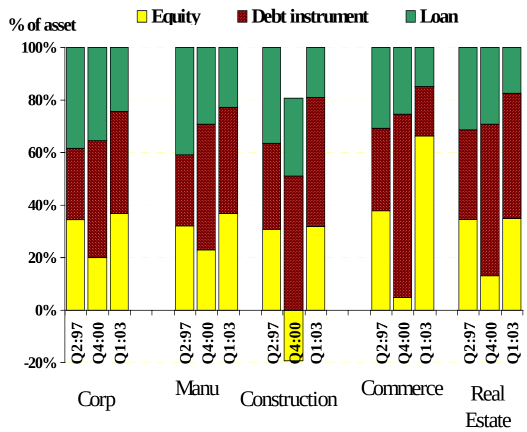
Figure 2.10: NPL* Increase in Major Sectors



* New definition from Dec.2002.

Turning to the liability side, on aggregate, the corporate sector increased its share of shareholders' equity from 31 percent of total asset in 1997 Q2 to 33 percent as of 2003 Q1. Commerce showed the highest gain in share of financing by shareholder's equity, accounting for 48 percent of total asset by 2003 Q1 (**Figure 2.11**), while moderate increases were recorded for manufacturing, construction, and real estate. Nevertheless, all sectors showed significant improvements from their respective lows at end-2000.

Figure 2.11: Financial Structure of Non-bank Listed Companies



Worth noting is that, except for the commerce sector, the share of non-bank loan debt increased significantly after the crisis. While this reflected the growth of the bond market, it reiterated concerns of *Haksar and Kongsamut (IMF, 2003)* on corporate vulnerabilities to interest rate increase and exchange rate weaknesses. We are somewhat less concerned on the corporate ability to withstand these short-term interest rate and exchange rate changes, as the value of external private debt has fallen significantly and

[5] Since the strengthening economic momentum did not exert pressure on prices, the monetary policy became increasingly accommodative with three cuts to the policy rate during 2002-2003, amounting to 1 percent per annum. This brought down MLR gradually from 7.13 to 6.19 percent per annum by end-2002 and to 6.5 percent per annum by 2003 Q1.

the borrowing diversification to medium-term debt instruments have interest rate characteristics that are either fixed for the whole or part of their maturities. Moreover, the painful lesson from the 1997 crisis should discourage firms from borrowing short term abroad.

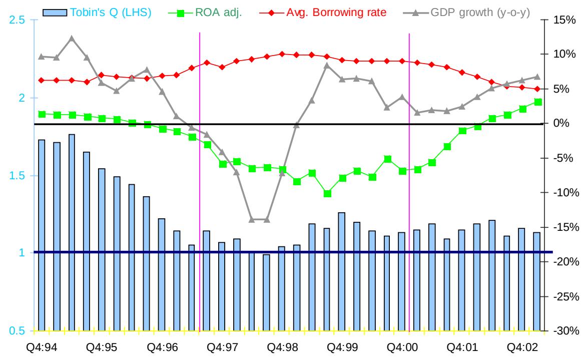
2.3 Outlook for Corporate Balance Sheet Expansion

As with during the economic down-cycle when the ability of the corporate sector to absorb shock diminishes but balance sheet weaknesses can linger for years without triggering the crisis, one could *prima facie* expect that firms may also linger for a certain period of time before expanding investment and employment even after significant balance sheet improvements.

According to the US experience, firms tend to wait before expanding investment even after significant balance sheet adjustments. This delay is not unexpected since firms start to invest again only after they regain confidence in the recovery of final demand. Meanwhile, as the liquidity improves, funding costs decline, and stock prices increase, firms will try to lock in low funding costs by continuing to restructure liabilities. Over time, with growing confidence, low cost of capital, and lean inventories that need replenishing, investment expansion can be triggered given that no significant overhang remains in the balance sheet.

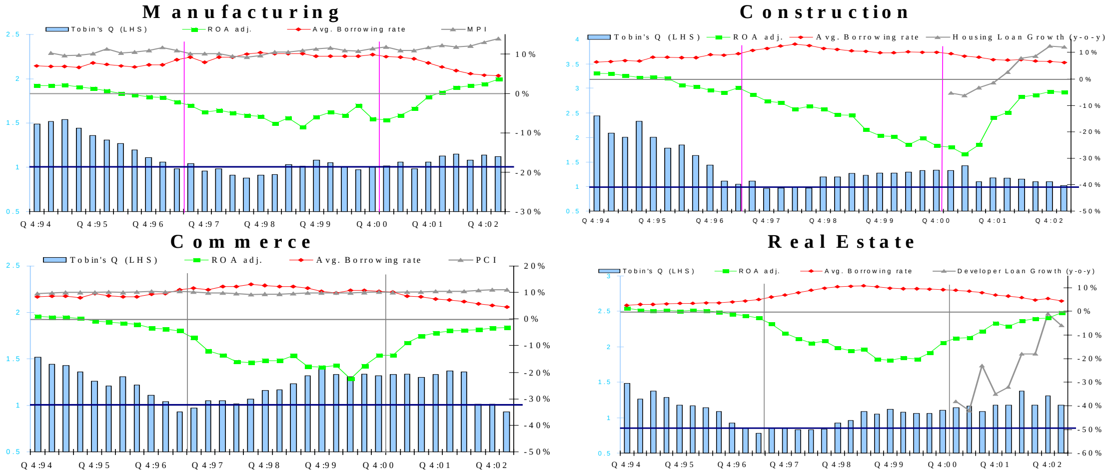
Clearly, projections for the Thai economy's growth by private and public agencies all point to the continuing momentum for the rest of 2003 and for the whole of 2004. Should the global recovery accelerate, this favourable outlook would be enhanced. As a rule, once the returns on asset in key sectors rise above average borrowing costs, firms typically make new investment. In the meantime, higher stock prices also improve investment prospects **(Figure 2.12)**.

Figure 2.12 Adjusted ROA and Tobin's Q ratio of Non-bank Listed Companies



In 2003 Q1, the above picture had not yet appeared. Non-bank aggregate return on asset excluding other income was still lower than the average borrowing cost by 1.8 percent per annum. Meanwhile, the Tobin Q proxy, calculated from the sum of market value of equity and total book value of debt as a ratio of total book value of assets, hovered close to end-2000 level notwithstanding significant increases in stock prices since then. Nevertheless, one may extrapolate that since MLR fell further in 2003 Q2 to 6 percent per annum and if the return on asset maintains its level, this rate of return could now be above the average borrowing rate.

Figure 2.13: Sectoral Development (2)



As for sectoral developments, only the manufacturing sector came closest to the above extrapolation whereas ROAs excluding other income for commerce, property, and construction, continued to be well below their average borrowing rates **(Figure 2.13)**. However, despite this seemingly positive investment prospect, the manufacturing sector still has much to achieve in terms of debt restructuring.

While prospects for investment expansion seem positive and should improve in tandem with the overall economic growth and buoyant stock market, the relatively nascent recovery in profitability, together with existing pockets of fragility in the corporate balance sheets, would tend to delay any investment expansion in the near term. As noted by Haksar and Kongsamut (IMF, 2003), "most firms with low debt equity are still relatively small; many smaller firms still have high debt- equity; many of the larger firms are highly leveraged". Therefore, large firms would probably be wary of expanding balance sheets because this will worsen their debt-equity ratios. To promote investment expansion, it is therefore crucial that firms with high debt-equity ratios accelerate their debt and financial restructuring, though these may inevitably involve merger and acquisition as well as costs sharing of debt write-offs.

Even if firms were able to restructure and reduce debt, it is not certain whether banks will be more willing to extend credit, unless there have been significant changes in the management and corporate governance to ensure more prudent business financial management going forward. Otherwise bank lending will continue to be plagued with problems of information asymmetry and adverse selection similar to those before the economic crisis. As for firms, their choice of financing will also be influenced by other factors including; (1) the preferred structure of ownership, management control, and business/bank linkages, (2) the speed of stock price increase relative the expected increase in the bank lending rate over the medium term, (3) the monetary and non-monetary costs of entering bond market, particularly relating to credit rating and greater information disclosure requirements, and (4) the risk tolerance and management capacity of currency and maturity mismatches between assets and liabilities. The choice of financing will be a matter of concern for monetary policy as it can affect the choice of policy instrument and effectiveness of different channels of policy transmission.

While overall economic recovery helps strengthen corporate balance sheets, only with advancing corporate debt restructuring and improved governance can the corporate balance sheets reciprocate in being supportive of medium-term growth. Looking forward, the health of corporate balance sheets would be weakened if firms are complacent and wait to be forced to adjust when the next down cycle hits. In that event, not only would the corporate balance sheet not be supportive of growth, it may exacerbate the economic prospects as new weaknesses compound on existing fragility.

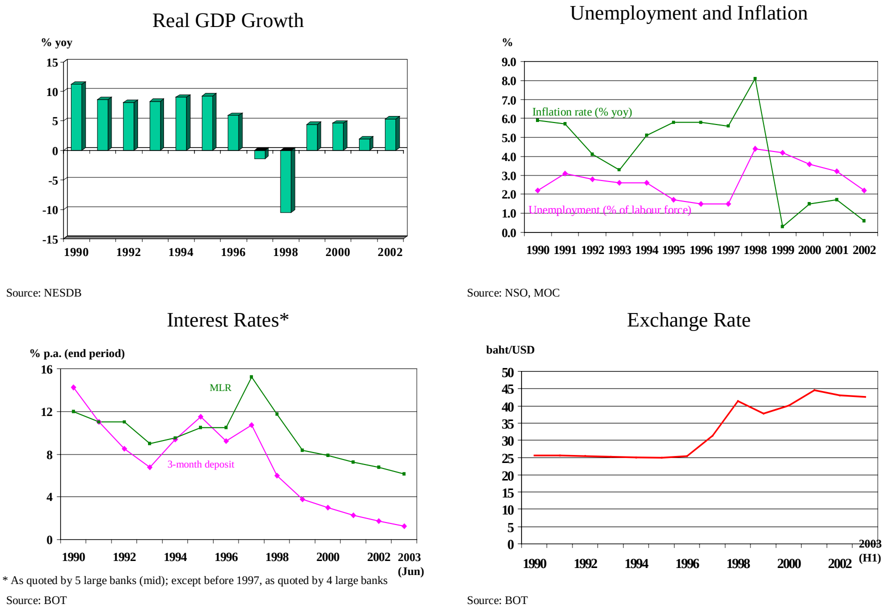
III. Balance Sheet Adjustments of Thai Households

Between 1990-1995, Thai households benefited from continued high GDP growth averaging 9.0 percent while unemployment and inflation rates were relatively low averaging 2.5 and 5.0 percent, respectively. In 1995, disposable income per capita increased at the highest rate of 8.1 percent in real terms. Households enjoyed an asset price boom and high deposit rates of over 10.3 percent during the same period. However, as economic growth fell to 5.9 percent in 1996, growth of household disposable income trickled to 2.7 percent in real terms.

In tandem with the disposable income growth, the average debt per household in 1996, based on the NSO's survey[6], amounted to Baht 52,001, 1.7 times the level observed in 1994. This amount of debt was equivalent to 4.8 times of monthly household income. However, with personal income per household remained strong – expanding by an average 15.2 percent per year in 1996, households continued to be able to service this increase in debt.

Following the economic and financial crisis in 1997, the sharp depreciation of the currency led to high inflation, falling output growth, and high unemployment **(Figure 3.1)**. As real GDP growth contracted to a trough of –10.5 percent in 1998, households' personal income contracted by 6.4 percent in real term. This coupled with the marked decrease in interest rates and falling asset prices inevitably had an adverse impact on households' wealth.

Figure 3.1: Thai economic conditions



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6 The National Statistics Office's Household Socio-Economic Survey.

In response to the significant drop in income and wealth, both nominal and real terms, households cut down their expenditure to strengthen their financial position, which improved markedly during 1999-2001. As the economic growth began to gather momentum in late 2001, private consumption was a major contributor to growth.

This section analyses the households' adjustment via their consumption and conversely saving to the post-crisis environment with respect to changes in income, wealth, and debt levels, in order to assess the households' strength in supporting further recovery. Although consumption-led growth is not sustainable in the long run, the strength of households' financial balance sheet is still crucial for the overall recovery.

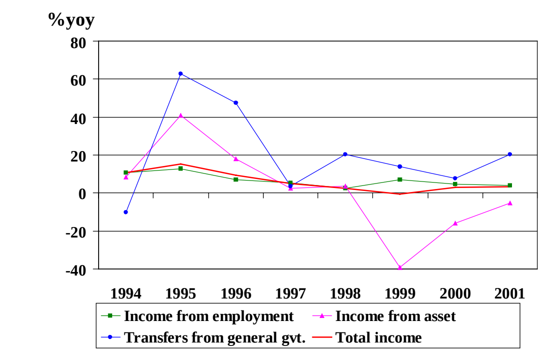
3.1 Development of Households' Income[7]

In the wake of the 1997 shocks, personal income growth in real terms fell by as much as 6.4 percent in 1998. Real wages and salaries, in particular, contracted 8.0 percent while real income from assets fell 5.4 percent in the same year **(Table 3.1)**. Real income from assets continued its negative growth until 2001, with the deepest contraction of 38.9 percent in 1999 due largely to declines in interest income. By contrast, government transfers have been on the rise since 1998, which have helped support households' consumption.

Although data for 2002 are yet not available, it is reasonable to expect that the upward trend of households' income continued judging from the high GDP growth rates during 2002-2003 Q1. In particular, the steady growth of income from employment, together with the continued reduction in unemployment in recent years, ensures that this major source of households' income continues to rise. Indeed, over the past 10 years employment has been the major source of household's income, representing around 85 percent of the total **(Table 3.2)**. The share rose to around 90 percent during 2000-2001, as income from interest payments and dividends dropped dramatically. Indeed, in the past 5 years, income from assets as a proportion of total personal income has declined to below the pre-crisis level as high returns on deposits of 7-11 percent per annum that households used to enjoy are now a thing of the past.

Income from employment has, moreover, been the main contributor to income growth, especially after the crisis. For instance, in 2001, when personal income grew 3.3 percent, the contribution of income from employment was 3.4 percent **(Table 3.3)**. In general, the growth of income from employment has been relatively slow but steady while the growth of income from asset tends to be very volatile **(Figure 3.2)**.

Figure 3.2: Growth of Personal Income



Source: NESDB

The relative importance of income from employment means that Thai households are more vulnerable to changes in labour market conditions than to movements in financial market. Macroeconomic policies focusing on employment creation, productivity enhancement, as well as structural reforms, are therefore crucial if consumption growth is to be maintained.

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[7] For our analysis, household incomes from the *National Income Account* by the National Economic and Social Development Board (NESDB), are classified into 3 major sources: (1) income from employment, (2) income from assets, and (3) other transfers.

Table 3.1: Real Personal Income Growth

(% change year-on-year)	1994	1995	1996	1997	1998	1999	2000	2001
REAL PERSONAL INCOME*	**5.5**	**9.4**	**3.8**	**-1.0**	**-6.4**	**0.3**	**1.8**	**1.2**
Income from Employment	**5.2**	**6.9**	**1.7**	**-0.4**	**-6.4**	**7.9**	**3.5**	**1.6**
o/w - *Wages and Salaries*	*8.9*	*13.9*	*5.6*	*0.1*	*-8.0*	*1.5*	*4.5*	*1.8*
- *Farm Income*	*20.1*	*10.6*	*2.6*	*-5.2*	*3.0*	*-11.9*	*-2.8*	*0.1*
Income from Asset	**3.1**	**33.6**	**11.9**	**-3.0**	**-5.4**	**-38.9**	**-16.8**	**-7.5**
o/w - *Interest*	*-2.9*	*42.5*	*17.2*	*-0.6*	*-7.3*	*-49.1*	*-29.2*	*-16.4*
- *Dividend*	*7.4*	*-2.3*	*-14.4*	*-42.5*	*-18.3*	*27.0*	*32.7*	*-11.5*
Transfers from General Gvt.	**-14.5**	**54.3**	**39.9**	**-2.1**	**9.8**	**14.8**	**6.7**	**17.9**
Corporate Transfer Payments	**19.7**	**9.6**	**5.4**	**-54.4**	**49.0**	**4.3**	**11.8**	**7.7**
Transfers from the Rest of the World	**47.6**	**-41.8**	**35.7**	**-0.9**	**-29.8**	**-11.4**	**20.4**	**10.3**

* Deflated by private consumption deflator

Table 3.2: Share of Total Personal Income

(% of total personal income)	1994	1995	1996	1997	1998	1999	2000	2001
PERSONAL INCOME	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Income from Employment	**85.3**	**83.4**	**81.7**	**82.2**	**82.1**	**88.3**	**89.9**	**90.3**
o/w - *Wages and Salaries*	*42.8*	*44.5*	*45.3*	*45.8*	*45.0*	*45.5*	*46.7*	*47.0*
- *Farm Income*	*10.1*	*10.2*	*10.1*	*9.7*	*10.6*	*9.3*	*8.9*	*8.8*
Income from Asset	**12.2**	**14.9**	**16.0**	**15.7**	**15.9**	**9.7**	**7.9**	**7.2**
o/w - *Interest*	*8.6*	*11.2*	*12.7*	*12.7*	*12.6*	*6.4*	*4.4*	*3.7*
- *Dividend*	*2.0*	*1.8*	*1.5*	*0.9*	*0.8*	*1.0*	*1.2*	*1.1*
Transfers from General Gvt.	**0.4**	**0.5**	**0.7**	**0.7**	**0.8**	**1.0**	**1.0**	**1.2**
Corporate Transfer Payments	**0.2**	**0.2**	**0.2**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**
Transfers from the Rest of the World	**1.9**	**1.0**	**1.4**	**1.4**	**1.0**	**0.9**	**1.1**	**1.2**

Table 3.3: Contribution to Growth of Personal Income

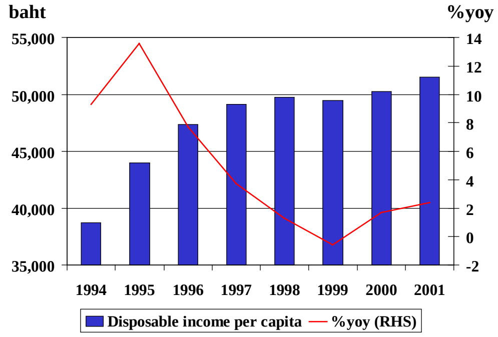
(%)	1994	1995	1996	1997	1998	1999	2000	2001
PERSONAL INCOME	**10.9**	**15.3**	**9.3**	**4.8**	**2.4**	**-0.4**	**2.8**	**3.3**
Income from Employment	**9.1**	**10.9**	**5.9**	**4.4**	**2.0**	**5.9**	**4.1**	**3.4**
o/w - *Wages and Salaries*	*6.0*	*8.6*	**5.0**	*2.7*	*0.3*	*0.3*	*2.5*	*1.8*
- *Farm Income*	*2.3*	*1.7*	**0.8**	*0.0*	*1.2*	*-1.3*	*-0.2*	*0.2*
Income from Asset	**1.0**	**5.0**	**2.6**	**0.4**	**0.6**	**-6.2**	**-1.5**	**-0.4**
o/w - *Interest*	*0.2*	*4.3*	*2.6*	*0.7*	*0.2*	*-6.2*	*-1.8*	*-0.7*
- *Dividend*	*0.3*	*0.1*	*-0.2*	*-0.6*	*-0.1*	*0.2*	*0.3*	*-0.1*
Transfers from General Gvt.	**0.0**	**0.2**	**0.3**	**0.0**	**0.1**	**0.1**	**0.1**	**0.2**
Corporate Transfer Payments	**0.0**	**0.0**	**0.0**	**-0.1**	**0.1**	**0.0**	**0.0**	**0.0**
Transfers from the Rest of the World	**0.8**	**-0.8**	**0.4**	**0.1**	**-0.3**	**-0.1**	**0.2**	**0.1**

Source: NESDB

To a certain extent, transfers from government have also cushioned household income in time of recession. Although representing only a small share, government transfers have been growing significantly in recent years, up 17.9 percent in 2001 from single digit growth in the previous 3 years except 1999. Its contribution to personal income growth has increased correspondingly as the direct result of a number of government stimulus packages, particularly the budget front-loading in 2001.

On per capita basis, households' disposable income has also been increasing continuously (**Figure 3.3**), except for a small negative growth in 1999. This upward trend is likely to continue in tandem with the economic expansion, along with support from several tax and non-tax government measures in place.

Figure 3.3: Disposable Income per Capita



Source: NESDB

3.2 Changes in Households' Wealth

The NSO's survey only provides information on changes in households' asset in each month, not the outstanding stock of household's assets. It does not therefore permit construction of a complete aggregate household's balance sheet (**Figure 3.4**). Nevertheless, this section attempts to assess the households' financial strength on the basis of several indicators on the asset side.

Figure 3.4: Structure of Household Aggregate Balance Sheet

Assets
- Housing
- Other tangible assets
- Gross financial assets
  - Pension and life insurance funds
  - Cash and deposits
  - Equities
  - Bonds
  - Other

Liabilities
- Gross financial liabilities
  - Mortgage loans
  - Other loans

Based on the net change in household's assets[8] – mostly in the form of cash and deposits as well as house and land holdings, net increase in households' assets underwent significant adjustments following the crisis before finally showing a strong surge in 2002 (**Figure 3.5**). Bank deposits remain a popular mean of saving as households perceive them as a risk-free instrument.

A. Financial Assets

Households' financial asset in terms of deposits has been expanding continuously despite the declining interest rate in recent years. Households' saving mobilized by financial institutions went up 7.8 and 6.9 percent in 2000 and 2001, respectively. Despite the absorption of the special issue of government saving bonds in September 2002, deposits still grew by 2.5 percent at end-2002. It is worth noting that in recent years the share of commercial bank deposits has been falling in favour of the government's specialized financial institutions such as Government Savings Bank, Government Housing Bank, and Bank for Agriculture and Agricultural Co-operatives (**Table 3.4**).

When deposit rates began to fall as bank's liquidity increased with the rising gap between deposit growth and credit growth, depositors were turned from the beneficiary

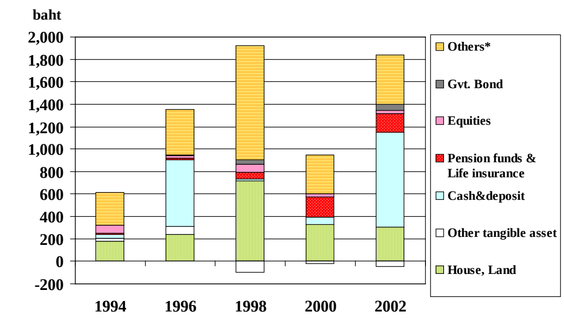
[8] Net change in assets = Increase in assets – Decrease in assets (from the NSO survey).

Note: The NSO survey should be used with caution as it does not control the sample group.

of credit boom to the bearer on non-performing loan problems and the inability as well as reluctance of banks to lend to the corporate sector. The profitability of banks as fund manager of household savings has declined as a result. As banks become more risk-averse in their lending and as deposit rates continue to fall, the deposit guarantee system has lost much of its value in helping lift risk-adjusted returns for households.

As interest rates have come down, so has households' wealth in terms of real returns on deposits (**Figure 3.6**). The decline in deposit rates has made pension funds and life insurance more attractive as an alternative means of saving. This has been induced in part by the government's tax incentive for life insurance programs as well as by the insurance industry offering an increasing variety of saving related insurance policies.

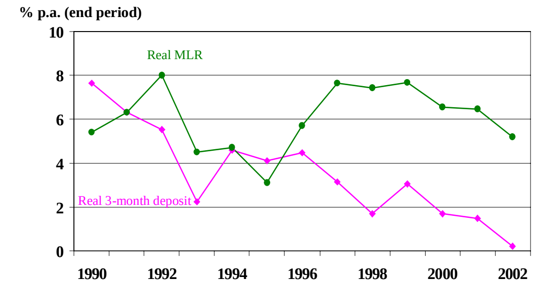
Figure 3.5: Average Net Change in Household's Assets per Month



Source: NSO Survey

*Households' Business Investment, Loans and Others

Figure 3.6: Real Interest Rates*



*As quoted by 5 large banks (mid); except before 1997 – as quoted by 4 large banks

Adjusted by inflation rate.

Source: BOT

Table 3.4: Average Share of Household Savings

Average annual share (% of total household savings) (end of period)	1985-90	1991-96	1997-99	2000	2001	2002
Commercial banks	75.8	73.1	79.6	78.2	77.1	76.2
Government Savings Bank	10.3	5.9	7.4	8.7	9.4	10.0
Government Housing Bank	1.3	1.4	3.0	3.4	2.9	2.5
Bank for Agriculture & Agricultural Co-operatives	0.7	1.1	2.0	2.5	2.7	3.1
Finance and finance & securities companies	9.1	15.5	4.0	2.8	2.9	2.6
Credit foncier companies	0.2	0.2	0.1	0.1	0.1	0.1
Life insurance companies	2.6	2.9	3.8	4.4	4.8	5.6
Total	**100**	**100**	**100**	**100**	**100**	**100**

Source: Bank of Thailand

Reflecting the skewed nature of deposit holding, large depositors should have the ability as well as the knowledge to diversify away from bank deposits into other investment channels, such as property, bonds and debt instruments while others may choose to increase their residential investment. Nonetheless, there are currently less than 200,000 people (0.3 percent of total population) taking part in the stock market due to its complexity and relatively high risk. The players are concentrated in the relatively more educated and higher income segment of the population. The impact on the wealth of the particular group may be approximated from the movements of the SET index, which dropped from the peak of 1,683 points in 1993 Q4 to a low of only 267 points in 1998 Q2 – a decrease of 84 percent or 88 percent in real terms. Despite recent improvement, the SET index is still much lower than the pre-crisis level **(Figure 3.7)**.

B. Non-financial Assets

Unlike their counterparts in developed countries, Thai households tend to prefer investment in real estates more than in financial assets, except for bank deposits. As the economy picked up more strongly in early 2002, the housing market rebounded significantly as witnessed in the increasing value of house and land (**Figure 3.8**). The increase in the value of land traded reflects both price and quantity increases. Its continued positive trend since 2000 has obviously had a positive impact on households' wealth.

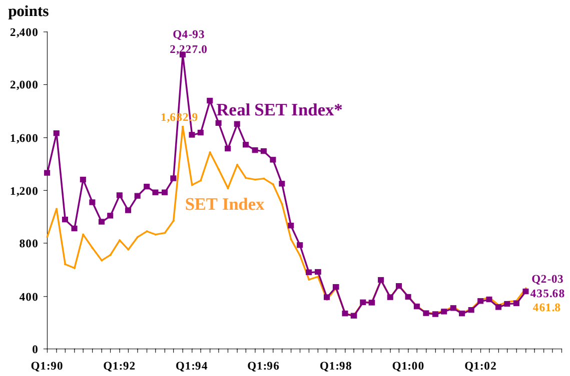
However, the improvement in prices in the housing market has so far been slow following its virtual collapse even before the crisis. The SET property development index, which is an indicator on the stock prices of the real estate firms in the SET, went from the peak of 2,266.6 in December 1993 to the trough of 20.3 in August 1998. This was equivalent to a fall of almost 100 percent in both nominal and real terms. Recently, the index started to move up, rising to 104.61 by June 2003 (**Figure 3.9A-B**).

The improvement in the housing market has been supported largely by low interest rates, together with several government measures encouraging house ownership in the medium term. Cheap mortgage loans and the switching from rental to house purchase, together with the government's housing credit schemes have supported the housing market in the past few years. Although the construction of condominiums collapsed after the bubble burst, developers' housing project and own-built houses have continued to grow at a moderate level **(Figure 3.10)**, which reflects the real – rather than speculative – demand for residential housing. Looking ahead, as the increase in housing demand starts to put pressure on cost of construction, it is reasonable to expect that house prices will rise **(Figure 3.11)**.

The improvement in the housing market also benefited from favourable tax measures such as tax exemption for transactions related to housing and property as well as a number of attractive refinancing packages. Moreover, several fiscal measures have been in place since November 2001, starting with the pioneering initiative of low cost mortgage scheme for state and state enterprise employees. This scheme was carried out through the Government Pension Fund and the Government Housing Bank, offering very low mortgage rates, long loan maturity and zero downpayments. In January 2003, the low cost mass market housing scheme was launched, aiming to build around 1 million residential units for low-income families in the next five years. This scheme is expected to benefit up to 14 percent of the population.[9] Overall, the housing schemes for the low-income earners have been well received by the public, reflecting a genuine demand for residential housing.

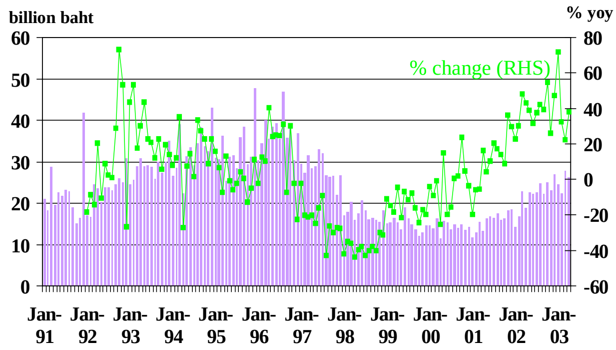
[9] Morgan Stanley's Southeast Asia Economics – May 30, 2003.

Figure 3.7: SET Index



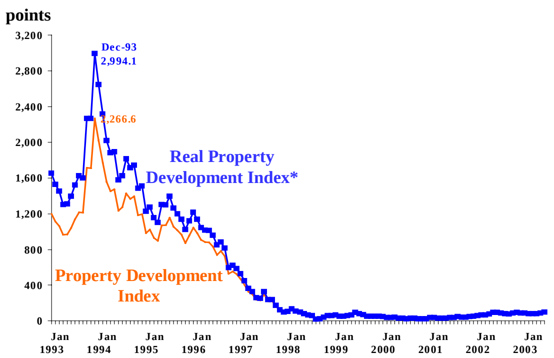
Source : SET

Figure 3.8: Value of Land Trades



Source: Department of Lands, Ministry of Interior

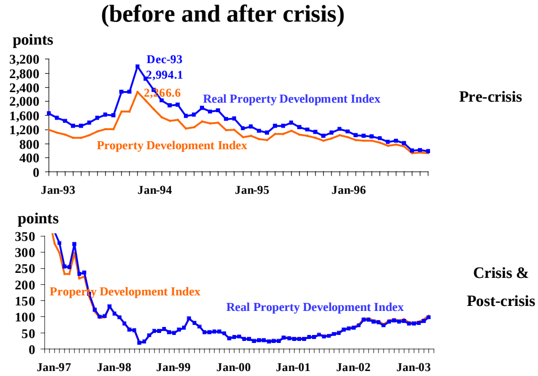
Figure 3.9A: Property Development Index



* Adjusted by CPI

Source : SET

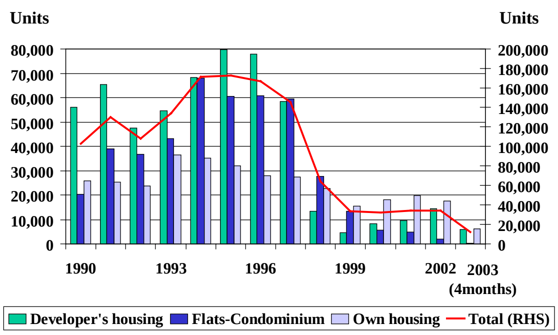
Figure 3.9B: Property Development Index (before and after crisis)



* Adjusted by CPI

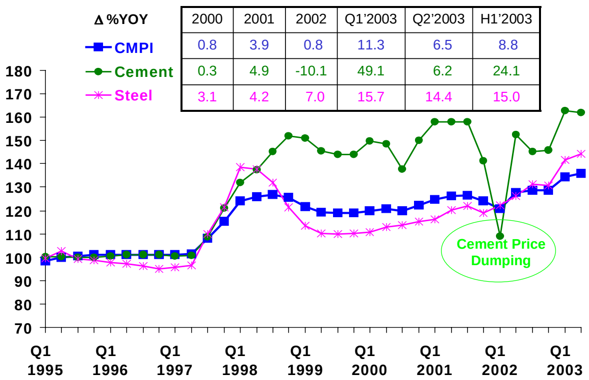
Source : SET

Figure 3.10: New Registration of Residential Housing



Source: Department of Lands, Ministry of Interior

Figure 3.11: Construction Material Price Index



Δ %YOY	2000	2001	2002	Q1'2003	Q2'2003	H1'2003
CMPI	0.8	3.9	0.8	11.3	6.5	8.8
Cement	0.3	4.9	-10.1	49.1	6.2	24.1
Steel	3.1	4.2	7.0	15.7	14.4	15.0

Source: Ministry of Commerce

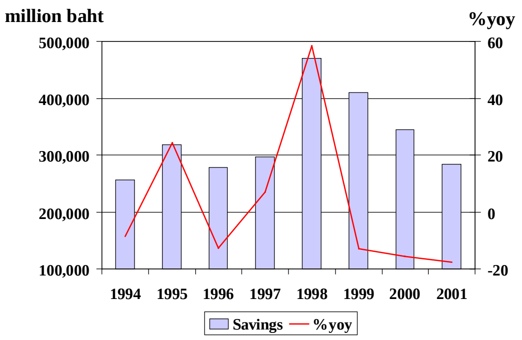
3.3 Adjustment in Households' Consumption

The contraction in income during the crisis led to the reduction in overall household saving and indeed dissaving by some households. The growth rate of saving **(Figure 3.12)** actually went negative since 1999 and continued to contract in 2000-2001. The share of saving in total personal income declined significantly from 10.9 percent in 1994 to 8.4 percent in 2001.

For our analysis on the expenditure side, household's expenditure is classified by the degree of necessity into 3 levels[10] (high, medium, and low), to reflect the substitution effect of different types of consumption. Our analysis found that households' ability to substitute goods between different levels of necessities was key in helping households to maintain the level of consumption after the crisis.

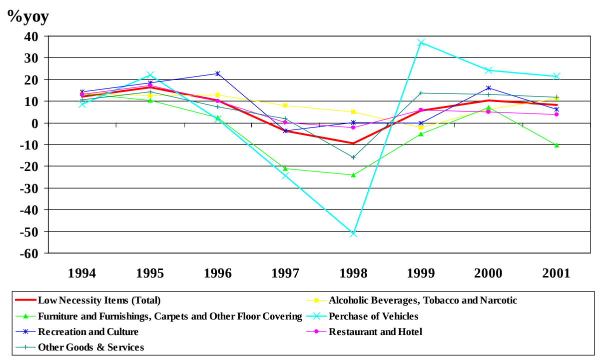
As income growth decelerated after the crisis, households cut down expenditure on non-necessity items such as *restaurant and hotel*, *recreation and culture* and *alcoholic beverage*. By contrast, fixed expenditure on high necessity items increased after 1997 **(Table 3.5)**. Medium necessity items have a relatively stable share over the same period while the share of high necessity items rose continuously to 51.6 percent in 2001. Nevertheless, the share of low necessity items in 2001 started to rise back to almost the pre-crisis level, indicating a strong recovery of private consumption.

Figure 3.12: Households' Savings



Source: NESDB

Figure 3.13: Household Expenditure on Low-level Necessity



Source: NESDB

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[10] **Domestic Consumption Expenditure** classified by the degree of necessity:

(1) **High level**. This group includes basic necessities in everyday life; namely, Food & Non-alcoholic drinks, Housing, Water, Electricity, Gas and other Fuels, Households equipment and routine maintenance of the house, Health, Operation of personal transport equipment, Transport services and Education.

(2) **Medium level.** This group is a mix ed group of both necessity and luxurious goods; namely, Clothing and footwear and Communication. Clothing and footwear also include high-end fashionable items whereas Communication also includes purchases of mobile phones and long distance calls.

(3) **Low level. This group includes luxurious or expensive goods; namely,** Alcoholic beverages, Tobacco and narcotic, Furniture and furnishings, Carpets and other floor covering, Purchase of vehicles, Recreation and culture, Restaurant and hotel, and Other goods and services.

Table 3.5: Share of Total Personal Expenses

(% of total personal expenses)	1994	1995	1996	1997	1998	1999	2000	2001
Disposable of Personal Income	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Private Consumption Expenditure	**83.1**	**81.9**	**83.5**	**83.1**	**78.6**	**81.7**	**84.2**	**86.3**
1) Domestic Consumption Exp.	**85.6**	**85.6**	**87.6**	**87.3**	**83.9**	**86.9**	**89.7**	**91.7**
o/w – *High necessity*	*44.6*	*44.0*	*45.0*	*47.3*	*48.7*	*49.8*	*50.6*	*51.6*
– *Medium necessity*	*11.6*	*11.8*	*12.6*	*12.4*	*10.7*	*11.2*	*11.3*	*11.0*
– *Low necessity*	*29.5*	*29.8*	*30.1*	*27.7*	*24.5*	*26.0*	*27.9*	*29.2*
2) Net Exp. of Residents Abroad	**-2.5**	**-3.7**	**-4.2**	**-4.2**	**-5.3**	**-5.2**	**-5.5**	**-5.4**
o/w – *(plus) Exp. of Residents Abroad*	*3.2*	*2.9*	*2.7*	*2.4*	*1.8*	*2.4*	*2.7*	*3.1*
– *(less) Exp. of Non-res. in the Country*	*-5.7*	*-6.6*	*-6.9*	*-6.6*	*-7.2*	*-7.6*	*-8.2*	*-8.4*
Social Security Contribution	**0.4**	**0.4**	**0.4**	**0.5**	**0.3**	**0.6**	**0.8**	**0.9**
Interest on Consumers' Debt	**1.7**	**1.9**	**2.1**	**2.1**	**1.6**	**1.1**	**0.9**	**0.7**
Direct Taxes	**3.0**	**3.4**	**3.8**	**3.7**	**4.0**	**3.0**	**2.9**	**3.0**
Other Current Transfers to General Gvt.	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**	**0.1**
Current Transfers to the Rest of the World	**0.8**	**0.6**	**0.7**	**0.9**	**0.5**	**0.5**	**0.4**	**0.5**
SAVINGS	**10.9**	**11.7**	**9.4**	**9.5**	**14.8**	**12.9**	**10.6**	**8.4**

Source: NESDB

Table 3.6: Contribution to Growth of Personal Expenses

(%)	1994	1995	1996	1997	1998	1999	2000	2001
Disposable of Personal Income	**10.9**	**15.3**	**9.3**	**4.8**	**2.4**	**-0.4**	**2.8**	**3.3**
Private Consumption Expenditure	**10.7**	**11.3**	**9.3**	**3.6**	**-2.6**	**2.8**	**4.9**	**5.0**
1) Domestic Consumption Exp.	**10.2**	**13.1**	**10.2**	**3.8**	**-1.4**	**2.7**	**5.3**	**5.0**
o/w – *High necessity*	*4.9*	*6.2*	*5.2*	*4.5*	*2.6*	*0.9*	*2.2*	*2.7*
– *Medium necessity*	*1.8*	*2.1*	*1.9*	*0.4*	*-1.4*	*0.4*	*0.4*	*0.1*
– *Low necessity*	*3.6*	*4.8*	*3.1*	*-1.1*	*-2.6*	*1.4*	*2.7*	*2.3*
2) Net Exp. of Residents Abroad	**0.5**	**-1.8**	**-0.8**	**-0.2**	**-1.3**	**0.2**	**-0.5**	**0.0**
o/w – *(plus) Exp. of Residents Abroad*	*0.9*	*0.1*	*0.1*	*-0.1*	*-0.6*	*0.5*	*0.4*	*0.5*
– *(less) Exp. of Non-res. in the Country*	*-0.4*	*-1.9*	*-0.9*	*-0.1*	*-0.7*	*-0.4*	*-0.9*	*-0.5*
Social Security Contribution	**0.1**	**0.1**	**0.1**	**0.1**	**-0.1**	**0.2**	**0.3**	**0.0**
Interest on Consumers' Debt	**0.3**	**0.5**	**0.4**	**0.1**	**-0.4**	**-0.5**	**-0.2**	**-0.1**
Direct Taxes	**0.5**	**0.9**	**0.8**	**0.1**	**0.4**	**-1.0**	**0.0**	**0.2**
Other Current Transfers to General Gvt.	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**
Current Transfers to the Rest of the World	**0.4**	**-0.1**	**0.2**	**0.2**	**-0.3**	**0.0**	**-0.1**	**0.1**
SAVINGS	**-1.1**	**2.6**	**-1.5**	**0.6**	**5.6**	**-1.9**	**-2.0**	**-1.9**

Source: NESDB

It is worth noting that households tended to switch expenditure between high and low necessity items which in turn helped absorb negative income shocks against household consumption. Calculated from the NESDB's annual data on household's income and expenditure, the income elasticity of consumption[11] prior to the crisis was around 1. The income elasticity doubled in the more recent years, reflecting the higher ability of household to adjust consumption. Over the period 1994-2001, the income elasticity for low necessity items has a higher elasticity of 1.1, compared to 0.8 for high necessity items[12]. This reflects the ability of household to adjust their consumption expenditure flexibly. Households' ability to switch between goods and services at different levels of necessity helps absorb shocks and thus maintain the overall consumption in time of crisis.

Under the low interest rate environment of the past few years, expenditure on durables which is sensitive to interest rate has expanded significantly. In particular, the purchase of vehicles (**Figure 3.13**) grew by an average rate of 28 percent per year during 1999-2001, contributing greatly to the growth of expenditure on low necessity items. This is consistent with the historically low rate of commercial bank lending as well as the increasing availability of consumer loans through other non-financial institutions or lending companies such as GE Capital and Aeons, which provide an easy access and alternative cheap finance to households.

The contribution to growth of domestic consumption expenditure (**Table 3.6**) has been increasingly important. Since 1999, domestic consumption expenditure has contributed almost to the entire growth of total expenses, coming mainly from the growth of high necessity items and low necessity items. Given the fast recovery in household consumption, overall economic activity should soon be strengthened and supportive to the growth of the Thai economy.

3.4 Debt Accumulation

The analysis in this section focuses on the increase in household debt during the economic recovery period and its implication on different types of households. Based on the NSO survey[13], average debt per household doubled from Baht 31,387 in 1994 to Baht 69,674 in 1998. This average debt level remained below Baht 70,000 until 2002 when there was a significant surge in households' debt, equivalent to 2.6 times of the average debt in 1994 (**Figure 3.14**). The increase in households' debt stemmed mainly from consumption loans (including mortgages), which made up about 50 percent of total household debt prior to the crisis.

A. Overall Developments

A surge in debt for personal consumption, unlike mortgage loan that is backed up by collateral, can be a cause of concern. Based on aggregate financial data from commercial banks, finance companies, and credit foncier companies, consumer loan is tracked by its main components of mortgage loan and loan for consumption (non-mortgage loan). In the period leading up to the crisis, there was a substantial outstanding amout of loan for consumption which exceeded mortgage loan. After the crisis, a significant structural change has occurred. There was a substantial decrease in the loan for consumption, while mortgage loan has become the majority accounting for 60 percent of the total consumer loan (**Figure 3.15**).

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[11] Income elasticity to consume = % change in consumption expenditure / % change in income

[12] Obtained from a simple OLS regression over the period.

[13] The NSO conducts a full survey every two years. The survey on households' debt only started in 1994.

Mortgage loan outstanding did not drop significantly after the crisis while its growth rate remains low despite gradual improvement. By contrast, non-mortgage loan contracted by as much as 50 percent after the crisis but its growth has recovered relatively fast, with the growth rate of 32 percent in 2002, which exceeds those before the crisis. Its outstanding underwent a strong upward adjustment despite a small proportion relative to mortgage loan in recent years. While this is not a serious concern for now, the accumulation of household debt, particularly debt for consumptions should be monitored closely during the recovery process to make sure that it is sustainable.

B. Type of Debtors

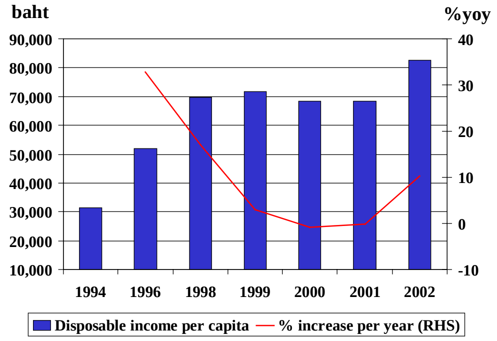
In a more detailed analysis, households are grouped by socio-economic group into 2 groups; **Group 1 -** who receives higher than average income of all households, and **Group 2 -** who receives lower than average income of all households.

During the adjustment period around the year 2000, households' debt maintained its level from 1998. Nevertheless, there is a significant downward adjustment in the debt stock in Group1. With the exception of own-account workers whose debt actually increased, Group1 was hit hard by the crisis since their income was highly dependent on economic conditions, particularly business profitability (**Table 3.7**). On the other hand, there was not as much adjustment in the group of agricultural-related households. Although suffering relatively less from the crisis, their income declined owing largely to low farm prices in the world market until 2001. Despite expenditure cut in line with their lower income, their debt outstanding continued to increase.

The latest statistics on households' debt in 2002 report a debt outstanding of Baht 82,485 per household, 2.6 times higher than that in 1994 **(Table 3.8)**. This reflects the households' renewal of debt accumulation for household consumption after the contraction during the initial years after the crisis. Now that the economic recovery is clearly on track, the proportion of debt for consumption increased to around 60 percent by 2002, while debt for investment declined. In particular, non-farm own account workers, having benefited from improved profitability since 2001, increased their debt for consumption 4 fold from 1994. Farm workers also accumulated debt by around 3-4 times from 1994 levels.

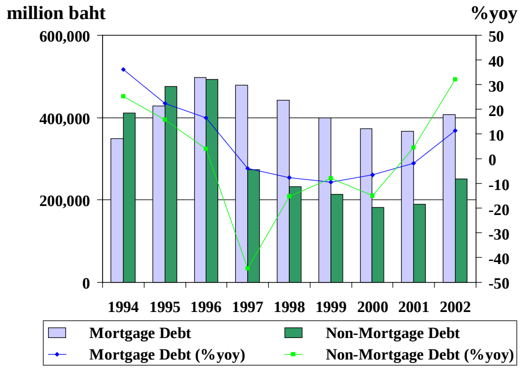
Households with higher income tend to have higher debt burden in terms of average debt as a proportion of disposable income **(Figure 3.16)**. In particular, in 2002, non-farm own account and employees in Group 1 had a high debt proportion of 67.4 and 62.3 percent of disposable income, respectively, compared with just around 40 percent in 1994. However, despite lower than average income, farm households saw this ratio accelerate to around 50 percent, against just around 30 percent recorded in 1994.

Figure 3.14: Average Debt per Household



Source: NSO Survey

Figure 3.15: Consumer Credits



Source: BOT

Table 3.7: Average Debt per Household by Group

(baht)	**1994**	**1996**	**1998**	**2000**	**2002**
All households	**31,387**	**52,001**	**69,674**	**68,405**	**82,485**
Group I					
Employee: Professional, Technical, Administrative	104,415	181,788	243,221	199,363	249,700
Non-farm own-account workers	63,006	130,339	142,654	145,135	153,132
Employee: Clerical, Sales and Services Workers	44,815	49,638	78,573	58,086	78,019
Group II					
Agriculture					
Farm operators: mainly owning land	*16,774*	*27,468*	*33,650*	*40,124*	*54,136*
Farm operators: mainly renting land	*22,863*	*39,293*	*49,440*	*54,795*	*56,899*
Employee: farm workers	*6,515*	*12,627*	*13,300*	*16,490*	*18,786*
Economically inactive	15,615	18,877	33,878	32,815	34,263
Other workers:					
Employee: Production workers	*13,154*	*18,215*	*26,757*	*27,332*	*27,605*
Employee: General workers	*7,623*	*7,565*	*20,297*	*19,813*	*20,291*

Source: NSO Survey

Table 3.8: Average Debt per Household (Relative to 1994)

	1994	**1996**	**1998**	**2000**	**2002**
All households	**1.0**	**1.7**	**2.2**	**2.2**	**2.6**
Group I					
Employee: Professional, Technical, Administrative	1.0	1.7	2.3	1.9	2.4
Non-farm own-account workers	1.0	2.1	2.3	2.3	2.4
Employee: Clerical, Sales and Services Workers	1.0	1.1	1.8	1.3	1.7
Group II					
Agriculture					
Farm operators: mainly owning land	*1.0*	*1.6*	*2.0*	*2.4*	*3.2*
Farm operators: mainly renting land	*1.0*	*1.7*	*2.2*	*2.4*	*2.5*
Employee: farm workers	*1.0*	*1.9*	*2.0*	*2.5*	*2.9*
Economically inactive	1.0	1.2	2.2	2.1	2.2
Other workers:					
Employee: Production workers	*1.0*	*1.4*	*2.0*	*2.1*	*2.1*
Employee: General workers	*1.0*	*1.0*	*2.7*	*2.6*	*2.7*

Source: NSO Survey

C. Source of Debt

Looking at source of debt in the survey, most households obtain loans from outside the financial system (over 30 percent of total loans). This has been the general structure before the crisis, except for 1998 when commercial bank loans accounted for up to 50 percent mainly to non-farm own business borrowers. Such high proportion of loans from outside financial system reflects high demand for loans which could be absorbed into the financial system in the medium term when banks start to expand more credits and households are allowed increasing access to funds in the financial system.

The second most important source of loans before the crisis came from commercial banks. However, the role of commercial banks has declined after the crisis as households are relying increasingly on saving cooperatives and Bank for Agricultural and Agricultural Cooperatives. This is particularly evident among the non-farm own account workers and employees in professional, technical, administrative work as well as clerical, sales and services **(Figure 3.17A)**. This group has a higher than average income and therefore has access to bank loan. However, as banks have become more risk-averse and more selective in extending credits, bank loan has shrunk substantially after the crisis.

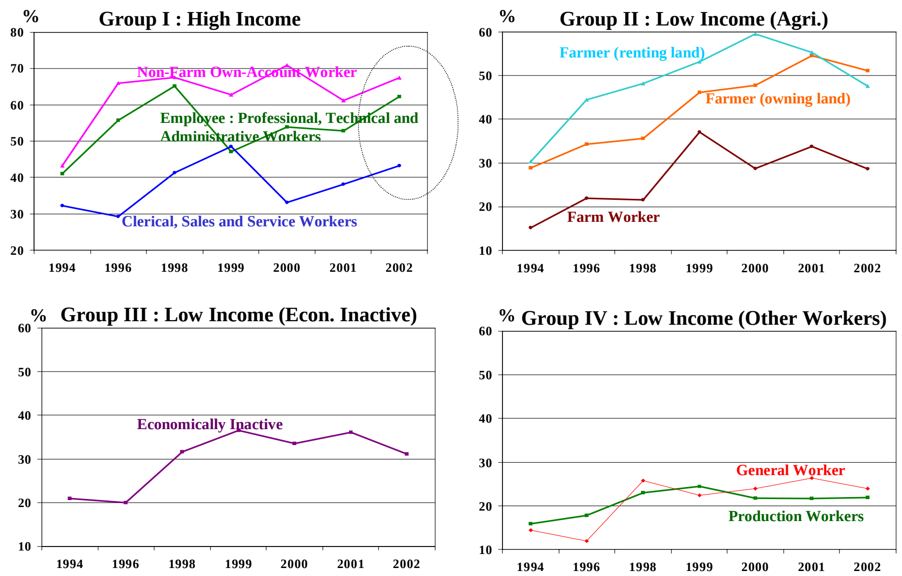
Moreover, there are also an increasing number of alternative funds available to households. Among others are the government's Village Funds, which may have played a part in easing financial constraints and provides more access to loans for the low income group whose access to loans within the financial system has been hitherto limited. This is particularly true among the lower middle class; namely, farm operators, agricultural and non-agricultural workers, and economically inactive persons (such as housewives) **(Figure 3.17B)**.

D. Debt Service Capacity

Debt accumulation of different groups has different implications. Those in Group1 generally borrow from financial institutions. Thus, it is important to monitor the risk management of financial institutions. On the other hand, those in Group2 rely more on loans from outside the financial system with an increasing role of government-supported funds. In this instance, it is important to build a strong credit culture in their community to limit potential fiscal burden and to prepare this group of potential borrowers for eventual entry into the financial system in the near future.

Even though the debt stock has been rising, low interest rates have significantly lessened the debt service burden of households **(Figure 3.18)**. The ratio of interest expense on consumers' debt to disposable personal income fell from the peak of 2.2 percent in 1997 to 0.8 percent in 2001. This is due to declining interest rates on the one hand, and to higher growth of disposable personal income on the other. Disposable personal income per capita expanded by 2.4 percent in 2001. Interest on consumer's debt as a proportion of total consumption expenditure also declined from the peak of 2.5 percent in 1997 to 0.9 percent in 2002. Even though the interest income declined significantly, the lower interest burden helped maintain the net interest income as a proportion of disposable personal income at just over 5 percent and declining. Such reductions of interest burden should continue to support the households' consumption in the medium term.

Figure 3.16: Debt Burden (Household Debt/Disposable Income)



Source: NSO Survey

Figure 3.17A: Source of Debt

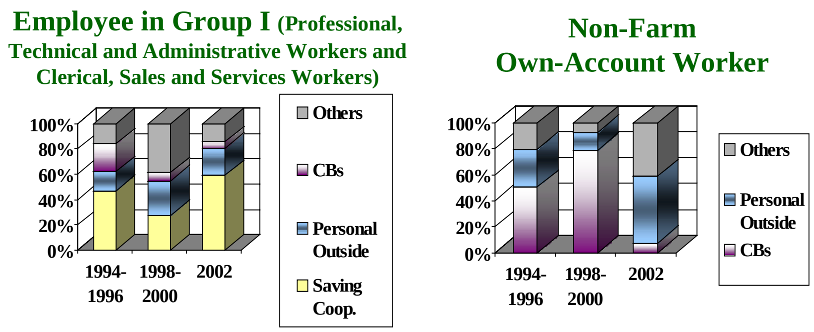
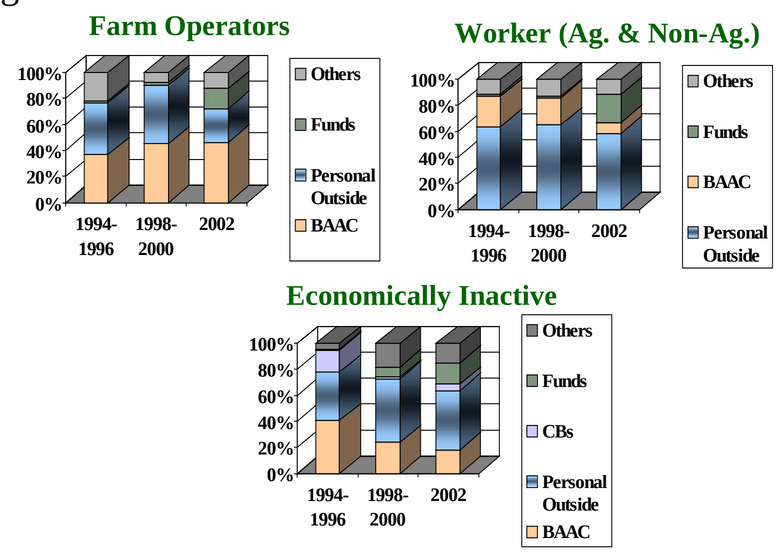
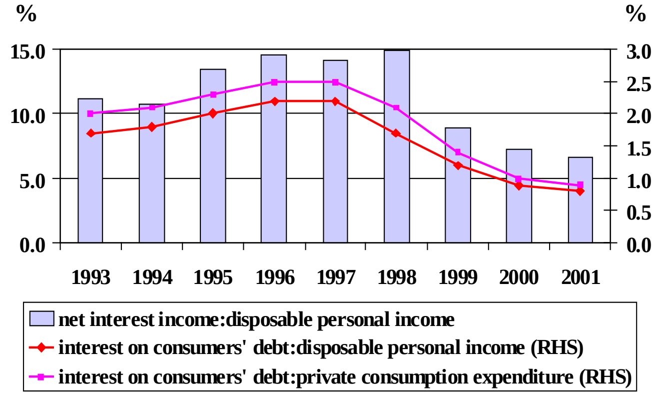


Figure 3.17B: Source of Debt



Source: NSO Survey

Figure 3.18: Interest Burden of Households



Source: NESDB

Overall households' balance sheet seems to be relatively strong. The rise in debt stock could be part of households' adjustment after economic shocks in order to maintain their level of consumption and should return to its normal trend in a near term. Moreover, the interest burden of households dropped significantly during 1999-2001. This provides households room for an increase in interest burden in the near future should the interest rate start to rise once the world economy has fully recovered from the current recession. Increasing debt can be serviced by increasing income as the economic growth continues its current momentum. The recent rise in debt may have been part of the normal process of stock adjustment or asset accumulation as well as a change in households' borrowing behaviour in response to the easing financial constraints. While the above observations remain inconclusive and subjects to further investigation, it is important that households' debt be closely monitored to limit any balance sheet vulnerability to shocks from interest rates and asset prices that could develop.

Another point of comfort arises from the fact that there has been an increase in Group1 who earns higher than average income of total households (**Table 3.9**). This might reflect the increasing higher than average income earners. It may also reflect the increasing number of deposit accounts in the middle range over the years (**Figure 3.19**).

Table 3.9: Socio Economic Class of Households

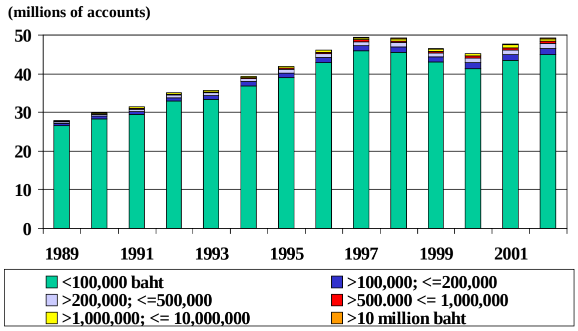
(% of household survey)	**1994**	**1996**	**1998**	**2000**	**2002**
All households	**100**	**100**	**100**	**100**	**100**
Group I	**33.3**	**34.3**	**36.9**	**37.7**	**39.4**
Employee: Professional, Technical, Administrative	5.8	6.1	6.5	8.2	9.1
Non-farm own-account workers	14.8	15.4	16.1	16.3	17.1
Employee: Clerical, Sales and Services Workers	12.7	12.8	14.3	13.2	13.2
Group II	**66.7**	**65.7**	**63.1**	**62.3**	**60.6**
Agriculture	35.0	33.2	33.7	31.7	29.9
Farm operators: mainly owning land	*24.6*	*23.7*	*23.3*	*20.4*	*19.0*
Farm operators: mainly renting land	*3.8*	*3.9*	*4.5*	*4.2*	*4.1*
Employee: farm workers	*6.6*	*5.6*	*5.9*	*7.1*	*6.8*
Economically inactive	13.1	13.4	14.0	16.3	16.4
Other employees:	18.6	19.1	15.4	14.3	14.3
Production workers	*14.9*	*15.8*	*13.9*	*12.4*	*12.7*
General workers	*3.7*	*3.3*	*1.5*	*1.9*	*1.6*

Source: NSO Survey

Although most accounts tend to be concentrated in the bottom end (less than Baht 100,000 per account), its proportion in total number of deposit declined from 94.96 percent in 1989 to 91.43 percent in 2002. The middle-range accounts (over Baht 100,000 – less than Baht 1,000,000 per account), increased in proportion from 4.34 percent to 7.06 percent in the corresponding period.

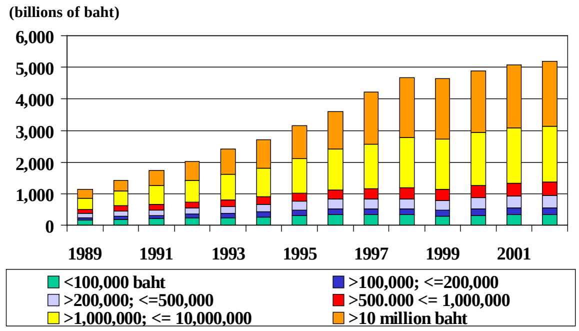
It is worth noticing that the major part of deposit money is placed in the top range of account size, reflecting highly unequal distribution of income. At end-2002, deposit accounts at the top end (over Baht 1 million) accounted for 73.7 percent of total deposits (**Figure 3.20**), but this is equivalent to only 1.51 percent in terms of number of accounts.

Figure 3.19: Deposit by Size (Number of Accounts)



Source: Bank of Thailand

Figure 3.20: Deposit by Size (Amount)

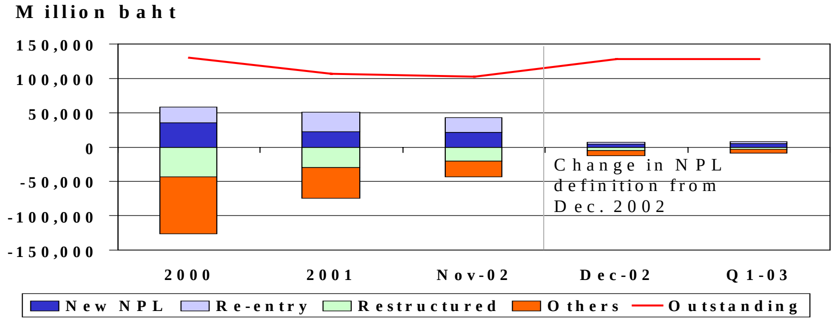


Source: Bank of Thailand

Given the large proportion of households' wealth in the form of deposits and a large proportion of low-income earners, it is important that authority help taking care of their wealth hold at financial institutions. With the expected implementation of the Deposit Insurance Agency (DIA) in the near future, households will have to take more risk in deposit saving as the blanket guarantee will no loner apply. Nevertheless, the DIA will be theoretically protecting the small depositors as these are low income earners who are less able to diversify risks in saving and investment.

In addition, despite improvements in the households' NPL reflecting in the decreasing new and re-entry NPL (**Figure 3.21**), debt negotiation and restructuring still needs continued support from authorities in order to resolve the NPL problem which has been holding back credit extention by commercial banks.

Figure 3.21: Change in Households' NPL



Source: BOT

IV. Implications for Economic Recovery, Risk Management, and Monetary Policy

The prospects of achieving sustainable growth momentum for Thailand over the medium term hinges importantly on corporate and household sectors expanding their assets and liabilities in manners that do not undermine their financial strengths. In this respect, policy makers face three key challenges in ensuring (1) broad-based economic recovery consistent with an orderly reduction of the positive savings-investment gap; (2) management of risks associated with economic growth through the promotion of information transparency, corporate governance, and financial market development; and (3) the conduct of monetary policy in light of changing transmission dynamics.

4.1 Implications for the Economic Recovery

With ongoing fiscal consolidation and the government's desire to achieve balanced budget in the near term, one of the major challenges in managing growth is to how engineer an orderly reduction in the savings – investment gap of the private sector, which has been positive since the crisis on account of collapse in investment.

To this end, it is clear that policy makers will want to attain the scenario that the ratio to GDP of private investment increases at a faster rate than that of private savings and not the scenario of low investment expansion and falling savings. The success of attaining brisk corporate investment expansion will be contingent on continued efforts to ensure that the corporate sector is able to capitalize on the presently favourable profitability prospects and low average borrowing costs. This means promoting more active and speedier debt restructuring and improvements in corporate governance.

Once the corporate sector expands, its growth should provide the impetus for employment expansion and productivity increases that will help to enhance household income and wealth accumulation. Since the aggregate household financial position is currently sound, though the pace of debt accumulation and debt service capacity needs to be monitored closely, sustainable growth requires that household financial conditions must also improve to ensure that the ratio of household savings to disposable income grows over the medium term.

This implies that aggregate household consumption and consumer finance should soon complete the stock adjustment phase and enter a steady state growth path. Policy makers must nonetheless be mindful that, owing to existing income and diverse household characteristics as highlighted in the previous section, saving and borrowing behaviours of the aggregate household sector do not mask imbalances in the financial strengths, as measured by debt stock and debt service as proportions of disposable incomes, of the higher than average income earners versus that of lower than average income earners.

On the basis of available data, a large proportion of household borrowings are still obtained from outside the financial system and, over time, with increasing access to financial services and government's grass-root promotion, this portion of demand for loans could shift to the financial system, particularly government-owned financial institutions. It is, therefore, important that good governance and appropriate credit culture be instilled early into the community' check and balance process, in order to promote risk awareness among households that would help minimize moral hazard or credit default problems.

4.2 Implications for Risk Management and Financial Market Development

Sectoral balance sheets provide useful information for policy makers to identify and correct weaknesses before they start to generate difficulties in the economy. However, since balance sheet information in practice is not readily available and usually has significant time lags, policymakers are bounded to an ex-post analysis and therefore need to identify gaps in these data and accordingly develop sources and accountability for providing such data.

In the near term, without such data, policymakers can assess changes in sectoral financial conditions by monitoring closely supply, demand, and price developments in domestic financial markets, particularly of debt, equity, as well as credit activities of bank and non-bank institutions, together with external capital account developments. This is to ensure that households do not over-borrow for consumption while the structure of corporate liabilities should be sufficiently diversified to cope with liquidity risks, market risks, and currency and maturity mismatches.

Even though this paper does not explicitly account for the balance sheet adjustments of the banking sector after the 1997 crisis, it recognizes the sector's importance in terms of interrelations with the balance sheets of the household and corporate sectors, particularly its role as financial intermediary between household savings and corporate investment. Suffice it to say then that policy efforts to promote the strengths of household and corporate balance sheets will also help support the strength of the banking sector's balance sheet, and vice versa.

As the economy's growth momentum continues and domestic financial markets advance both in width and depth, households will interrelate with the banking sector not only as fund providers as but also as borrowers for consumption and wealth accumulation. Consequently, *the linkage between the balance sheet of households and that of banks will increasingly tighten.*

As savers, households will continue to depend on banks to generate return for their savings, i.e., deposit rates, such that banking profitability and efficiency will continue to have implications for households' financial returns. On the other hand, as the banking sector lends more to households, its balance sheet will also become more exposed to the strength or weakness of the household balance sheet.

Over time, in tandem with growth of new financial instruments, households can diversify saving portfolios away from deposits and land to debt and equity investment, either directly or indirectly via investment in mutual funds. The relationship between households and banks will become more complex because not only will the banking sector be affected directly by changes in prices of debt and equity in their own balance sheets, it will affected by changes in the strength of household balance sheet following asset price changes, and vice versa.

This not to say that increasing bank lending to households is necessarily bad as greater loan portfolio diversification toward more housing mortgage with houses and land as collaterals may in fact enhance the asset quality of banks' balance sheet. However, the changing composition of credit portfolio with higher shares of mortgage and consumer finance would require banks to adjust their risk assessment framework and means to manage and reallocate risks, particularly the ability to shift risky assets out of their credit portfolios.[14] In the meantime, changing interrelation between the banking sector and the corporate sector also have implications on bank's balance sheet that, in turn, impacts the household balance sheet through changes in bank profitability and deposit rates. In particular, as financial market growth inevitably means more channels for corporate borrowers to raise funds in addition to bank credit, banks will face fiercer competition in the loan market and this can affect credit expansion and the quality of collaterals.

Financial sector development policy that promotes diversity of players in a level-playing field, which have an array of financial instruments and markets for managing and transferring risks and under the umbrella of transparent foreclosure and bankruptcy laws with effective court process, will be key for all the economic sectors in safeguarding the strengths of their own balance sheets over the medium term.

It is important to emphasize, however, that financial market policy should not attempt to pick winners, i.e., targeting development of any particular segment of financial markets. Instead, it should be a strategy that promotes breadth and depth of the market in general. In this connection, the authorities should, in close coordination with market participants, prioritize or phase in the development stages as resources for market development, financial as well as personnel, are limited and in some cases the growth of one particular segment of the market may be reliant on the existence and efficient functioning of another part of financial markets[15].

While many market development initiatives require policy efforts to ensure market stability, consumer protection, tax neutrality or incentives, and orderly entry/exit, the direct participation of public agencies as suppliers of financial instruments and as demanders of funds should be systematic and not create undue distortions in the pricing, trading, and development of financial markets in general.

Currently, the public sector role in financial markets seems ambiguous because, on the supply side, the faster consolidation in the budgetary financing requirement will reduce the supply of government securities whereas the expanding extra-budgetary involvement, together with privatization initiatives, will surely raise public demand for funds from both debt and capital markets. In this regard, clear communications regarding the government's intended participation in financial and capital markets will exemplify commitment to transparency and governance.

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[14] The securitization of bank credits has not been as popular in Thailand as in other countries such as Australia for a number of reasons. One of these is that the current excess liquidity situation and unresolved non-performing debt problem discourage banks from offloading performing assets from their balance sheets, which would exacerbate the excess liquidity problem. In addition, existing players in Thai financial markets are not diverse enough to generate demand for assets of differentiated risk classes. The development and open access of new players, particularly mutual funds and insurance companies with expanding liability base, will be instrumental to providing demand for securitized bank credits.

[15] In Thailand, the relatively efficient functioning of the cash, swap, and government and corporate bond markets provide a fundamental support for liquidity management and hedging for financial institutions and corporations -- the activities which will be augmented by the continued growth of corporate bond markets and derivatives trading, as well as the birth of local futures market for financial products in the not-too-distant future.

4.3 Implications for Monetary Policy

Unless there appears price pressure in the economy, the supportive monetary environment for stock market growth, debt financing, and asset price recovery, will facilitate firms' progress in operational and financial restructuring. Meanwhile, an accommodative monetary policy would also enable households to complete the stock adjustment of wealth that was impacted by the crisis that would, in turn, help the economy to count on consumption growth until the new investment cycle picks up and solidifies.

Over the medium term, changing interrelations between the balance sheets of households, firms, and banks as well as other types of financial intermediaries, mean that the analysis and formulation of monetary policy to ensure economic stability and sustainable growth will be increasingly challenged by such complexities.

In particular, there are three noteworthy issues on the future conduct of monetary policy:

First, even though continued growth should lead to an increase in demand for investment financing over the medium term, it is not conclusive whether bank loans would be the most preferred financing source going forward. Nevertheless, with the disintermediation process being gradual because financial markets take time to develop, the bank-lending channel should continue to remain quite an important channel for monetary policy transmission. The impact of an interest rate change on the corporate cost of funds would, however, depend largely on how it works through the corporate liabilities structure and the factors driving corporate investment decisions.

Second, with increasing household financial savings, consumer loans and mortgages, monetary policy change could work through the household balance sheet more directly than in the past. Moreover, asset price changes would also have more bearing on the household balance sheet through holding of stocks and other financial assets, directly or indirectly via investment in mutual funds. In this respect, efforts to understand asset price behavior and how it responds to monetary policy will be important in assessing and formulating appropriate and timely changes in monetary policy.

Third, the disintermediation process that is expected to happen over time would likely weaken the relationship between current monetary aggregates and economic activities further. The central bank will have to develop and monitor broader monetary aggregates that cover liquid assets of more diverse financial players, including mutual funds and insurance companies. However, since the current monetary policy framework employs the interest rate as instrument and not monetary targeting, the development of such broader monetary aggregates data will serve as indicators of financial developments and not policy targets.

Going forward, it is crucial that policy makers are aware of the implications of changes in corporate and household assets and liabilities on the exposure of private sector to risks in order to promote efficient risk management, including sufficient cushion of reserves and appropriate prudential and accounting guidelines as well as information disclosure. Moreover, such analysis of sectoral financial strengths will help them evaluate trade-offs between policy objectives in case of systemic threat and assess a case for effective financial intervention or official support.

V. Conclusion

The country's aggregate balance sheet, consisting of households, government, financial, corporate, and foreign sectors, reflects the overall economy's financial resilience against shocks. Therefore, one of the major lessons learnt from the 1997 economic and financial crises is that the success of macroeconomic management to promote sustainable growth cannot neglect policies to safeguard against any potential imbalances in the balance sheets of key economic agencies. In assessing the strengths of key economic sectors in supporting economic recovery, this paper focuses on examining the financial conditions of the corporate sector and households, focusing on the stock variables, i.e., assets and liabilities, complementing the traditional approach that focuses on flow variables.

On the basis of available data, we found that both corporate and household sectors have made considerable progress in terms of asset and liability adjustments since 1997. The financial conditions of non-bank firms listed in the SET have improved with regards to profitability and solvency, but some sectors, particularly manufacturing, continue to shoulder problems of asset and debt overhang that require a more active and speedier restructuring together with improvements in governance. For households, expenditure substitution was key in smoothing consumption during income falls, which was supported by transfer from government.

From 2001-present, the pace of recovery of the corporate and household sectors has been aided by the country's overall economic growth, which increased household income, while accelerating profitability for the corporate sector. There was evidence of firms reducing asset though the liability adjustment was primarily debt switching from bank and foreign loans to cheaper debts. As a result, a number of firms continued to be highly leveraged. We are therefore concerned on the continued unresolved problem of NPL that could hinder the prospects of corporate balance sheet expansion.

As income rises, households have re-accumulated wealth, particularly house and land. At present, this sector seems to be a position to increase debt as long as its stock of debt and interest expenses as ratios to disposable incomes do not increase too rapidly but stabilize in a medium-term steady state. Nevertheless, vigilance is required in monitoring households of different socioeconomic groups and income categories as each relies on different sources of debt that have differing implications on systemic vulnerabilities.

This paper highlighted three key policy challenges in managing the economic recovery. First is an attainment of a faster rate of increase of the ratio to GDP of private investment than that of private savings in order to close the private savings – investment gap. Second is the need to construct and disseminate data that monitor changes in assets and liabilities of key economic sectors, through the promotion of governance and financial market development. This is in order to promote risk awareness and management as balance sheet interrelations between household, corporate, and banking sectors tighten, with weakness in one balance sheet can spill over onto balance sheet of other sectors.

The last challenge relates directly to monetary policy. In the near term, accommodative policy should be helpful for the corporate sector to complete its balance sheet adjustment process while enabling households to build up the stock of assets without undermining their medium-term financial strengths. Over the medium term, the central bank needs to monitor the effectiveness of the transmission channels of monetary policy, in light of changing dynamics between monetary aggregates and economic activities and that between asset price movements and its inflation target.

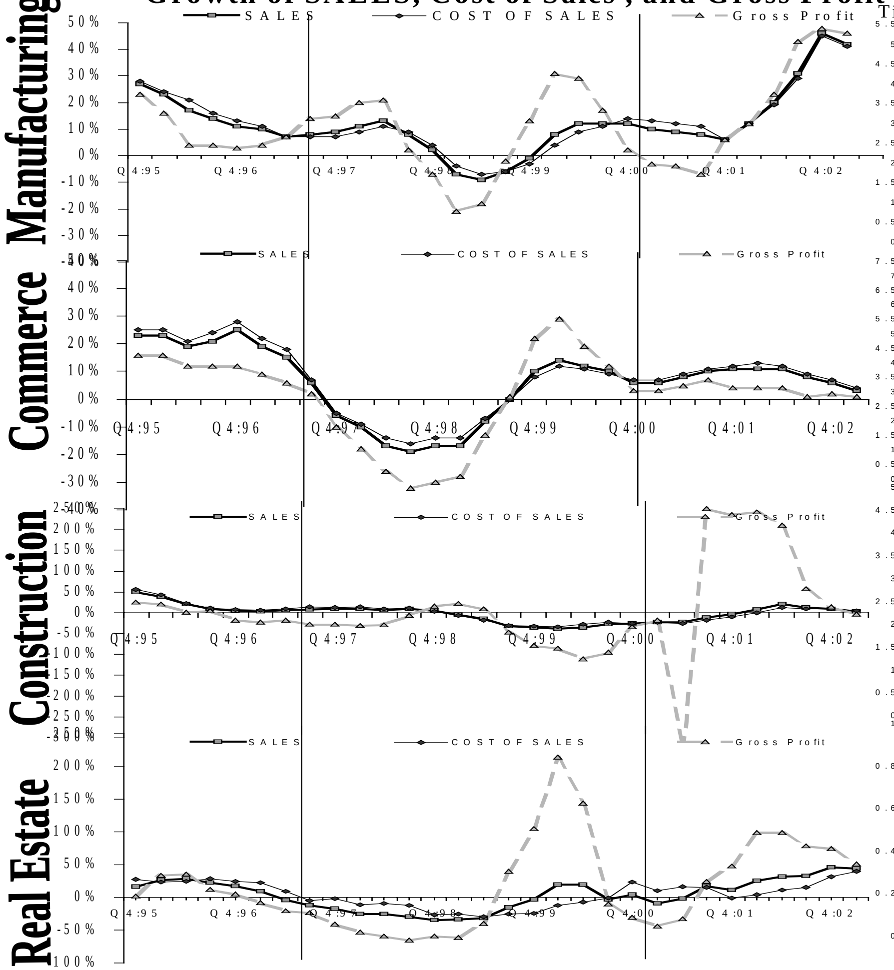
VI. Appendix

VI.1 : Definition of Financial Ratios of Corporate Data

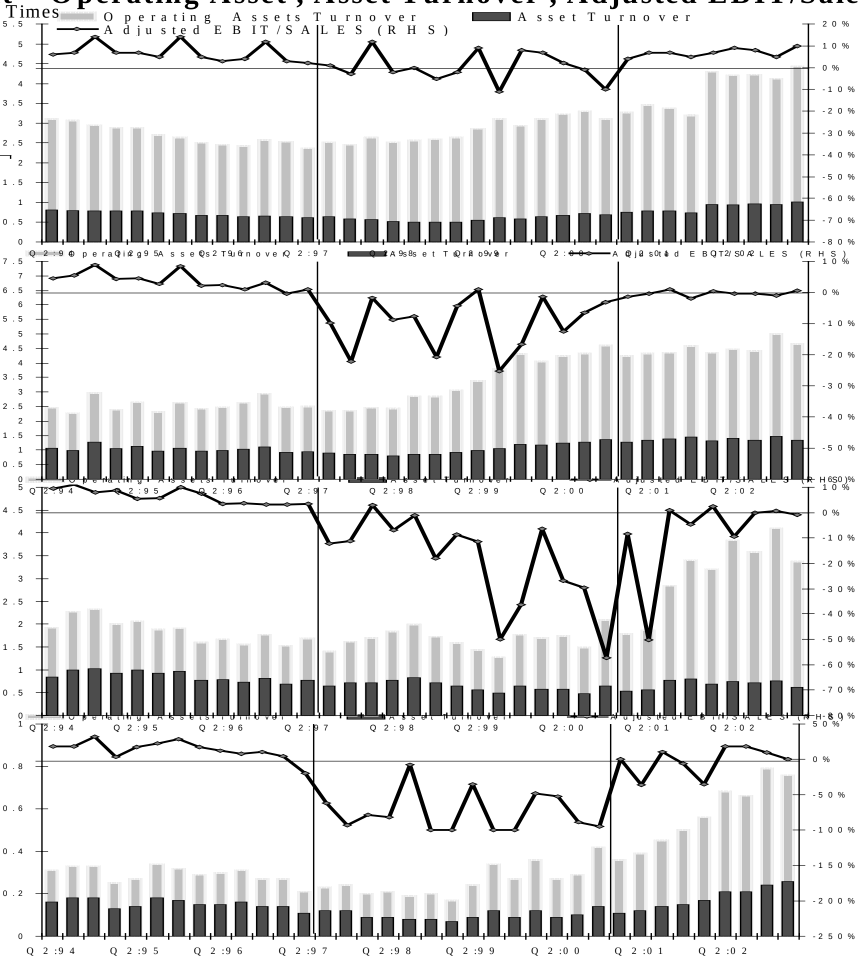
Ratio	Definition
1. Return On Asset (ROA)	Net Income / Average Total Assets
2. Adjusted Return On Asset (Adj. ROA)	(Net Income – Other income) / Average Total Assets
3. Average Borrowing Rate	Interest Payment of Interest Bearing Debts / Interest Bearing Debts
4. Tobin's Q ratio	(Market capitalization of Equity + Book value of Debts) / Total Assets
5. Operating Assets Turnover	Sales / Average Operating Assets
6. Assets Turnover	Sales / Average Total Assets
7. Adjusted EBIT / Sales ratio	(Earning Before Interest and Taxes (EBIT) – Other income) / Sales
8. Interest / Sales ratio	Interest Expenses / Sales
9. Interest Coverage ratio	Earning Before Interest and Taxes (EBIT) / Interest Expenses
10. Cash ratio	Cash / Total Current Liabilities
11. Quick ratio	(Total Current assets – inventory) / Total Current Liabilities
12. Operating Asset	Trade accounts and Note Receivable + Loans to and amount due from related parties + Inventories
13. Investment Asset	Short-Term investments + Investment and Loan + Investment and Loans to Related parties
14. Other Asset	Other current assets + Other assets
15. Revaluation Items	Appraisal surplus + Excess of investment (over) less net book value + Unrealized loss on securities for investment + Unrealized gain (loss) on foreign currency translation
16. Debt to Equity ratio (D/E)	Total Liabilities / Total Equity
17. Debt to Common Equity	Total Liabilities / Total Common Equity
18. Common Equity	Issued and paid up share capital (common stock) + Paid in capital + Other capital surpluses

VI.1a:Profitability and Operational Efficiency

Growth of SALES, Cost of Sales , and Gross Profit

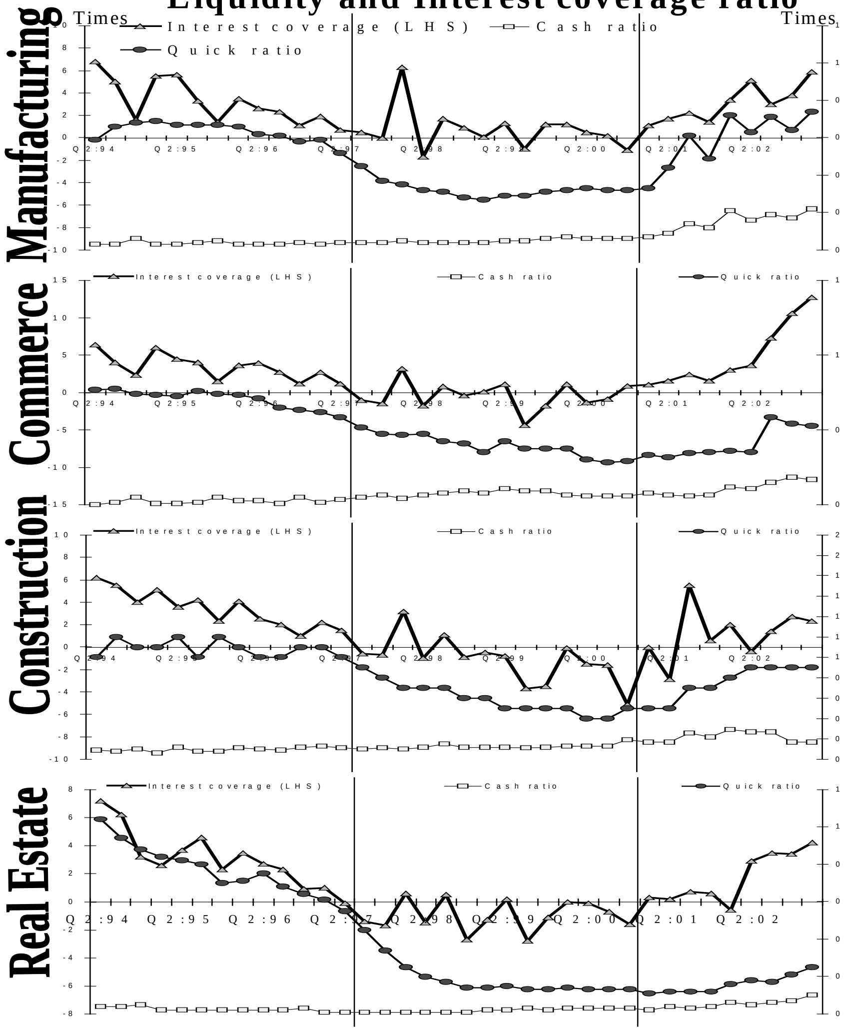


Operating Asset , Asset Turnover , Adjusted EBIT/Sales

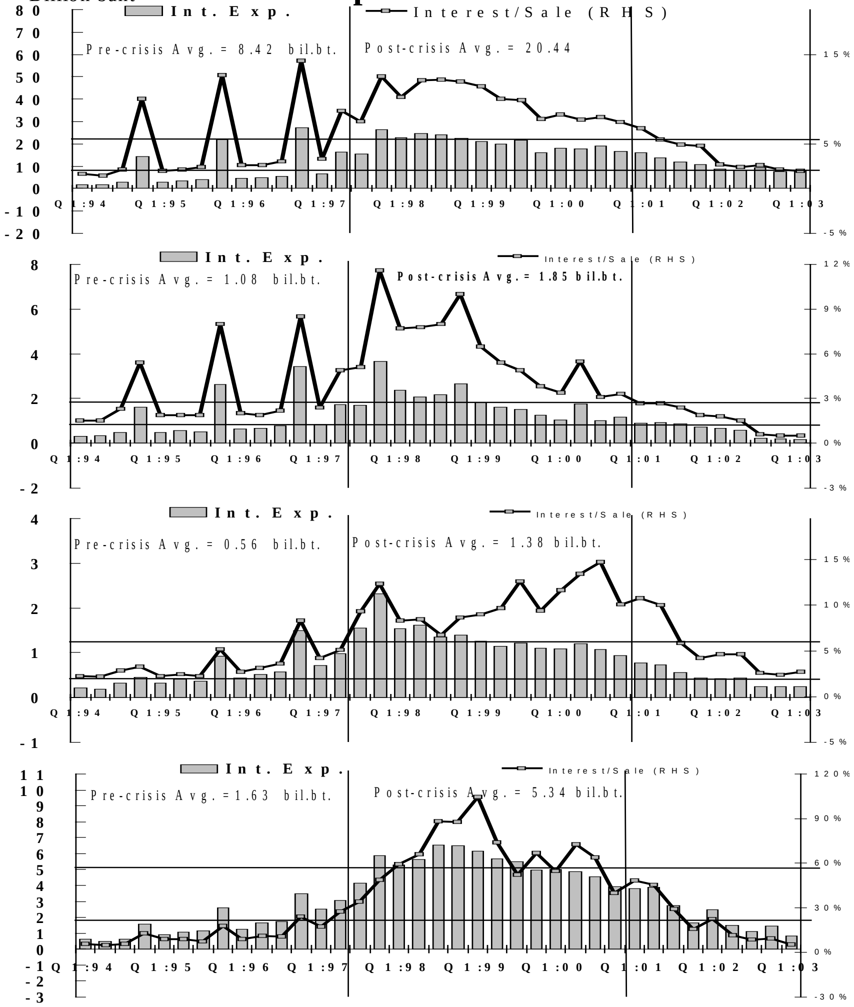


VI.1b Debt Servicing Developments

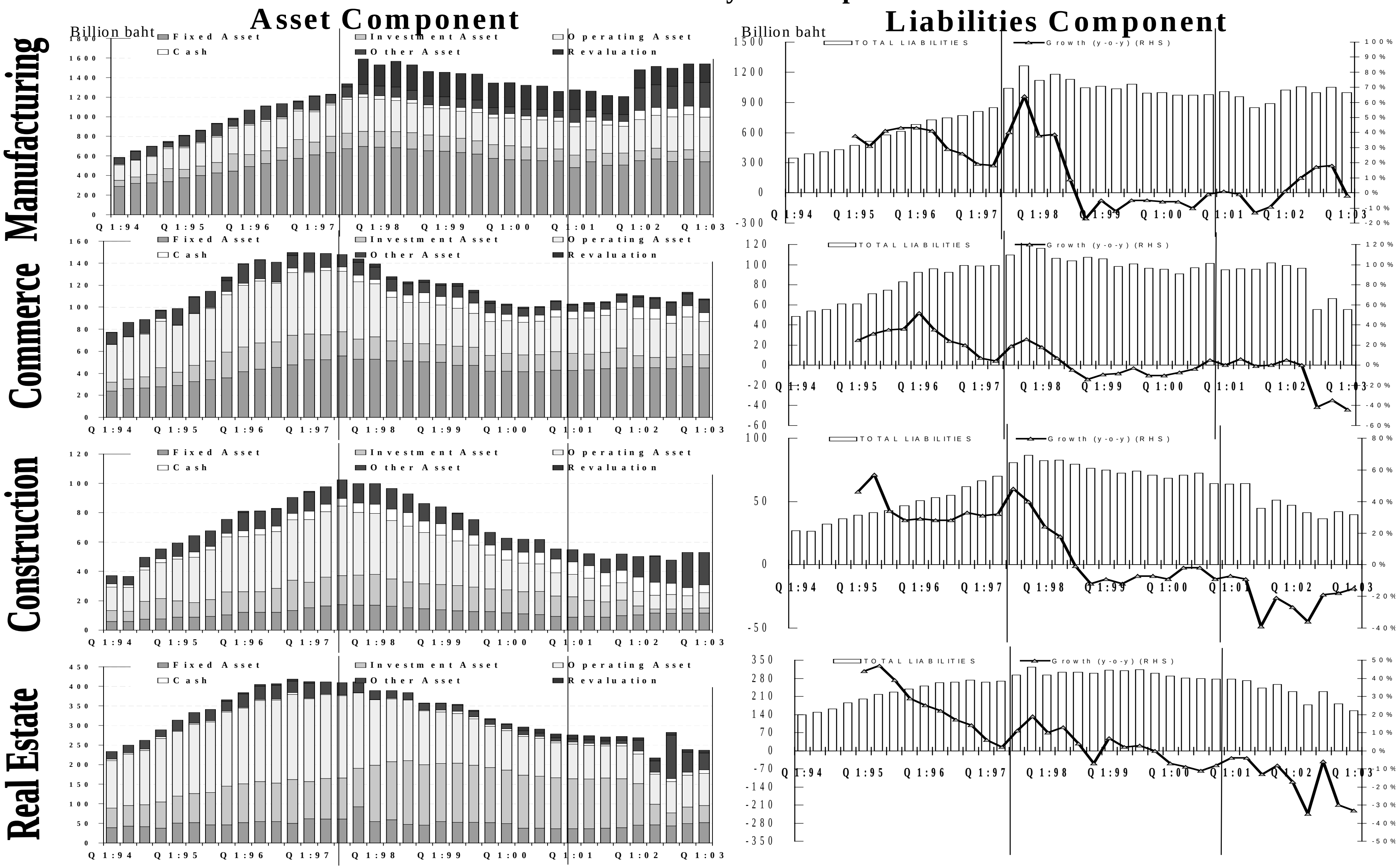
Liquidity and Interest coverage ratio



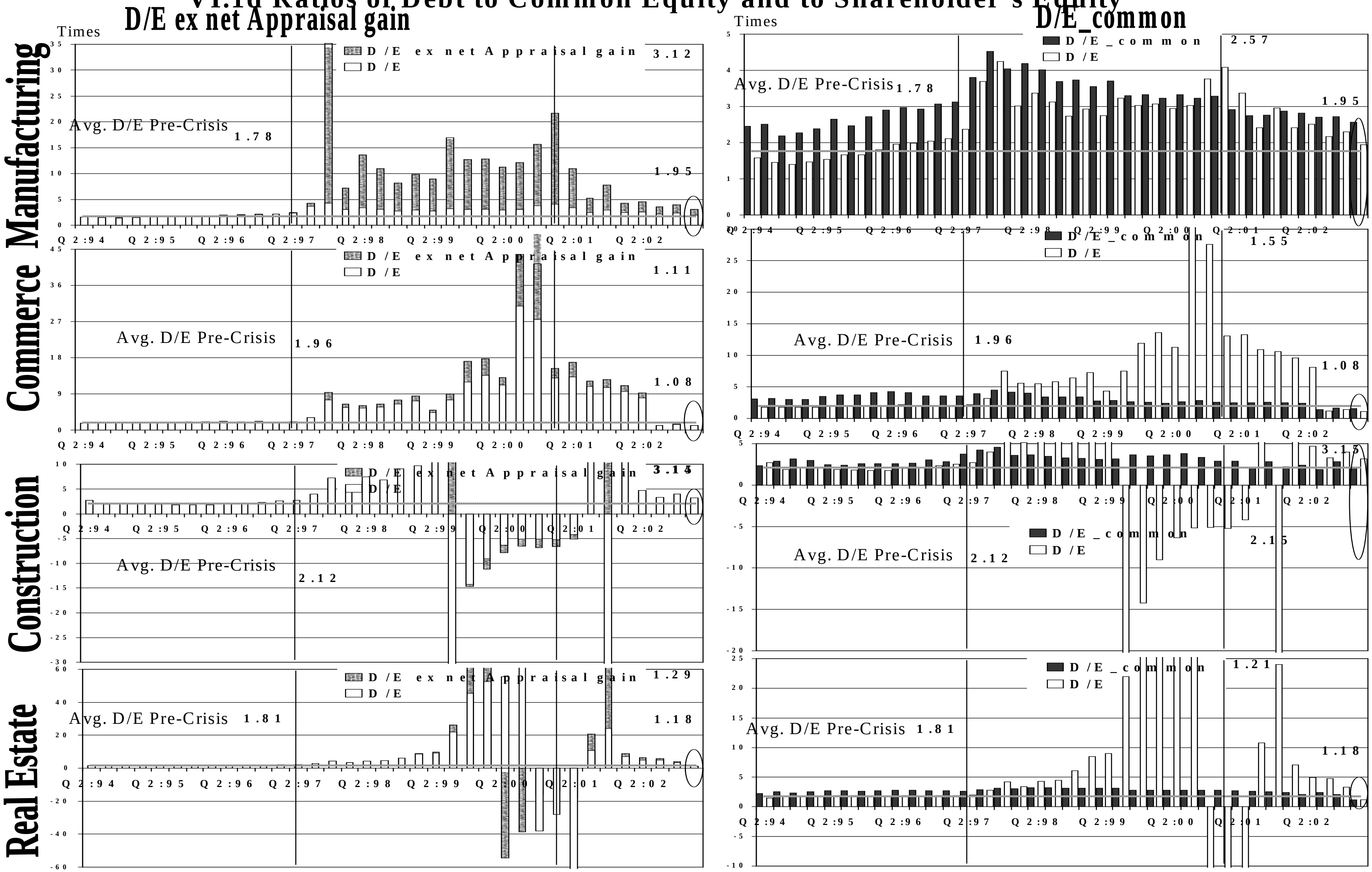
Interest Expense and Interest/Sales



VI.1c Assets and Liability Developments



VI.1d Ratios of Debt to Common Equity and to Shareholder's Equity



VI.2.1 : Household Personal Income and Disposal

PERSONAL INCOME	1993	1994	1995	1996	1997	1998	1999	2000	2001
	(Millions of Baht)								
PERSONAL INCOME	2,124,867	2,356,598	2,719,328	2,971,332	3,112,505	3,198,040	3,175,862	3,296,201	3,374,933
Income from Employment	1,816,993	2,010,296	2,296,377	2,427,947	2,557,277	2,618,839	2,805,637	2,935,594	3,046,936
Wages and Salaries	880,735	1,007,806	1,210,658	1,245,884	1,425,659	1,434,695	1,445,814	1,526,245	1,586,572
Farm Income	186,906	238,432	278,019	380,437	301,165	339,401	296,838	291,623	298,024
Social Security Benefit	7,098	9,934	12,022	16,977	22,645	17,955	22,560	30,378	30,941
Others (Non-profit institutions Revenue)	740,234	754,114	795,678	784,649	807,808	826,788	1,040,425	1,087,348	1,131,399
Income from Asset	264,663	286,798	403,886	476,782	489,060	505,662	306,609	257,806	243,684
Interest	198,794	202,901	304,960	376,351	395,700	401,298	202,852	145,089	123,819
Dividends	42,037	47,474	48,865	44,089	26,821	23,886	30,251	40,555	36,670
Income attributed to Funds	6,602	12,537	17,442	20,898	29,439	42,698	35,870	33,495	43,218
Rent	17,230	23,886	32,659	34,444	36,050	37,570	37,636	38,667	39,887
Transfers from General Government	9,880	8,881	14,451	21,297	22,044	26,450	30,198	32,552	39,193
Corporate Transfer Payments	3,723	4,686	5,413	6,006	2,899	4,726	4,892	5,529	6,080
Transfers from the Rest of the World	29,606	45,947	39,201	40,300	42,225	32,430	28,536	34,721	39,120

DISPOSAL OF PERSONAL INCOME	1993	1994	1995	1996	1997	1998	1999	2000	2001
	(Millions of Baht)								
DISPOSAL OF PERSONAL INCOME	2,124,867	2,356,598	2,719,328	2,971,332	3,112,505	3,198,040	3,175,862	3,296,201	3,374,933
Private Consumption Expenditure	1,730,519	1,958,726	2,225,739	2,479,828	2,586,956	2,505,312	2,595,113	2,750,486	2,913,662
1) Domestic Consumption Expenditure classified by degree of necessity	1,801,064	2,016,303	2,327,481	2,603,861	2,717,906	2,675,712	2,760,518	2,930,240	3,094,698
High Level	946,552	1,049,903	1,196,204	1,336,219	1,471,103	1,552,724	1,580,957	1,652,215	1,739,835
Food & Non-alcoholic	414,738	464,381	531,905	587,032	670,134	706,820	704,763	702,308	732,457
Housing, Water, Electricity, Gas and Other Fuels	145,324	156,935	181,176	204,934	228,219	245,142	241,767	254,284	269,372
Households Equipment and Routine Maintenance of The House	94,825	105,441	125,102	142,432	156,052	155,056	161,270	172,938	174,065
Health	122,809	136,047	151,508	163,692	167,730	165,676	180,356	193,534	206,668
Transport - Operation of Personal Transport Equipment	61,957	69,750	81,299	89,893	101,096	112,137	119,128	145,395	155,724
Transport Services	95,306	103,900	108,396	115,994	121,037	135,856	144,777	155,964	170,592
Education	11,593	13,449	17,618	22,239	26,795	28,637	28,696	28,582	30,945
Medium Level	235,324	273,095	321,807	372,917	385,520	341,787	355,120	367,726	369,740
Clothing and Footwear	212,803	246,021	289,986	332,134	339,375	303,707	317,621	327,739	320,815
Communication	22,521	27,064	31,821	40,783	46,145	38,080	37,499	39,987	48,925
Low Level	619,188	696,316	809,470	894,726	861,183	781,201	824,441	910,299	985,123
Alcoholic Beverages, Tobacco and Narcotic	101,630	115,442	129,933	146,617	158,332	185,432	162,700	172,866	182,169
Furniture and Furnishings, Carpets and Other Floor Covering	40,118	45,474	50,164	51,361	40,487	30,673	29,042	31,139	37,922
Transport - Purchase of Vehicles	94,870	103,114	125,914	127,943	96,787	47,297	64,785	80,482	87,767
Recreation and Culture	104,264	119,172	141,172	173,032	166,608	166,750	166,609	193,180	205,012
Restaurant and Hotel	172,880	195,591	229,056	252,424	252,794	247,163	261,555	274,375	285,122
Other Goods & Services	105,326	116,521	133,331	143,349	146,195	122,886	139,750	158,257	177,129
2) Net expenditure of Residents Abroad	-70,545	-59,577	-101,742	-124,033	-130,950	-170,400	-165,405	-179,754	-181,036
Plus : Expenditure of Residents Abroad	56,775	75,349	78,531	80,133	75,793	58,610	74,947	89,139	104,138
Less : Expenditure of Non-residents in the Country	127,320	134,926	180,273	204,166	206,643	229,010	240,352	268,893	285,174
Social Security Contribution	6,479	9,111	10,360	13,056	14,603	10,362	18,083	27,377	28,754
Interest on Consumers' Debt	34,531	40,363	51,855	61,941	65,066	51,426	35,352	28,294	25,086
Direct Taxes	59,869	70,419	91,796	112,306	116,291	127,817	96,375	95,411	101,764
Others Current Transfers to General Government	2,261	2,897	3,328	4,430	5,996	6,420	4,918	5,328	4,663
Current Transfers to the Rest of the World	11,465	19,074	17,157	21,821	26,510	16,418	16,705	14,396	17,039
SAVING	279,743	256,008	318,094	277,960	296,393	470,296	409,316	344,909	283,955

DISPOSABLE PERSONAL INCOME & INCOME PER CAPITA	1993	1994	1995	1996	1997	1998	1999	2000	2001
	(Millions of Baht)								
PERSONAL INCOME	2,124,867	2,356,598	2,719,328	2,971,332	3,112,505	3,198,040	3,175,862	3,296,201	3,374,933
Less : Direct Taxes	59,869	70,419	91,796	112,306	116,291	127,817	96,375	95,411	101,764
Less : Current Transfers to General Government	2,261	2,897	3,328	4,430	5,996	6,420	4,918	5,328	4,663
Less : Social Security Contribution	6,479	9,111	10,360	13,056	14,603	10,362	18,083	27,377	28,754
DISPOSABLE PERSONAL INCOME	2,056,258	2,274,171	2,612,846	2,841,540	2,975,626	3,043,451	3,056,486	3,138,085	3,239,742
Less : Personal Outlay	1,776,515	2,018,163	2,294,751	2,563,590	2,678,632	2,573,156	2,647,170	2,793,176	2,956,787
Private Consumption Expenditure	1,730,519	1,958,726	2,225,739	2,479,828	2,586,956	2,505,312	2,595,113	2,750,486	2,913,662
Interest on Consumers' Debt	34,531	40,363	51,855	61,941	65,066	51,426	35,352	28,294	25,086
Current Transfers to the Rest of the World	11,465	19,074	17,157	21,821	26,510	16,418	16,705	14,396	17,039
Personal Savings	279,743	256,008	318,094	277,960	296,393	470,295	409,316	344,909	283,955
Personal Income Per Capita (Baht)	36,629	40,138	45,762	49,520	51,360	52,091	51,384	52,338	53,643
Disposable Personal Income Per Capita (Baht)	35,447	38,734	43,967	47,357	49,101	49,729	49,453	50,285	51,495
Personal Outlay Per Capita (Baht)	30,624	34,373	38,632	42,724	44,200	42,044	42,830	44,758	46,981
Personal Savings Per Capita (Baht)	4,822	4,360	5,356	4,632	4,901	7,684	6,623	5,527	4,513
Population (1,000 Heads)	58,010	58,713	59,401	60,003	60,602	61,201	61,806	62,406	62,914

Source : NESDB

VI.2.2 : Household Income and Debt from Household Socio-Economic Survey

Average Monthly Household Income (Classified by Socio-Economic Classification)	1994	1996	1998	2000	2002
			(Baht)		
All Households	**8,262**	**10,779**	**12,492**	**12,150**	**13,736**
Group I					
Employee : Professional, Technical and Administrative Workers	**21,368**	**27,593**	**32,307**	**31,366**	**33,963**
Own-Account Worker, Non-Farm	**12,175**	**16,496**	**17,656**	**17,093**	**18,970**
Employee : Clerical, Sales and Services Workers	**11,608**	**14,245**	**16,015**	**14,678**	**15,122**
Group II					
Agriculture					
Farm Operators : Mainly Owning Land	*4,836*	*6,684*	*7,915*	*7,014*	*8,827*
Farm Operator : Mainly Renting Land	*6,290*	*7,365*	*8,568*	*7,678*	*9,971*
Employee : Farm Workers	*3,575*	*4,802*	*5,179*	*4,796*	*5,467*
Economically Inactive	**6,254**	**7,862**	**8,972**	**8,169**	**9,189**
Other Workers					
Employee : Production Workers	*6,890*	*8,528*	*9,807*	*10,500*	*10,499*
Employee : General Workers	*4,410*	*5,322*	*6,570*	*6,869*	*7,088*

Average Household Debt (Classified by Purpose of Borrowing)	1994	1996	1998	2000	2002
			(Baht)		
Total Debt	**31,387**	**52,001**	**69,674**	**68,405**	**82,485**
Debt for Household Consumption	17,404	26,269	42,315	41,242	52,403
Debt for Own-Account Non-Farm	8,688	15,178	16,280	15,191	16,597
Debt for Farming	5,295	7,709	9,999	11,637	12,071
Other	n.a.	2,845	1,080	335	1,413

Average Household Debt (Classified by Socio-Economic Classification)	1994	1996	1998	2000	2002
			(Baht)		
All Households	**31,387**	**52,001**	**69,674**	**68,405**	**82,485**
Group I					
Employee : Professional, Technical and Administrative Workers	**104,415**	**181,788**	**243,221**	**199,363**	**249,700**
Own-Account Worker, Non-Farm	**63,006**	**130,339**	**142,654**	**145,135**	**153,132**
Employee : Clerical, Sales and Services Workers	**44,816**	**49,638**	**78,573**	**69,096**	**78,019**
Group II					
Agriculture					
Farm Operators : Mainly Owning Land	*16,774*	*27,468*	*33,650*	*40,124*	*54,136*
Farm Operator : Mainly Renting Land	*22,863*	*39,293*	*49,440*	*54,795*	*56,899*
Employee : Farm Workers	*6,515*	*12,627*	*13,300*	*16,490*	*18,786*
Economically Inactive	**15,615**	**18,877**	**33,878**	**32,815**	**34,263**
Other Workers					
Employee : Production Workers	*13,154*	*18,215*	*26,757*	*27,332*	*27,605*
Employee : General Workers	*7,623*	*7,565*	*20,297*	*19,813*	*20,291*

Average Debt for Household Consumption (Classified by Socio-Economic Classification)	1994	1996	1998	2000	2002
			(Baht)		
All Households	**17,404**	**26,269**	**42,315**	**41,242**	**52,403**
Group I					
Employee : Professional, Technical and Administrative Workers	**91,151**	**154,153**	**221,399**	**182,872**	**223,527**
Own-Account Worker, Non-Farm	**19,045**	**34,879**	**50,193**	**58,415**	**75,930**
Employee : Clerical, Sales and Services Workers	**36,673**	**41,074**	**65,841**	**53,208**	**65,291**
Group II					
Agriculture					
Farm Operators : Mainly Owning Land	*3,983*	*7,741*	*10,345*	*11,283*	*13,396*
Farm Operator : Mainly Renting Land	*3,958*	*7,650*	*12,573*	*11,309*	*15,132*
Employee : Farm Workers	*3,416*	*7,549*	*7,752*	*8,987*	*11,130*
Economically Inactive	**9,454**	**11,660**	**27,107**	**21,174**	**22,700**
Other Workers					
Employee : Production Workers	*9,643*	*11,835*	*21,520*	*20,862*	*20,941*
Employee : General Workers	*3,292*	*4,855*	*8,935*	*13,461*	*12,837*

Source : National Statistical Office

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บทสรุปผู้บริหาร

การปรับตัวของฐานะทางการเงินและการฟื้นตัวของเศรษฐกิจ

ภาพรวมฐานะทางการเงินของประเทศนั้นประกอบขึ้นด้วยฐานะทางการเงินของ 5 ภาคเศรษฐกิจที่สำคัญ คือ ภาคครัวเรือน ภาครัฐบาล ภาคการเงิน ภาคธุรกิจ และภาคต่างประเทศ ซึ่งความแข็งแกร่งทางฐานะการเงินของภาคเศรษฐกิจเหล่านี้จะสะท้อนความยืดหยุ่นของระบบเศรษฐกิจในการรองรับปัจจัยภายนอกที่มากระทบได้ ดังนั้นในการประเมินความเข้มแข็งของแต่ละภาคเศรษฐกิจต่อการสนับสนุนการฟื้นตัวของเศรษฐกิจต่อไป จึงจำเป็นต้องวิเคราะห์การเปลี่ยนแปลงของฐานะทางการเงินโดยใช้ข้อมูลตัวแปรคงค้าง (stock variable) เช่น สินทรัพย์และหนี้สิน เสริมเพิ่มจากการวิเคราะห์ข้อมูลที่เกิดขึ้นระหว่างปี (flow variable) ที่นิยมใช้ในวิธีการศึกษาทั่วไป

ทั้งนี้ ในปัจจุบันที่เศรษฐกิจไทยมีความเข้มแข็งมากขึ้น โดยเฉพาะฐานะด้านต่างประเทศ จากดุลบัญชีเดินสะพัดที่เกินดุลต่อเนื่อง ทุนสำรองระหว่างประเทศในระดับสูง หนี้ต่างประเทศที่ลดลง ตลอดจนฐานะทางการคลังที่ปรับตัวดีขึ้นนั้น ภาคเศรษฐกิจดังกล่าวมีสัดส่วนความสำคัญต่อระบบเศรษฐกิจไม่ถึงร้อยละ 30 ของเศรษฐกิจทั้งหมด ดังนั้น ผู้วางนโยบายเศรษฐกิจจึงควรมีความเข้าใจอย่างถ่องแท้ถึงการปรับตัวของภาคครัวเรือนและภาคธุรกิจที่เกิดขึ้น เนื่องจากการบริโภคและการลงทุนภาคเอกชนมีสัดส่วนรวมกันกว่าร้อยละ 70 ของผลิตภัณฑ์มวลรวมในประเทศ

การศึกษาบนพื้นฐานของข้อมูลที่มีอยู่ในปัจจุบัน ชี้ให้เห็นว่าภาคธุรกิจและครัวเรือนมีความก้าวหน้าพอควรในการปรับตัวของสินทรัพย์และหนี้สินนับจากวิกฤตเป็นต้นมา โดยภาพการฟื้นตัวของภาคเศรษฐกิจเหล่านี้ได้รับการเกื้อหนุนเป็นอย่างดีจากการขยายตัวของเศรษฐกิจตั้งแต่ปี 2544 จนถึงปัจจุบัน ซึ่งเป็นปัจจัยกระตุ้นการเพิ่มขึ้นของรายได้ภาคครัวเรือน และความสามารถในการสร้างผลกำไรของภาคธุรกิจ

งานวิจัยนี้ได้เลือกศึกษาเฉพาะใน 4 กลุ่มธุรกิจในตลาดหลักทรัพย์ที่มีความเกี่ยวโยงกับการบริโภคและการลงทุนภาคเอกชนโดยตรง ได้แก่ พาณิชยกรรม อุตสาหกรรม ก่อสร้าง และอสังหาริมทรัพย์ ซึ่งพบว่าผลกำไร และฐานะทางการเงินของทุกกลุ่มได้ปรับตัวมาอยู่ในสภาวะที่ค่อนข้างดี แต่การฟื้นตัวในส่วนของผู้ถือหุ้นยังมีความแตกต่างให้เห็นอยู่บ้าง โดยสัดส่วนผู้ถือหุ้นต่อสินทรัพย์รวมปรับตัวดีขึ้นมากในกลุ่มพาณิชยกรรม และ รองลงมาได้แก่ กลุ่มอสังหาริมทรัพย์ อุตสาหกรรม และก่อสร้าง ตามลำดับ ลักษณะการจัดลำดับนี้ค่อนข้างจะสอดคล้องกับลักษณะการฟื้นตัวของเศรษฐกิจไทยที่นำโดยการบริโภค ตามมาด้วยการฟื้นตัวของภาคอสังหาริมทรัพย์ ขณะที่ด้านการผลิตยังคงขยายตัวต่ำกว่าอัตราการขยายตัวของการบริโภค เป็นผลให้การลงทุนและการก่อสร้างขยายตัวอย่างค่อยเป็นค่อยไปจากสภาวะกำลังการผลิตส่วนเกินที่ธุรกิจยังคงเผชิญอยู่

นอกจากนี้ ข้อมูลยังชี้ให้เห็นถึงการปรับลดสินทรัพย์ของภาคธุรกิจ ขณะที่ด้านหนี้สินมีการปรับตัวจากการเปลี่ยนหนี้จากสินเชื่อธนาคารพาณิชย์และเงินกู้จากต่างประเทศไปสู่การกู้ยืมในรูปของตราสารหนี้ประเภทต่างๆ ที่มีต้นทุนต่ำกว่า ซึ่งเป็นผลให้ธุรกิจจำนวนหนึ่งยังมีสัดส่วนหนี้สินต่อทุนสูงมากอยู่ นอกจากนี้ ปัญหาหนี้ที่ไม่ก่อให้เกิดรายได้ที่ยังปรับโครงสร้างไม่สำเร็จและแฝงเร้นอยู่เบื้องหลังฐานะทางการเงินภาคธุรกิจที่ดูดีขึ้น ซึ่งเป็นสิ่งที่ยังคงน่าเป็นห่วงต่อภาพฐานะทางการเงินในภายหน้า ทั้งนี้ เมื่อใดที่ภาคธุรกิจขยายตัว จะก่อให้เกิดการจ้างงานที่ดี และการเพิ่มขึ้นของผลิตภาพแรงงานที่ดียิ่งขึ้น ก็จะเป็นผลดีต่อรายได้และความมั่งคั่งของครัวเรือนในระยะปานกลางต่อไป

สำหรับภาคครัวเรือนนั้น มีการปรับตัวโดยการเพิ่มหรือลดการบริโภคสินค้าและบริการที่มีระดับความจำเป็นที่ต่างกัน ซึ่งช่วยรักษาระดับการบริโภคมิให้ลดลงมากในช่วงที่รายได้และความมั่งคั่งลดลงจากวิกฤตเศรษฐกิจ พร้อมกันนี้ภาคครัวเรือนก็ได้รับประโยชน์จากมาตรการช่วยเหลือจากรัฐบาลเสริมเข้ามา สำหรับช่วงที่เศรษฐกิจเริ่มฟื้นตัวนี้ ครัวเรือนได้เริ่มกลับมาสะสมความมั่งคั่งกันใหม่โดยเฉพาะในบ้านและที่ดิน เนื่องจาก รายได้ที่พึงใช้จ่ายได้จริงขยายตัวต่อเนื่องนับจากปี2542 เป็นต้นมา พร้อมกับที่ตลาดอสังหาริมทรัพย์เริ่มฟื้นตัวจากปัจจัยแวดล้อมด้านดอกเบี้ยต่ำและมาตรการกระตุ้นอสังหาริมทรัพย์ของรัฐบาล ทั้งนี้ครัวเรือนน่าจะอยู่ในสถานะที่จะบริหารภาระหนี้ที่เพิ่มขึ้นได้ โดยเฉพาะอย่างยิ่งในส่วนของหนี้เพื่อซื้อที่อยู่อาศัย ตราบเท่าที่ยอดคงค้างหนี้และรายจ่ายดอกเบี้ยเมื่อเทียบเป็นสัดส่วนกับรายได้แล้ว เริ่มเข้าสู่สมดุลในที่สุด (steady state)

ทั้งนี้ การที่รายได้จากการจ้างงานมีความสำคัญมากต่อครัวเรือน นโยบายเศรษฐกิจมหภาคเพื่อสนับสนุนการจ้างงานและผลิตภาพแรงงานจึงเป็นสิ่งสำคัญยิ่ง เพื่อที่จะรักษาการบริโภคและการออมของครัวเรือนไว้ได้ โดยครัวเรือนเป็นแหล่งเงินทุนสำคัญต่อการลงทุนของประเทศ อันจะนำมาซึ่งการเติบโตของเศรษฐกิจได้ได้อย่างยั่งยืนต่อไป

งานวิจัยนี้ได้เสนอนโยบายหลัก 3 ด้านที่เป็นความท้าทายต่อการจัดการเกี่ยวกับการฟื้นตัวของเศรษฐกิจ ประการแรก คือ การทำให้สัดส่วนการลงทุนภาคเอกชนต่อผลิตภัณฑ์มวลรวมในประเทศขยายตัวสูงกว่าสัดส่วนการออมภาคเอกชน เพื่อช่วยลดช่องว่างการออมและการลงทุนภาคเอกชนที่เป็นบวกลงไปได้ ประการต่อมานั้น คือ ความจำเป็นอย่างยิ่งที่ประเทศต้องมีการจัดเก็บข้อมูลที่ครอบคลุมและเพียงพอต่อการติดตามการเปลี่ยนแปลงในสินทรัพย์และหนี้สินของภาคเศรษฐกิจที่สำคัญ โดยการส่งเสริมหลักธรรมาภิบาล และการพัฒนาตลาดการเงินควบคู่กันไป เพื่อสนับสนุนการบริหารจัดการความเสี่ยงที่อาจเกิดขึ้น เนื่องจากในระยะต่อไปนั้น ฐานะทางการเงินของทุกภาคเศรษฐกิจจะมีความเชื่อมโยงกันแน่นแฟ้นยิ่งขึ้น ซึ่งมีนัยว่า หากเกิดความอ่อนแอขึ้นในฐานะทางการเงินของภาคเศรษฐกิจใด ก็สามารถจะแพร่กระจายไปยังฐานะทางการเงินของภาคเศรษฐกิจอื่นได้มากกว่าในอดีต

ประการสุดท้ายเป็นความท้าทายโดยตรงต่อนโยบายการเงิน โดยในระยะสั้นนี้ นโยบายการเงินที่เอื้ออำนวยยังจะสนับสนุนการปรับตัวของฐานะทางการเงินภาคธุรกิจให้มีความสมบูรณ์ยิ่งขึ้น ทั้งยังช่วยส่งเสริมให้ภาคครัวเรือนสามารถสะสมสินทรัพย์ได้ต่อไปโดยปราศจากอุปสรรคทางการเงิน และในระยะปานกลางต่อไปนั้น ธนาคารกลางจำเป็นอย่างยิ่งที่จะต้องติดตามถึงประสิทธิผลของกลไกการส่งผ่านนโยบายการเงิน ท่ามกลางสภาวะพลวัตรระหว่างปริมาณเงินกับกิจกรรมทางเศรษฐกิจ และระหว่างการเคลื่อนไหวของราคาสินทรัพย์กับเป้าหมายเงินเฟ้อ