

# Household Debt in Taiwan

## —Trend and Policy Responses\*

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Greater household indebtedness has been a major trend for many countries over the past few years. In Taiwan, housing market boom, deregulation of bank entry, narrow profit margins in corporate finance, and downward adjustment in the proposed Basle II risk weights for mortgage loans and consumer loans contributed to an upward trend of household debt in the recent two decades.

Although household debt has been increasing in Taiwan, it is not very excessive. Its effect on the economy by far moderate, as this report will demonstrate by first discussing the trend, financing sources and major components of household debt, and then the factors accounting for this trend, followed by a discussion of financial ratios for household debt in Taiwan, and finally, policy responses.

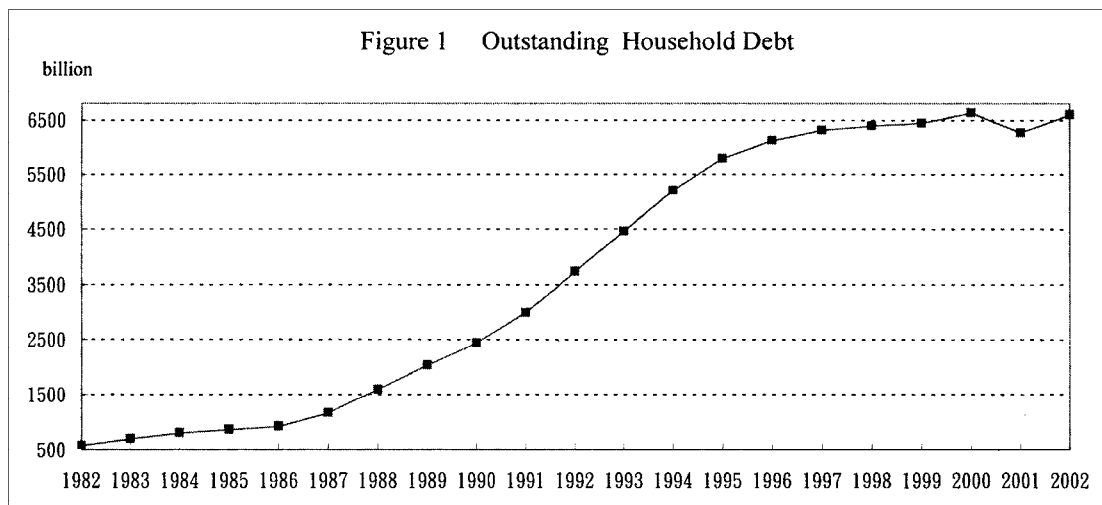
### I. The Trend of Household Debt

Before 1987, the expansion in household debt<sup>1</sup> was very moderate in Taiwan. Between 1987 and 1996, household debt increased rapidly, with an average annual growth rate of 21.1 percent. This momentum slowed down as the housing market turned into a recession and banks' lending attitude became conservative due to a build-up of non-performing loans. As of the end of 2002, the outstanding household debt reached NT\$6.6 trillion. Figure 1 displays the

outstanding household debt between 1982 and 2002. The data on household debt for 2003 is not yet available. However, according to the recent monthly financial statistics, household loans extended by domestic commercial banks have expanded at a faster pace since mid-2003 as a result of the recovery in the housing market and the improvement in banks' asset quality. It is estimated that household debt for 2003 was higher than that of the previous year.



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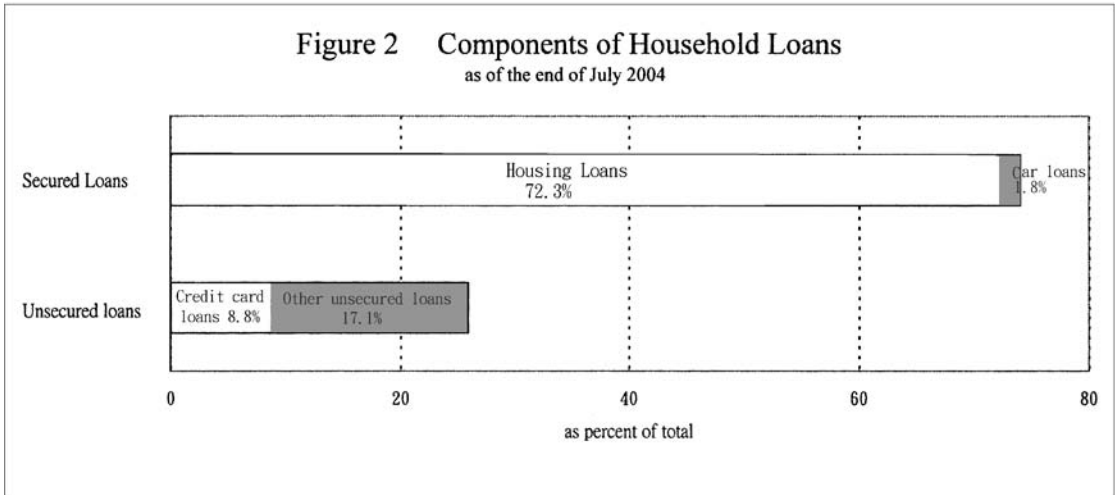
Source: Flow of Funds Statistics, The Central Bank of China, Taiwan

## II. Financial Sources and Major Components of Household Debt

In Taiwan, banks finance more than 95 percent of household debt. The generic term--banks here refers to financial institutions that are allowed to extend loans to households including commercial banks, community financial institutions, postal savings, insurance companies, and investment and trust companies. Among them, commercial banks account for the majority of the financial sources of household debt. Based on the data at the end of 2002, household loans extended by domestic

commercial banks accounted for 70 percent of total household debt.

As depicted in Figure 2, household loans consist of secured loans and unsecured loans. As of the end of July 2004, secured loans including housing loans and car loans were 72.3 and 1.8 percent of total outstanding household loans, while credit card loans and other unsecured consumer loans were 8.8 and 17.1 percent. Housing loans or so-called mortgage loans are the major component of household debt.



Source: Financial Statistics Monthly, The Central Bank of China, Taiwan

### III. Factors Accounting for the Trend of Household debt

Many factors contributed to the upward trend of household debt in Taiwan in the past two decades. From the lenders side, entry deregulation, narrow profit margins in corporate finance and downward adjustment in the proposed Basle II risk weights for mortgage loans and consumer loans were the major factors accounting for the changes in banks' lending behavior. From the borrowers side, factors such as expectation of higher housing prices, rising household income, and downward adjustment in interest rates increased household consumptions and housing investments, and thus households' demand for borrowing.

For banks, the most important institutional

change was the entry deregulation of commercial banks in 1991. Within a year, sixteen banks each with a capital above NT\$10 billion were established and started to compete with existing banks for loans. For these new banks, exploring new household customers was easier than attracting large business firms from existing banks since household customers were relatively underserved by existing banks. In addition, housing market was still booming at the time, expectations of rising housing prices automatically encouraged banks to raise their loan-to-value ratios. As a result, there was a significant increase in household loans, especially housing loans, after the sudden entry

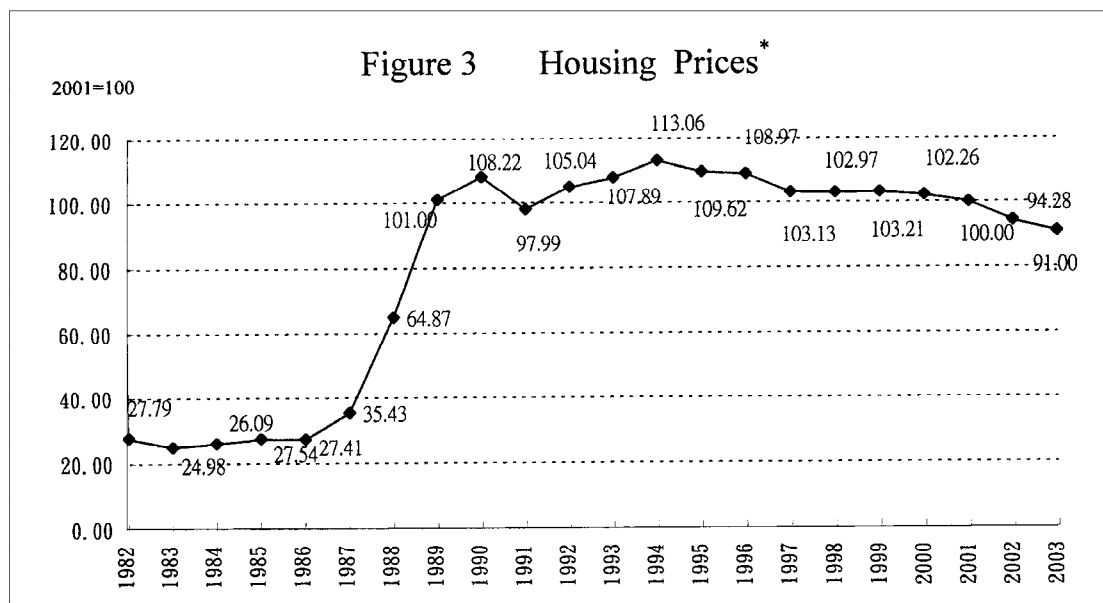
of new banks.

Besides that, the rapid growth of bond funds after mid-1990s provided good opportunities for local businesses to issue corporate bonds with low funding costs. Banks had to cut lending rates in order to compete for corporate customers. Consequently, profit margins in corporate finance kept on shrinking. Furthermore, according to the Basle II, the risk weights for mortgage loans and consumer loans will be reduced from those of the Basle I. These domestic and international financial developments led local banks to turn their focus to consumer finance in recent years<sup>2</sup>.

For households, housing investment has

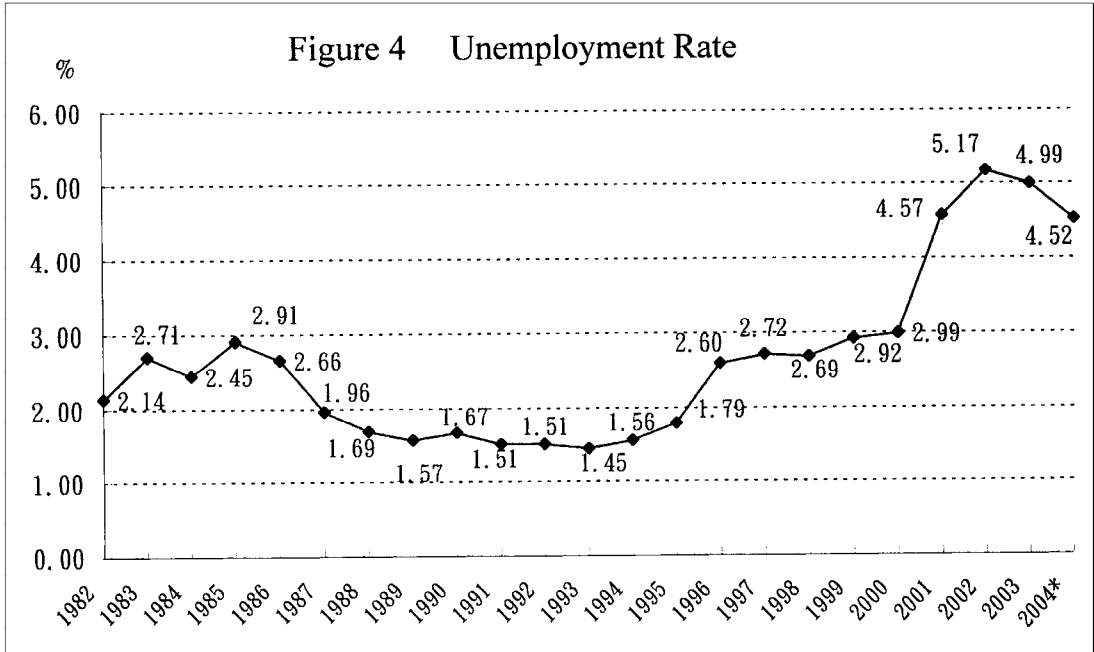
been the major cause of borrowing. The movement of housing prices plays an important role in housing investment decisions. As depicted in Figure 3, housing prices went up sharply in the late 1980s, and continued to increase until 1995, and then declined gradually toward mid-2003. Thereafter, housing prices began to move upward. When housing prices went up, expectations of higher housing prices encouraged households to purchase houses. Increases in the units and values of houses purchased accelerated the growth of housing debt. When housing prices went down, the growth of housing debt usually decelerated.

Household income is another important



\* new construction average list price index

Source: Real Estate Cycle Indicators, Architecture and Building Research Institute, Ministry of Interior



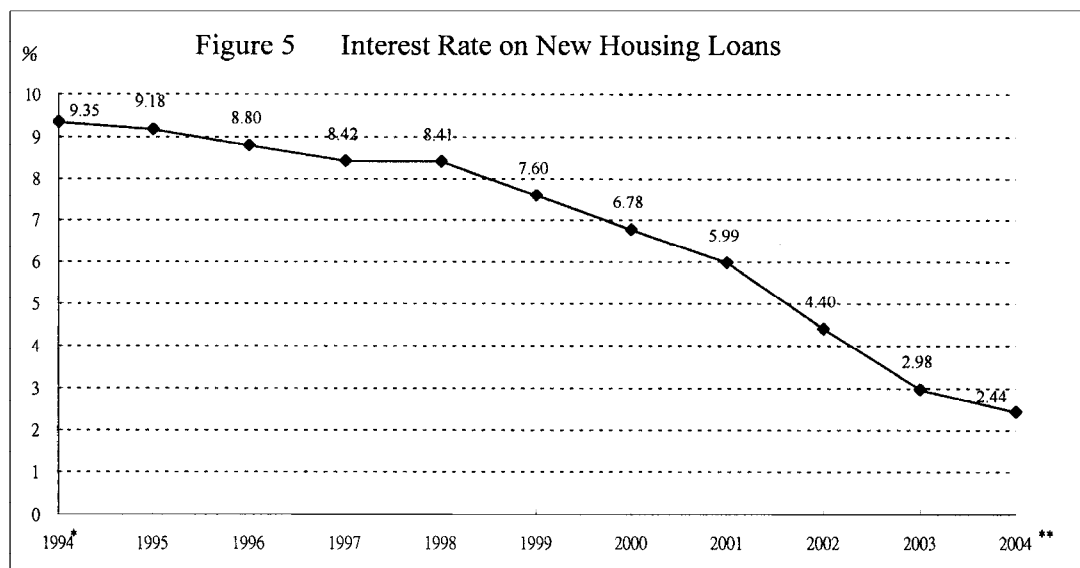
\* For the first 8 months of 2004

Source: Monthly Bulletin of Manpower Statistics, DGBAS, Taiwan

factor, because it affects households' capacity to service their debt. According to the government report on the Family Income and Expenditure Survey, employees' compensation has been the major source of household income<sup>3</sup>. Due to the shift of production base to overseas, especially to low-cost China, by Taiwan businesses, the structural unemployment has picked up since 1996. Some empirical studies showed that the nature rate of unemployment increased by a range of 0.8 to 1.5 percentage points after 1996. In addition, the burst of the global IT bubble in 2001 had an adverse impact on Taiwan exporting sector, and created more cyclical unemployment.

The rising unemployment rate from 1996 to 2002 discouraged housing investment, and thus household borrowing, as depicted in Figure 4. The unemployment rate has fallen since mid-2003 as the economy picked up.

Adjustments in interest rates may also affect households' borrowing decisions. However, since the household sector has a high saving rate and its financial position is always in surplus, the positive income effect of an increase in deposit rates might offset the negative income effect of an increase in borrowing rates. The negative substitution effect of an increase in interest rates is also small



\* the average of the second half of 1994

\*\* the average of the first 8 months of 2004

Source: Financial Statistics Monthly, The Central Bank of China, Taiwan

because that interest rates on mortgage loans are floating rates, not fixed rates. Therefore, household borrowing used to be not so sensitive to adjustments in interest rates.

As more than 85 percent of households in Taiwan have had their own dwellings since 2000, further expansion in housing loan

businesses is likely to slow down<sup>4</sup>. On the other hand, the growth of unsecured consumer loans has been strong from mid-2003 onwards. Credit card debt, for example, has grown more than 20 percent per year. The growth rate of unsecured consumer loans has therefore outpaced that of housing loans in the recent two years.

#### IV. Financial Ratios for Household Indebtedness

The ratios for evaluating household indebtedness include debt to disposable income, debt servicing, debt to asset, and non-performing loan ratios.

In Taiwan, several databanks provide household data. The CBC has data on financial

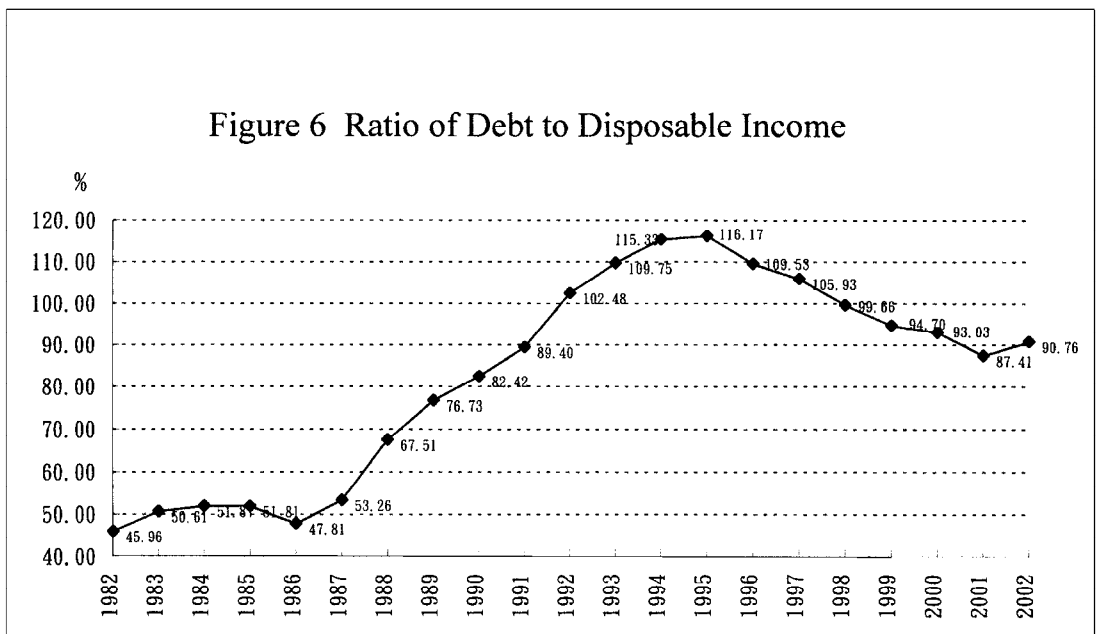
position, financial assets and financial debt of the household sector, which are part of the flow of funds statistics. The Directorate-General of Budget, Accounting and Statistics' (DGBAS) Survey on National Wealth has data on real assets of households. Its Family Income and

Expenditure Survey includes data on households' interest payments and disposable income. The Joint Credit Information Center (JCIC), supervised by the CBC and MOF, collects data on credit information from member financial institutions, and nationwide credit information from this databank is shared by members only.

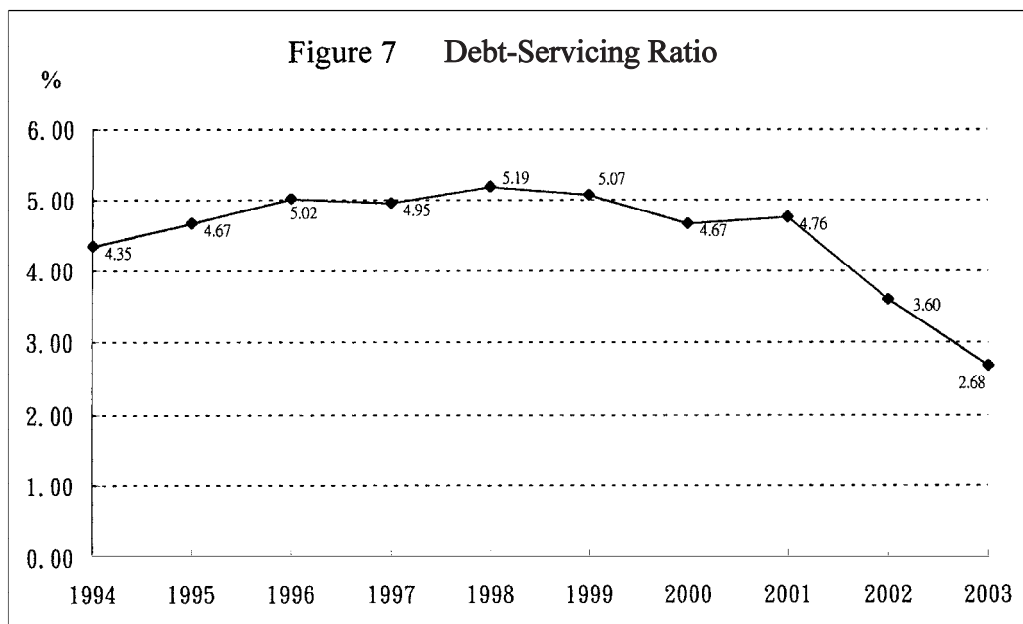
As depicted in Figure 6, the debt to disposable income ratio of the household sector rose rapidly between 1987 and 1995. After 1996, the growth of household debt turned mild and was at a slower pace than that of disposable income, which led to the decline in the debt to income ratio after 1996. As of the end of 2002,

the debt to income ratio of the household sector stood at 90.76 percent.

The debt-servicing ratio, defined as the ratio of interest payments to disposable income, moved largely in line with banks' lending rates. In the recent ten year, this ratio fell between 3.60 and 5.20 percent, as depicted in Figure 7. The debt-servicing ratio was 3.60 percent as of the end of 2002, and is estimated to decline further in 2003. Although this ratio was relatively low by international standard, the ratio for the lowest income quintile was much higher than the rest of the households. In some years, the debt-servicing ratio for the lowest income quintile was twice as large as the average ratio for the



Sources: Flow of Funds Statistics, The Central Bank of China, Taiwan ; National Income in Taiwan, DGBAS, Taiwan



Source: Family Income and Expenditure Survey, DGBAS, Taiwan

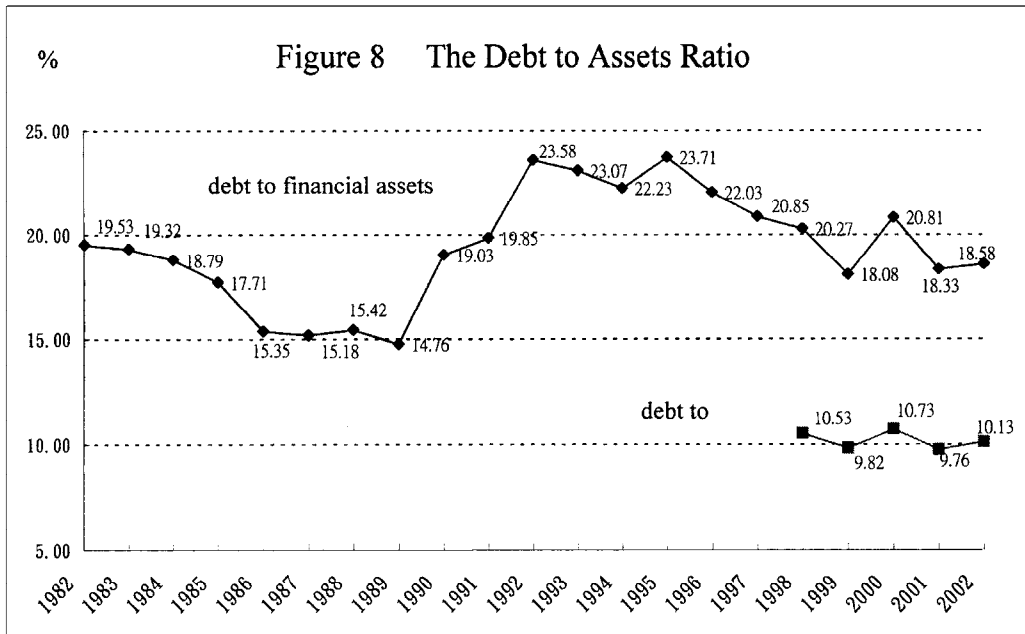
entire household sector. Furthermore, the highest income quintile always has positive net interest income. Therefore, the low-income families suffered most when interest rates went higher.

Regarding the debt to financial asset ratio, based on the flow of funds statistics, the ratio fell between 14.8 and 23.7 percent for the past twenty years. When including real assets, the ratio of debt to total assets hovered around 10% in the past six years, as depicted in Figure 8. The low debt to asset ratio reflects the fact that Taiwan is a country with current account surpluses for years, and the household sector has a high saving rate.

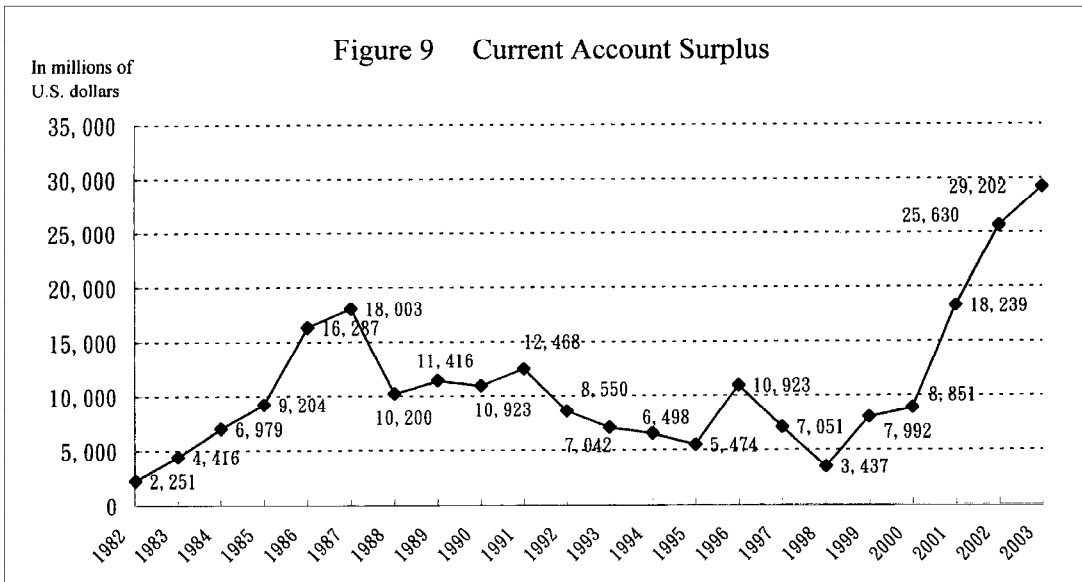
To evaluate the solvency of household debt, non-performing loan ratio for individuals, non-performing loan ratio for credit card debt, and

non-performing loan ratio for cash card debt are commonly used as indicators in Taiwan. The non-performing loan ratio for individuals peaked at 9.88% in April 2002, and fell to 3.95% in June 2004 as banks actively wrote off their bad loans and the economy regained its momentum. The non-performing loan ratios for credit cards and cash card were still below 3% in June 2004. However, cardholders are allowed to pay only a minimum amount of their debt by the due date. The unpaid balances are subject to very high interest rates. Consequently, cardholders may face increasing difficulty in paying off the debt. A worsening insolvency condition of cardholders might hide behind the current low non-performing loan ratios.





Sources: Flow of Funds Statistics, The Central Bank of China, Taiwan ; National Wealth Survey, DGBAS, Taiwan



Source: Balance of Payments Quarterly, The Central Bank of China, Taiwan

## V. Policy Responses

Taiwan household debt level is not very excessive, and the overall financial position of the household sector is largely sound as demonstrated by the low debt-servicing ratio, low debt to asset ratio and the acceptable quality of the debt.

Nevertheless, in recent years, the composition of household debt has shifted due to significant increases in unsecured consumer loans such as credit card debt and cash card debt. Since the unusually high growth of credit card debt and cash card debt might end up with a build-up of non-performing loans, the MOF has required banks to tighten their credit investigation upon card approvals. In June 2004, the MOF announced a new supervisory measure on credit card and cash card business<sup>5</sup>. It required banks with a non-performing loan ratio for credit card debt or cash card debt exceeding 8 percent to stop issuing new cards. Banks with a non-performing loan ratio between 5 and 8 percent have to improve the quality of the debt within three months. Banks with a non-performing loan ratio between 3 and 5 percent have to submit the improvement plans.

To reduce inflationary expectation, the CBC terminated the downward trend of interest

rates by increasing the discount rate 25 basis points on October 1, 2004. Confronted with rising household debt, the CBC is fully aware of a possible increase in the sensitivity of household spending to economic shocks, such as interest rate hikes, asset price fluctuations, or rising unemployment during economic downturns, and includes this into its policy-making decision.

The majority of household debt data are annual data. It is difficult for the CBC to take effective measures based on such low-frequency data. Since domestic commercial banks finance more than 70 percent of household debt in Taiwan, the CBC uses monthly data such as banks' household loans and non-performing loan ratios to assess risk of household indebtedness. So far, the gaps between the trend and actual level for bank loans, stock prices and housing prices are calculated on a quarterly basis for risk assessment, and the sensitivity analysis is conducted if necessary. However, in an increasingly uncertain global environment, scenario analysis for risk assessment of household indebtedness may need to be developed in the near future.

## Notes

- 1 It includes the debt of households and nonprofit entities.
- 2 The share of household loans in total loans extended by domestic commercial banks increased from 27 percent at the end of 1992 to 37 percent at the end of 2003.
- 3 The share of employees' compensation averaged at 55.5 % for the recent ten years, followed by entrepreneurial income 16.6%, property income 15.5% and Transfer receipts 12.5%.
- 4 The government preferential housing loan program and tax advantages have stimulated the demand for housing in the recent four years, but the effect of these measures should be temporary.
- 5 The Financial Supervisory Commission (FSC) started operations in July 2004. The supervision of banks, securities houses, insurance companies has been removed from the MOF to the FSC. So far, the FSC has already ordered three banks with the NPL ratio for cash card debt exceeding 3 percent to submit improvement plans.

