

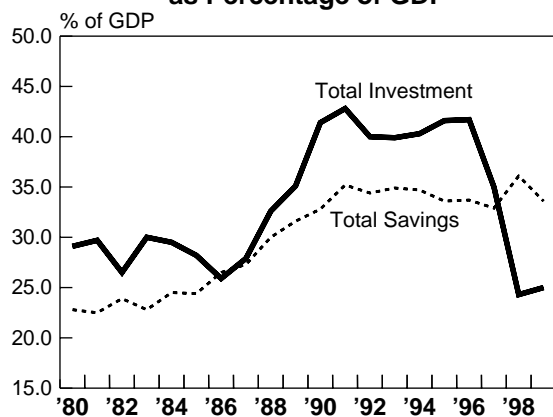
Recent Developments in Household Savings Behaviour ^{1/}

Economic Research Department

1. Introduction

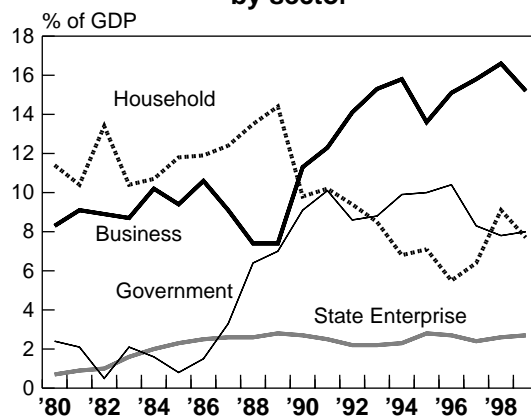
Savings and investments naturally play an important role in the economic growth and development process. Savings determine the national capability to invest and thus to produce, which in turn specify economic growth potential. Prior to the financial crisis which started in the middle of 1997, Thailand has been running a relatively large current account deficit due to high saving-investment gap. Although national savings as a percentage of GDP rose from 25.6 in 1980-89 period to 34.2 during 1990-99, it was still inadequate to finance domestic investment. Notable developments between 1990-96, were the decline in household savings and the rise in corporate savings as a percentage of GDP ^{2/} (Figures 1 and 2.). The decline in household savings was partly attributable to the fall in the share of household income in GDP as well as changing consumer behaviour in accordance with economic developments.

Figure 1 : Savings and Investment as Percentage of GDP



Sources : National Economic and Social Development Board, Bank of Thailand

Figure 2 : Savings and Investment by sector



Since the financial crisis in 1997, Thailand has introduced a number of measures to remedy the disequilibrium. At the initial stage, restrictive macroeconomics policies were implemented to restore economic stability and instill confidence in the financial systems by pursuing high interest rates measure. As a consequence, current account turned into a surplus, inflation rate declined, international reserves improved and baht became stabilised.

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^{2/} Based on the United Nation System of National Accounting standard, profits and losses from asset valuation e.g. from exchange rate changes are excluded. The continued increase in corporate savings may thus be attributed to the rises in provisioning for loan losses.

The economic crisis which spread into the region and the rest of the world, together with the implementation of restrictive policies in the earlier period caused the Thai economy to slow down significantly. The improved macroeconomics stability, however, has given the authorities an opportunity to relax monetary and fiscal policies since July 1998. The interest rates have begun to decline, and decelerated in the fourth quarter of 1998. These developments raised a question as to whether **low interest rate policy has produced any repercussions on household savings?**

According to two Household Socioeconomic Surveys jointly executed by the National Statistical Office and the Bank of Thailand, and the data from the financial system, as well as earlier empirical studies of the Bank of Thailand, **no statistically significant relationships have been found between household savings and interest rates.** Details of some of these evidences are discussed below.

2. Factors Affecting Household Savings

The Joint Socioeconomic Survey of the National Statistical Office and the Bank of Thailand in 1998 on 3,933 households covered a variety of aspects including income, expenditure, assets and liabilities as well as other socioeconomic characteristics. When compared with the previous survey in 1993, it was found that the household saving behaviour has changed in a number of ways. First, average household income rose by approximately 15.1 percent between 1993 and 1998 (slightly lower than the CPI which rose 34.2 percent during the same period). Consumption, on the other hand, rose 34.1 percent raising average propensity to consume to 71.42 percent in 1998 compared with 61.29 percent in 1993. As a consequence, average household savings fell by 27.6 percent lowering average propensity to save to 17.31 percent compared with 27.51 percent of the previous survey.

An explanation for these changes in the behaviour is that the economic crisis in 1997-98 has probably led to lower income growth while households struggled to maintain their standard of living. This resulted in a lower average propensity to save.

Table 1 : Comparison of Household Savings Behaviour between 1993 and 1998 Surveys

	1993	1998	growth (%)
1. Income Average (Baht)	11,058.95	12,730.65	15.1
2. Consumption (Baht)	6,777.85	9,092.20	34.1
3. Savings (Baht)	3,042.68	2,203.15	-27.6
4. Average Propensity to Consume (%)	61.29	71.42	
5. Average Propensity to Save (%)	27.51	17.31	

Source : *Socioeconomic Survey by BOT in 1993 and by National Statistical Office in 1998.*

Most savings remained as deposits at commercial banks which amounted to 88 percent of the total, higher than 71 percent in the previous survey. Savings in life insurance declined substantially nationwide in line with falling average real income (nominal income net of inflation). This is consistent with the fact that most life insurance savers tend to be in the high income brackets. Savings at cooperatives and for provident funds rose marginally.

Table 2 : Components of Household Savings
(unit : % share)

	1993	1998
1. Bank Deposits	71.36	88.25
2. Savings Cooperative	3.52	6.24
3. Life Insurance	18.88	1.42
4. Provident Funds	0.26	2.10
5. Investments in the Stock Market	1.27	0.25
6. Others	4.71	1.74
Total	100.0	100.0

Source : Socioeconomic Survey by BOT in 1993 and by National Statistical Office in 1998.

On savings rationale, most households saved for sickness or old age (42.5%), for education (16.5%) and for working capital (15.8%). Household savings for interest income constituted only 13.4 percent of the total. Although this is somewhat higher than the 7.7 percent of the previous survey, it remains only the fourth most important reason for savings. This result indicates that the influence of interest rate on household savings is probably growing slowly over time and likely to be more important in the future.

Table 3 : Rationale for Household Savings
(unit : % share)

	1993	1998
1. For Sickness or Old Age	29.4	42.5
2. For Education	21.3	16.5
3. For Working Capital	17.9	15.8
4. For Interest Income	7.7	13.4
5. For Acquiring Other Assets	6.1	3.4
6. For Religious/Cultural Purposes	3.0	0.8
7. For Collateral for a Loan	2.5	5.1
8. Others	12.1	2.8
Total	100.0	100.0

Source : Socioeconomic Survey by BOT in 1993 and by National Statistical Office in 1998.

Household savings can be in both non-movable and movable assets, including financial assets which encompass deposits, securities investments, and other forms of contractual savings e.g. provident funds etc. Since financial assets constitute the largest share of household savings, the data of which are readily available and subject to direct impacts of public policies, the present study will concentrate somewhat more on this group of assets. The following analysis is based on the “stock” number as reported by the financial institutions which is different from the “flow concept” of household socioeconomic survey above. Nevertheless, the conclusions reached are quite similar as may be seen below.

3. Household Savings in the Form of Financial Instruments

According to the consolidated balance sheet of the financial system at the end of 1998, the stock of household savings amounted to B4.56 trillion. This can be divided into commercial bank deposits B3.34 trillion (73.2 percent), Government Savings Bank deposits B0.34 trillion (7.5 percent), Savings Cooperatives B0.26 trillion (5.7 percent), finance companies deposits B0.24 trillion (5.2 percent), life insurance B0.14 trillion (3.1 percent), Government Housing Bank B0.13 trillion (2.9 percent), Bank for Agriculture and Agricultural Cooperatives B0.09 trillion (2.0 percent), Agricultural Cooperatives B0.02 trillion (0.4 percent) and Credit Foncier B3.5 billion (0.1 percent).

Table 4 : Stock Outstanding of Household Savings
(unit : trillions of baht)

	1995	1996	1997	1998			
				Q1	Q2	Q3	Q4
Total	3.47	3.93	4.04	4.18	4.26	4.45	4.56
Commercial Banks	2.37	2.64	3.06	3.19	3.28	3.34	3.34
Government Savings Bank	0.18	0.21	0.20	0.20	0.20	0.26	0.34
Savings Cooperatives	0.14	0.18	0.20	0.21	0.23	0.24	0.26
Finance Companies*	0.57	0.66	0.25	0.26	0.23	0.23	0.24
Life Insurance	0.10	0.12	0.14	0.14	0.14	0.14	0.14
Government Housing Bank	0.05	0.06	0.11	0.10	0.11	0.13	0.13
BAAC	0.04	0.06	0.07	0.07	0.07	0.08	0.09
Agricultural Cooperatives	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Credit Foncier	0.01	0.01	0.01	0.01	0.00	0.00	0.00

* including all finance companies and 30% of borrowings (deposits) of closed finance and securities companies

Household aggregate financial savings grew on average 1.5 percent per month between 1991-95, decelerated to 1.1 percent in 1996 and declined by 0.3 percent, on average between

May and November 1997, during the financial crisis, before recovering along with banks' deposits. Nevertheless, commercial banks' deposits which previously contributed approximately 1 percent per month of household aggregate financial savings growth before the crisis also decelerated to 0.5-0.6 percent per month towards the end of 1998. This deceleration could be attributed to the cuts in banks' deposit rates (using 3-month deposit rates of the four biggest Thai banks) which declined from 8.25-9.25 percent in June 1997, prior to the crisis, to 6 percent in December 1998. Meanwhile, contribution by the deposits at the Government Savings Bank accelerated to 0.6 percent per month during the second half of 1998, partly compensating for the slowdown in commercial banks' deposit growth rates. Household aggregate financial savings, therefore, continued to grow. It may be noted that total deposit outstanding improved somewhat after the introduction of the August 14, 1998 financial institutions reform package. Moreover, the uncertainties regarding economic and employment situations may have prompted some households to be more cautious in their expenditure. All these factors contributed to the rapid recovery in savings despite the economic downturn.

Table 5 : Contribution to Household Savings Growth
(unit : % per month)

	1991-95	1996	1997	1998			
				Q1	Q2	Q3	Q4
Total	1.5	1.1	0.2	1.2	0.6	1.4	0.8
Commercial Banks	0.9	0.7	0.9	1.0	0.7	0.5	0.0
Finance Companies	0.3	0.2	-0.9	0.1	-0.3	0.0	0.1
Government Savings Bank	0.1	0.1	0.0	-0.1	0.0	0.6	0.6
Savings Cooperatives	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Life Insurance	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Government Housing Bank	0.0	0.0	0.1	-0.1	0.1	0.1	0.0
BAAC	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Agricultural Cooperatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Credit Foncier	0.0	0.0	0.0	0.0	0.0	0.0	0.0

In addition to deposits at financial institutions above, during the past 4-5 years, increasing proportion of household savings have been mobilised in the forms of funds. As of the end of December 1998, stock of household savings in financial funds amounted to B489 billion. This may be divided into Provident Fund B156 billion (31.9 percent), Mutual Funds B123 billion (25.2 percent), Government Pension Fund B97 billion (19.8 percent), Social Security Fund B61 billion (12.5 percent), Private Funds B41 billion (8.4 percent) and Compensation Fund B12 billion (2.5 percent).

Similar to household deposits in the financial institutions, household savings in the forms of financial funds also declined sharply during the economic crisis, i.e. declined by 1.8

Table 6 : Stock of Household Savings in Financial Funds
(unit : billions of baht)

	1995	1996	1997	1998			
				Q1	Q2	Q3	Q4
Total	304	338	377	389	411	428	489
Provident Funds	57	91	137	134	151	151	156
Mutual Funds	246	247	102	113	85	87	123
Government Pension Fund	0	0	69	75	81	88	97
Social Security Fund	0	0	57	53	59	60	61
Private Funds	0	0	0	1	22	30	41
Compensation Funds	0	0	10	12	12	12	12

percent between February and November 1997^{3/} before recovering continuously since the beginning of 1998. The most important and also most volatile component of these savings were the mutual funds which fell almost 3 percent per month during the economic crisis. Further, when some issuers of debentures defaulted, a number of mutual funds that invested in these instruments were heavily affected and had to be closed down. Moreover, the SET index also fell substantially from 527.28 in June 1997 prior to the crisis to the bottom of 207.31 in September 1998 before recovering only towards the end of 1998. The recovery was supported by the substantial amount of liquidity, and lower interest rates. Similarly, the provident funds and private funds have also picked up in recent months.

Table 7 : Contribution to Household Savings Growth in the Forms of Financial Funds
(unit : percent per month)

	1991-95	1996	1997	1998			
				Q1	Q2	Q3	Q4
Total	17.6	1.0	1.3	1.1	1.9	1.3	4.6
Provident Funds	2.2	0.9	0.9	-0.3	1.5	0.0	0.4
Mutual Funds	15.5	0.0	-2.9	1.0	-2.3	0.1	2.7
Government Pension Fund	0.0	0.0	1.7	0.5	0.5	0.6	0.6
Social Security Fund	0.0	0.0	1.4	-0.3	0.5	0.1	0.1
Private Funds	0.0	0.0	0.0	0.1	1.8	0.6	0.8
Compensation Funds	0.0	0.0	0.3	0.1	0.0	0.0	0.0

3/ Nevertheless, household savings in the forms of financial funds continued to grow on average 1.3 percent in 1997 due to the establishment of the Government Pension Fund and the Social Security Fund at the beginning of the year.

Finally, time series analyses based on econometric models by the Bank of Thailand^{4/} also found no significant impacts^{5/} of interest rates on household savings. The net effects of deposit rates cuts did not lead to lower household savings^{6/}. Nevertheless, there were evidences of switching among financial instruments, particularly towards those with relatively higher rates of return. For example, higher deposit rates could lead to lower shares of investments in securities and debt instruments.

4/ From both internal and published studies e.g. Suchada Kirakul, Ammara Sripayak and Preecha Ploydanai, Household Savings, in **Bank of Thailand Monthly Bulletin**, 23 (September 1982) : 25-62. and Economic Research Department, **Bank of Thailand Economic Focus: Private Saving in Thailand**, Volume 1, Number 2, April-June 1996. These results are consistent with other studies on the relationships between household savings and deposit rates in Thailand which concluded that interest rates had low, unclear, or statistically insignificant impacts, e.g., Praveena Dethihithikool, **A Study of Aggregate Saving Rate of Five Selected Developing Asian Countries : 1960-1981**, Master of Economics Thesis, Thammasat University, 1986. Somsong Chirapatanakul, **Analysis of Factors Affecting Deposits at Commercial Banks in Thailand**, a Master Thesis, Chulalongkorn University, 1986. And Pornpen Phuwittayapan, **Impacts of Economic Factors on Household Savings Behaviour through Financial Institutions**, a Master Thesis, Chulalongkorn University, 1997.

5/ Both nominal and real interest rates.

6/ The coefficients of interest rates in household savings equations were either small or insignificant, indicating that price effect and income effect of a change in interest rate on savings are similar and cancel each other out. On the one hand, price effect of lower interest rate will encourage a net saver to consume in the current period as against future consumption since the opportunity costs of current consumption has become lower. On the other hand, income effect of interest cut will also make that net saver feel poorer with his/her lower interest income providing an incentive to increase savings to preserve future income. The income effect works in the opposite direction to price effect. When these two effects are of similar magnitude, they cancel each other out, resulting in small or insignificant coefficients in the equations.