A Decade of Flow of Funds in China (1995-2005)
(Preliminary Draft: Not to be Quoted Without Authors' Consent)

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Abstract

In this paper we examine the balance between savings and investment (the flow of funds) for the People's Republic of China (China) at both a macroeconomic level and at disaggregated sectoral levels. Specifically, we look at the flow of funds at the national level and then at the sectoral level as divided into the Government sector, the Production sector and the Individual economy sector. Finally, we subdivide the Production sector into three component sectors: the State-Owned Enterprise sector (SOE), the Collective sector (COE) and the Corporate sector. Finally, we attempt to measure the extent to which China's domestic savings are intermediated through formal channels as opposed to informal channels.

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I. Introduction

In this paper we examine the balance between savings and investment (the flow of funds) for the People's Republic of China (China) at both a macroeconomic level and at disaggregated sectoral levels. Specifically, we look at the flow of funds at the national level and then at the sectoral level as divided into the Government sector, the Production sector and the Individual economy sector. Finally, we subdivide the Production sector into three component sectors: the State-Owned Enterprise sector (SOE), the Collective sector (COE) and the Corporate sector.

We take a top-down approach starting at the macroeconomic flow level and then moving down to individual sectors. Earlier research in this area has been rather limited. Kujis (2005), relying on National Bureaus of Statistics data presents a breakdown identical to the sectoral breakdown used here, but does not link that breakdown upward at the macro level nor to the lower sub-sector level. We also make explicit assumptions regarding the share of Government in the flow of funds accounts and allow for several estimates and alternative scenarios in order to come up with a range of possible flow of funds and balances. Other approaches have taken as a starting point the sources of finance (e.g., loans, grants, self-raised funds etc.) to individual sectors consistent with the NBS presentation. Some studies have focused on the profitability of a single sector such as the SOE sector (Carsten, 2002). Zhang (2001) has written a number of insightful articles on the evolving structure of enterprise finance. It is hoped that our more integrated approach provides both a different angle in analyzing China's flow of funds and a broader range of estimates. In the process, we learn more about data availability, consistency and shortcomings.

A number of results emerge from this paper. Some are new and some confirm the work of earlier authors but with a different approach. We summarize our findings and observations: i. Foreign Direct Investment (FDI) in part has freed Chinese national savings to take the form of capital outflows (to date most of which has been used in the accumulation of foreign exchange reserves); ii. Though the Individual sector has a lower savings rate than does the Production sector, it is the largest source of funds to both the Government sector and the Production sector. Though our estimates of profitability in the production sector are much higher than Kujis (2005) estimates, the Production sector flow balance has been shrinking over the past decade and may have become negative around 2000; iii The SOE sector in the aggregate has been profitable over the past decade.   Nevertheless. its savings/investment balance has been either very low or negative in that period. The balance appears to have improved around 2001; COEs have had a deteriorating balance with investment remaining stable, but savings (profitability) declining over most of the decade; v. The Corporate sector has had a positive balance throughout the decade which has allowed it to lend to the Production and Government sectors; v. Perhaps more than half of national savings is not financially intermediated either via bank deposits, insurance premia, debt or equity instruments or increased cash

holdings. This suggests a substantial informal intermediation market within and between companies and individuals. This, in part, quantifies the often cited "triangle of debt".

Section II of the paper presents the accounting framework for our analysis. Section III identifies sources of data and the methodological approach. Section IV-VI provides results for flow of funds at the macroeconomic, sectoral and production sub-sector levels. Section VII briefly analyzes the flow of financial intermediation instruments. Section VIII summarizes and hints at some policy implications.

II. China: Flow of Funds Analysis

Our approach in examining China's flow of funds is to combine the well known macroeconomic methodology with the more disaggregated data presentation of China's NBS. We start by segregating Chinese output (Y) into its uses:: Consumption (C), Investment (I), Government (G) and Net Exports + Net Factor Payments (X-M+NFP) and obtain the familiar identity:

$$Y_{GNP} \equiv C + I + G + (X - M + NFP) \qquad\qquad (1)$$

After some adjustments to using the definition of the budget deficit and the breakdown of personal income into Consumption (C), Savings (S), and Taxes (T), we have:

$$S'-I = (X - M + NFP) + (G + Tr - Taxes) \qquad\qquad (2)$$

Here we have the traditional breakdown of the economy into three sectors (from left to right in (2)) we have national savings/investment balance, the external sector and the government sector. Equation (2) states that the difference between savings (S') and Investment (I) on the part of individuals and productive entities will equal the current account on the balance of payments plus the budget deficit (where G + Tr – Taxes is a positive number when there is a budget deficit). Importantly, we note that G in (2) represents Government consumption; Government investment in included in I along with Individual and Productive sector investment. Savings includes savings of just the private and productive sectors and excludes government savings. We also note that I includes "stock-building" or inventory accumulation – both planned and unplanned.

We would now like to rearrange and specify (2) in a way more suitable to China's statistical presentation. First we collapse the budget deficit into S' and redefine S' as S or Domestic Savings. We next decompose S into its variant sectors: i. the Government sector, representing all levels of government; ii. the Production sector, representing production by state-owned enterprises (SOEs), collective entities and corporate entities;

and iii. the private or Individual sector representing non-incorporated domestic entities and individuals. We classify sub-sectors of investment, I, in exactly the same way. We summarize these relationships in (3) and (4):

$$S = I + (X - M + NFP) \qquad (3)$$

$$S^G + S^{\text{Prod}} + S^{\text{Priv}} = I^G + I^{\text{Prod}} + I^{\text{Priv}} + (X - M + NFP) \qquad (4)$$

Equations (3) and (4) have sources of funds on the left-hand side of each equation and uses of funds (savings) on the right-hand side. To be complete, we identify S^{Prod} and I^{Prod} and its components:

$$S \equiv S^{SOE} + S^{Collective} + S^{Corporate} \quad \text{and} \quad I \equiv I^{SOE} + I^{Collective} + I^{Corporate} \quad (5)$$

We refer to S and I in the form of equation (5) as Domestic Savings and Domestic Investment. Finally, it is useful to define National Savings and National Investment. Subtracting out Foreign Direct Investment (FDI) from each side of (3) and rearranging, we have:

$$S - (X - M + NFP) - FDI = I - FDI \qquad (6)$$

On the right-hand side of (6) National Investment represents investment undertaken by domestic (not foreign) entities within China. The left-hand side represents National Savings by Chinese residents which are directed toward investment (physical) within China. The expression (X-M+NFP)-FDI represents gross capital outflows (mainly financial and mainly channeled into reserve holdings) by Chinese entities and individuals beyond China's borders.[1] Equation (6) is important in that it allows us to isolate Chinese flow of funds which are directed toward national investment activities. Of course, we will also present results regarding those flows which are channeled abroad.

Our general approach is to apply the definition of Domestic savings and National investment at a sectoral level and then compare savings and investment and the resulting balance between the two at the sectoral level. Formally, we examine:

$$S^i - I^i = Balance^i \qquad (7)$$

where superscript *"i"* represents either a sector such as the production sector or a sub-sector of a sector such as the Collective sector of the Production sector.

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[1] In fact, we should also subtract out portfolio inflows into China to get the broadest measure of gross capital outflows. Doing so, however, would break the equality between Domestic Investment and Domestic Savings and maintaining the usefulness of the definition of Domestic Investment as non-FDI invesetment seemed more important than altering this definition too.

Our general strategy is to use data for sectors where the "level of comfort" with that data is high. We then use our accounting framework above to identify data for the residual sector. Specifically, the Production sector is the residual sector or "plug sector" for both savings and investment. The residual sub-sector of the Production sector is the Corporate sector on the savings side while on the investment side, there was sufficient data to make a residual sector unnecessary.

III. Sources of Data and Definitions

Data on the distribution of investment across sub-sectors, profitability of various sub-sectors and private savings came from various issues of the China Statistical Yearbook (CSY).[2] While this provided the bulk of information on relative size of various sub-sectors, this information was supplemented by data from International Financial Statistics and estimates from the Economist Intelligence Unit. Updates to all these sources were found in China Monthly Statistics. The China Financail Stability Report (2005) provided a useful historical summary of financial data on bank deposits, equity and bond issuance and loan amounts. Regarding assumptions on "fiscal reach" we used both International Monetary Fund and World Bank estimates.

We use the same definitions for State-Owned and State-Controlled Enterprises, State-Owned Units, Collective Enterprises, Private Enterprises and Self-Employed Enterprises as found in the China Statistical Yearbook. Specifically, the appendices for Chapters 6 and 14 of the 2005 CSY provide detailed definitions of these different types of entities. Any entity which is not included in any of the above definitions, **we define as a "corporate entity"**. As such, this latter definition includes shareholding units, joint ownership units, foreign funded units and units funded from Hong Kong, Macao and Taiwan. Again, these latter types of entities are defined in the above-mentioned appendices.

IV. Flow of Funds at the Macro Level

The results of this section are well-known, but provide the basis for two more disaggregated sections on flows that follow. We therefore, discuss in some detail the methodology and assumptions employed in deriving the results found in Table 1 and Charts 1-3. Chart1 and 2 provides the sources and uses of China's Domestic savings. Inclusion of budget surpluses, makes China's prodigious Domestic savings rate even higher (47 % of GDP) by 2005)[3]. As is the case with virtually all countries, most of this savings is channeled into investment (41% of GDP). The remainder is channeled in foreign savings (lending abroad) as represented by the current account surplus (6% of GDP in 2005). We note that both Domestic savings and investment have accelerated as

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[2] Data on investment can be found in Chapter 6. Data on profitability can be found in Chapter 14 for recent years and Chapter 13 for earlier years. Data on private savings and consumption can be found in Chapter 10.

[3] In this paper, estimates for 2005 are based on either preliminary data or are simply extrapolated by the author in the absence of a preliminary estimate.

a share of GDP since 2000 consistent with an economic growth expansion that began in 1999.

Domestic savings is a residual estimate along the lines of equation (2) above after taking into account budget deficit/surplus, current account and Domestic investment data. The budget deficit/surplus data is based on International Monetary Fund IFS data (2006) and various Article IV estimates. These estimates exclude Government investment since we are including that investment as a use under national investment. It is for this reason that our budget series is in surplus – it only includes government consumption and various government transfers as expenditure items. Domestic Investment includes both investment in plant, property and equipment as well as inventory accumulation. We rely on EIU estimates for this series which average about 11% higher than National Bureau of Statistics (NBS) published estimates for fixed investment. Part of this difference reflects our inclusion of inventory accumulation. [4] The Current Account balance is based on International Monetary Fund (IMF) estimates. Since the current account and capital account must sum to zero if we broadly define the capital account to include changes in reserve holdings, we interpret current account surpluses as net lending abroad[5].

Referring to Charts 4-5 and with reference to equation (6), we see that the gap between Domestic Savings and National Savings has remained relatively stable while that between Domestic Investment and National Investment has narrowed somewhat. In part the stable gap for the former pair reflects the narrowing share of FDI as a share of Domestic Savings (as seen in Chart 3) being offset by the widening current account surplus. In the sectoral analysis below we use the National investment and Domestic savings measures because these measures tell us about the financing and investing decisions of the various economic entities within China as opposed to the investment and savings decisions of the rest of the world as they affect China..

What are we attempting to show with the National vs. Domestic distinction? In part, what is being highlighted here is that FDI over the years has allowed some of China's substantial savings to be used elsewhere – that is as gross lending – either in the form of reserve accumulation or other outward financial flows. In fact the cumulated sum of the difference between Domestic Savings and National Savings for the 1995-2005 period is approximately US$ 875.5 billion.[6] This is remarkably close to recent measures of China's gross foreign exchange reserve holdings.

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[4] Use of the NBS measure for investment leads to estimates of national savngs as a share of GDP in the 30% range as opposed to the more commonly estimated measures (as in this paper) in the 40% range. Using either measure makes no difference to our sectoral anaysis below, since lowering investment also lowers national savings given a current account balance estimate.

[5] When we later work with Domestic Savings and Domestic Investment, we will no longer be working with net lending abroad but an approximate gross lending measure. Specifically, the concept of net lending nets out FDI inflows against China's, increase in foreign exchange reserve holdings, for example.

[6] Recent EIU estimates are US$ 875.1 billion.

V. Flow of Funds at the Sector Level

In this section we attempt to divide the flow of Domestic Savings and National Investment identified in the last section into 3 sectors: Government, Production and Individual. Government refers to all levels of government – central, provincial and township but as we will discuss below our definition attempts to exclude output of a non-public good nature.[7] Production refers to productive activities by enterprises, including output by SOEs, COEs and Corporate entities for use by the non-Government sector and individuals. The Individual sector includes both households in their role as workers and as entrepreneurs – here we use the NBS definitions of 'Self-Employed Units" and "Private Enterprises" found in Chapters 6 and 14 of the CSY(2005) and data on consumption and savings for individuals found in Chapter 10.

Separating what constitutes Government Savings and Investment hinges on our ability to determine what share of production by SOEs can be attributed to the production of public goods and what share to private goods – not an easy task. We examine two possible benchmarks to delineate Government Investment from SOE non-Government investment. The first relies on estimates found in Article IV (IMF) reports for various years which range from 2.1% (1996) to 3.5% (1999) of GDPand average 2.9 % as Government's Investment share of GDP for the entire period 1995-2005. We refer to this as the "Low Investment Scenario." For the "High Investment Scenario" we use an average share of GDP of 6.5% for Government Investment. This number assumes an intermediate role of the Government in investment (World Bank, 1995) and is consistent with the share of the national budget allocated to investment in 1992.[8]

Individual sector investment is based on the estimates found in the CSY (Chapter 6) but is pro-rated based on the larger EIU aggregate figure. Production sector investment is also based on CSY pro-rated data and has been adjusted by removing Government Investment as suggested in the previous paragraph, Individual Investment and FDI (since we are working with a National Investment measure).

Government savings is based on IFS and Article IV (IMF) data and is taken as the difference between Government Revenues and Government Consumption and Transfers. This measure is indifferent to either the High Investment Scenario or Low Investment Scenario assumption for the Government. Individual Savings (for both urban and rural residents) is based on the difference between disposable income and consumption CSY data. Between 1995 and 2005 it is estimated that individual savings as a share of individual disposable personal income rose from about 30% to 38 %. Finally, Production sector savings is estimated as the residual of Domestic savings minus the sum of Government savings and Individual savings.

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[7] In that discussion we will attempt to follow along the lines of World Bank (1995) where we make the distinction between goods produced *for use* by the public sector as opposed to goods *supplied* by the public sector (by SOEs).

[8] Basing shares of Government Investment on GDP is preferable to basing shares on Total Investment since the latter is confounded by the presence of FDI. Though it is an intermediate scenario in the World Bank paper, the fact that the estimate is for 1992 makes it a "High Investment Scenario."

Results

With respect to the Government sector flow of funds balance, we see in Tables 2-3 and Charts 6-10 that under either a High or Low scenario, the Government's primary surplus (savings) is insufficient to cover its investment needs throughout the decade and therefore the Government needs to borrow outside of its sector in order to meet its financing needs. As is obvious from the above discussion, the difference in borrowing needs between High and Low scenarios averages about 3.6% of GDP for the decade.

The High vs. Low assumption does make a qualitative difference for the production sector flow of funds. Under both scenarios, the Savings/Investment balance declines through the decade. In the Low scenario, however, the balance, actually becomes negative and remains so through 2005. That is to say, the production sector becomes a net user of savings of the one remaining sector (the private sector) after 2003. Under the High scenario (where Government investment rather than Production investment is high), the Production sector borrows from the Individual sector in only one year – 2003. In the section below, we will look at the Production sector at a more disaggregated level for further insight into these results. We note that our estimates for Production sector savings is considerably higher than that of Kujis (2005) suggesting an even higher rate of profitability of this sector over the past decade. This, in part, reflects our forced linkage of sectoral savings to macro- level savings.

The Private sector flow of funds is not affected by either our High or Low assumption and results are presented in Chart . The Individual sector has a uniformly increasing surplus of funds to lend out to the other two sectors rising from 5% in 1995 to 11% in 2005. We can say that this surplus of funds is either lent out to the Government or Productive sector. Though the Individual sector in fact has a lower savings ratio out of GDP than the Production sector (17% of GDP for Individual as compared to 29% for Production in 2005), the Production sector's Investment uses is significantly higher than the Individual's sector.[9] This creates either a much smaller Production surplus (High scenario) or an actual deficit (Low scenario).

VI. Flow of Funds as the Production Sector Level

We disaggregate the Production sector into SOEs, COEs and Corporate entities as discussed and defined above. We keep our High and Low scenarios and add two sub-scenarios. The sub-scenarios relate to how we distribute Production sector savings across the above 3 sub-sectors. Limited information is available on what is in effect absolute levels of net profitability across the three sectors – SOEs, COEs and Corporate entities.[10]

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[9] We note that in the G-7 economies in 2004, corporate savings represented about 11% of GDP and Household savings about 4%, so the finding of a higher Production sector savings rate in China is not unique. Historically, however, household savings have exceeded corporate savings in the industrialized economies.

[10] We are assuming that net profits are a sufficient measure of savings. Given the limited level of dividend distribution in China, we believe this assumption is reasonable.

We therefore need to make assumptions regarding their distribution. We use two possible measures of how profits might be distributed. One is based on the distribution of value-added across the three sub-sectors. The other is based on actual profitability of the three sub-sectors. Both measures can be found in CSY (2005)Chapter 14. These measures are for enterprises "above a designated size" and may therefore not adequately represent the full sample of enterprises.[11]

Under either the Value- Added or the Profitability scenarios, the COEs share of profits is relatively similar. SOEs, however, are relatively siginificant (55 % of all value-added) at the start of the 1995 period and less so toward the end (32% of all value added). Corporate entities have a mirror image pattern with 20% of value added at the beginning of the period, but moving up to 65% toward the end. Basing the distribution on profitability, leads to a more level share of SOE profits hovering around 40%, but a rising share for Corporate entities rising from 35% to 55%.[12]

Results

Our results suggests that all three sub-sectors had positive savings (or profitability) over the entire decade under consideration. This is surprising in light of so much that has been written particularly with respect to the SOE sector. (Carsten, 2002). This result is also consistent with the findings of Kujis (2005). The High/Low and Value-Added/Profitability scenarios combined with 3 subsectors would lead to 12 possible combinations of outcomes. Our results suggest that, qualitatively, results are fairly similar across all scenarios, so we only present two extreme cases for our sub-sector results. Tables 4-5 and Charts 11-14 show SOE's flow of funds under either High Government Investment with Value-Added profitability distribution and Low Government Investment with Profitability distribution. Both scenarios suggest a relatively low balance of funds to be lent to other sectors and both scenarios suggest an improvement in that balance (a turning point) beginning in 2001. No doubt this reflects Government efforts at moving SOEs to operate more in line with market forces – and improvement in management and financial practices.

On the other hand, COEs moved into a negative flow of funds balance beginning in 1998 and that situation appears to have deteriorated each year thereafter. The movement downward appears to be a result of continuing investment in the face of ever decreasing savings (profitability). The Corporate sector is the only sector that consistently had a positive flow of funds balance throughout the decade reflecting in part an ever-rising level of profitability. We need to remember that this sector receives the lion's share of FDI but that is not reflected as a use under our National Investment measure. Meanwhile, savings is Domestic savings and the difference between the two helps create a positive balance.

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[11] Beginning in 1998 coverage was changed from type of ownership to the size of the enterprise. All enterprises with sales over 5 million Yuan (about US$ 625,000) were covered in the CSY data for Chapter 14. Earlier years selected entities based on whether or not they had an "independent accounting system."
[12] Corporate entities replace the COEs declining share.

To summarize, it would appear that of the 3 sub-sectors, the Corporate sector appears most likely to have a positive flow of funds balance and the Collective sector most likely to have a negative balance. The State-owed sector has experience somewhat of a turnaround in 2001 moving toward a positive flow of funds balance. All three sub-sectors, however, have positive savings throughout the entire period – suggesting that in the aggregate at least all were profitable over the past decade.

VII. Savings/Investment Financial Intermediation

Chart 15 presents the flow of various intermediating instruments, additions to cash holdings, net financial institutional deposits and insurance premiums paid over the past decade.[13] As is well understood, financial instruments and increased cash holdings represent a relatively small share of how Domestic savings are intermediated (at most 21% in 1999 and only 11% in 2005). Increased bank deposits make up at most 28 % of the flow of Domestic savings. Surprisingly, an average of 56% appears to be informally intermediated. That is, over half of Domestic savings does not appear to pass through a financial instrument, a government issued instrument an insurance company or a bank. Even if we were to assume that *all* external capital outflows were not intermediated, the estimate of non-intermediation would still be close to 50%.[14]

We can only assume that much of the savings of productive entities and households is either used internally (for investment in plant, equipment and inventory or for residential housing) or is loaned or invested informally intra and inter company and households. A great deal has been written about inter-company financing – the so called "triangle of debt." and this data provides some measure of its possible magnitude. Based on our estimates, while the Production sector's savings was 82% higher over the decade than the Individual sector, the Production sector's financial institution deposits were 60% lower. The implication is that much of the informal intermediation is occurring in the Production sector.

Though it is beyond the scope of this paper, one might speculate that such informal intermediation results from low ceiling rates on bank deposits and bonds and the relative immaturity of mortgage and equity markets. By comparison, we note that even if we exclude financial institution deposits, the various vehicles for financial intermediation offered by corporations, government at all levels and foreign entities constitute 90% of savings in the United States (Board of Governors of the Federal Reserve System, 2006). This suggests a much higher share of financial intermediation per unit of savings in the United States than in China.[15]

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[13] From the perspective of household and productive entities, we treat the activities of insurance companies as similar to that of banking institutions. They accept premiums and channel those premiums into productive investments after deducting costs.

[14] This result is even more dramatic since one would assume that bank deposits represent a multiplier effect above and beyond actual savings. It is in this sense that our estimate for informal intermediation is conservative.

[15] No doubt this in part reflects the secular decline in United States savings relative to the long history of financial innovation and intermediation in the United States.

VIII. **Summary, Policy Implications and Direction for Further Research**

China's massive savings and investment has helped fuel the tremendous growth that we have seen in that economy over the past several decades. Surprisingly, very little research exists attempting to analyze the decomposition of those flows. This is an early attempt. A better understanding of these flows can only lead to their improved utilization. At a macro level we have identified the role of FDI in freeing up some of China's vast savings to flow abroad (FDI inflows averaged about 56% of gross external outflows over the past decade). Over time those outflows will need to be diversified across a broader spectrum of foreign assets in order to provide both higher returns along with reduced risk. Our assumptions regarding the size of the Government sector in SOE investment highlights the need for greater transparency in this area – something that will inevitably occur over time. At the sub-sectoral level, the finding that SOEs have in the aggregate been profitable over the past decade, suggests a dramatic change in their financial structure – a reduction in the Debt/Equity ratio via the accumulation of retained earnings.   In turn, the focus shifts from the creditor-company relationship to the shareholder-company relationship and an entailing corporate governance set of issues. Our results suggest that perhaps the spotlight may need to be turned to the Collective sector which appears to have suffered a continuous decline in profitability over the decade yet a steady level of investment. Further research will be needed to verify these results. Finally, the surprisingly small share of Domestic savings that is intermediated via formal financial instruments and structures, raises a host of research and policy questions. Specifically, how are these informal financing decisions being made and will reform of the financial sector ultimately move these funds into the formal financial system and will that in turn enhance the economic efficiency of their use?

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TABLES AND CHARTS

TABLE 1: FLOW OF FUNDS AT MACROECONOMIC LEVEL
(US$ MILLIONS)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
DOMESTIC SAVINGS OR SOURCES OF FUNDS											
Savings (Imputed) Private+Prod+GOV	298681	343853	398943	412737	423403	456488	520770	605395	740792	921498	1044981
DOMESTIC USES OF FUNDS											
Total Investment	297062	336610	361980	381265	402288	435969	503369	569973	694918	852839	916481
Current Account(surp-)	263213	298544	320306	340148	365310	398486	466012	523183	647689	799707	869481

Source: China Statistical Yearbook, Economist Intelligence Unit and International Financial Statistics.

TABLE 2: FLOW OF FUNDS AT SECTORAL LEVEL (HIGH SCENARIO)
(US$ MILLIONS)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
GOVERNMENT SECTOR											
SAVINGS GOVERNMENT	3640	5993	6669	4078	3250	-1011	7086	7727	15414	28791	29040
INVESTMENT GOVERNMENT	47317	55646	61922	66266	70413	77900	86113	94491	106654	125543	144629
BALANCE	-43677	-49653	-55254	-62188	-67163	-78911	-79027	-86764	-91240	-96752	-115589
PRODUCTION SECTOR											
SAVINGS PRODUCTION	220025	241288	276341	277841	270811	299562	323908	357666	439842	556221	646574
INVESTMENT PRODUCTIVE $ dom	177906	195725	208611	223625	238360	258214	306456	343272	444487	554601	596367
BALANCE	42119	45563	67729	54216	32451	41348	17452	14394	-4645	1621	50206
INDIVIDUAL SECTOR											
SAVINGS PRIVATE	75016	96573	115934	130818	149342	157937	189776	240002	285537	336486	369368
INVESTMENT INDIVIDUAL	37991	47174	49772	50257	56536	62372	73443	85420	96548	119563	128485
BALANCE	37025	49399	66162	80561	92805	95565	116333	154582	188989	216923	240882

Source: China Statistical Yearbook, Economist Intelligence Unit and International Financial Statistics.

TABLE 3: FLOW OF FUNDS AT SECTORAL LEVEL (LOW SCENARIO)
(US$ MILLIONS)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
GOVERNMENT SECTOR (LOW SCENARIO)											
SAVINGS GOVERNMENT	3640	5993	6669	4078	3250	-1011	7086	7727	15414	28791	29040
INVESTMENT GOVERNMENT	16015	17978	20958	26506	37915	38248	43452	50734	55643	56818	62113
BALANCE	-12375	-11985	-14290	-22428	-34665	-39258	-36366	-43007	-40229	-28027	-33073
PRODUCTION SECTOR (LOW SCENARIO)											
SAVINGS PRODUCTION	220025	241288	276341	277841	270811	299562	323908	357666	439842	556221	646574
INVESTMENT PRODUCTIVE $ dom	209208	233393	249576	263385	270859	297867	349117	387029	495498	623325	678883
BALANCE	10817	7895	26765	14456	-47	1695	-25209	-29363	-55656	-67104	-32309
INDIVIDUAL SECTOR (LOW SECNARIO)											
SAVINGS PRIVATE	75016	96573	115934	130818	149342	157937	189776	240002	285537	336486	369368
INVESTMENT INDIVIDUAL	37991	47174	49772	50257	56536	62372	73443	85420	96548	119563	128485
BALANCE	37025	49399	66162	80561	92805	95565	116333	154582	188989	216923	240882

Source: China Statistical Yearbook, Economist Intelligence Unit and International Financial Statistics.

TABLE 4: FLOW OF FUNDS AT THE SUB-SECTOR LEVEL
(HIGH SCENARIO,VALUE-ADDED RATIO)
(US$ MILLIONS)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
SOE SECTOR											
SAVINGS	120002	119100	130815	161923	150909	133021	133252	139230	160428	194368	208843
INVESTMENT	101731	109489	117786	129557	133199	131878	144577	143714	158085	170387	174701
BALANCE	18272	9611	13028	32366	17709	1143	-11324	-4484	2343	23981	34142
COLLECTIVE SECTOR											
SAVINGS	55850	70336	74788	48272	39440	29656	23786	22302	21731	24093	20681
INVESTMENT	45736	49420	51532	52062	54870	59375	67600	74034	92860	112373	122321
BALANCE	10114	20916	23256	-3790	-15429	-29719	-43813	-51732	-71129	-88280	-101640
CORPORATE SECTOR											
SAVINGS	44172	51852	70738	67646	80463	136885	166869	196134	257682	337760	417049
INVESTMENT	9699	12130	14413	17514	25472	41678	62508	89774	141272	197788	217817
FFE INVESTMNET	20739	24686	24880	24492	24819	25284	31772	35751	52270	74053	81529
BALANCE	13733	15036	31445	25640	30171	69923	72589	70610	64141	65920	117703

Source: China Statistical Yearbook, Economist Intelligence Unit and International Financial Statistics.

TABLE 5: FLOW OF FUNDS AT THE SUB-SECTOR LEVEL
(LOW SCENARIO,PROFIT RATIO)
(US$ MILLIONS)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
SOE SECTOR											
SAVINGS	91255	68706	71125	102398	104550	133796	140381	149418	187938	241903	269522
INVESTMENT	133033	147157	158750	169317	165697	171531	187238	187471	209096	239112	257217
BALANCE	-41778	-78451	-87625	-66918	-61148	-37735	-46857	-38053	-21158	2791	12305
COLLECTIVE SECTOR											
SAVINGS	51507	72484	76213	76983	47620	25068	22745	23554	22034	22269	19398
INVESTMENT	45736	49420	51532	52062	54870	59375	67600	74034	92860	112373	122321
BALANCE	5771	23064	24680	24921	-7250	-34307	-44854	-50479	-70827	-90104	-102923
CORPORATE SECTOR											
SAVINGS	77263	100097	129003	98459	118642	140699	160782	184694	229871	292049	357653
INVESTMENT	9699	12130	14413	17514	25472	41678	62508	89774	141272	197788	217817
FFE INVESTMENT	20739	24686	24880	24492	24819	25284	31772	35751	52270	74053	81529
BALANCE	46824	63282	89710	56454	68350	73737	66502	59170	36329	20208	58308

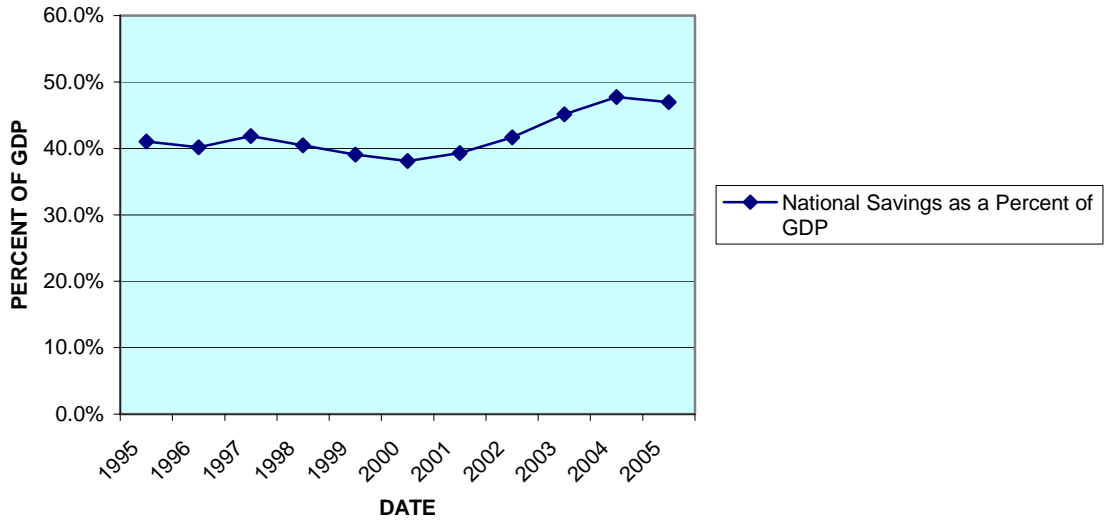# CHART 1: National Sources of Funds or Savings as a Percent of GDP

Legend: National Savings as a Percent of GDP

X-axis: DATE (1995–2005)
Y-axis: PERCENT OF GDP (0.0%–60.0%)

CHART 2: National Uses of Funds or Savings

Legend: Total Investment; Current Account(surp-)

X-axis: Date (1995–2005)
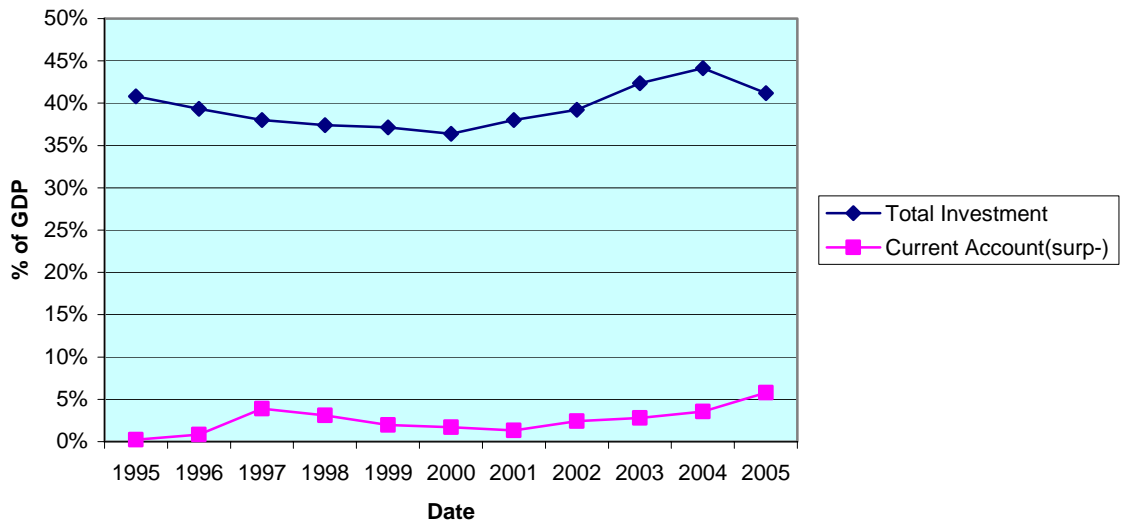Y-axis: % of GDP (0%–50%)

CHART 3: FDI as a Share of Total Investment
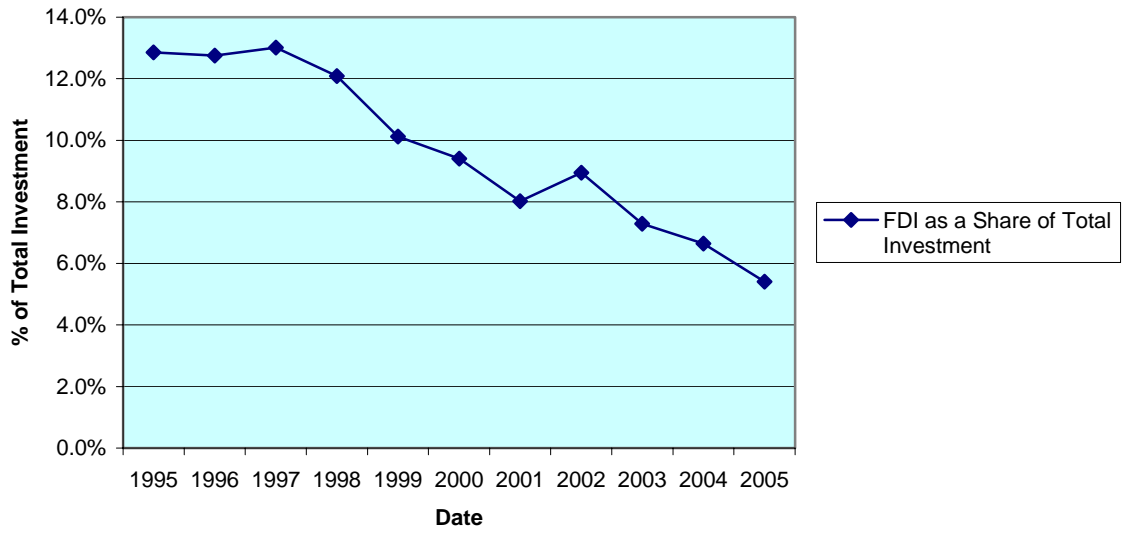
CHART 4: National vs, Domestic Savings

Legend:
- Domestic Savings as a Percent of GDP
- National Savings as a Percent of GDP
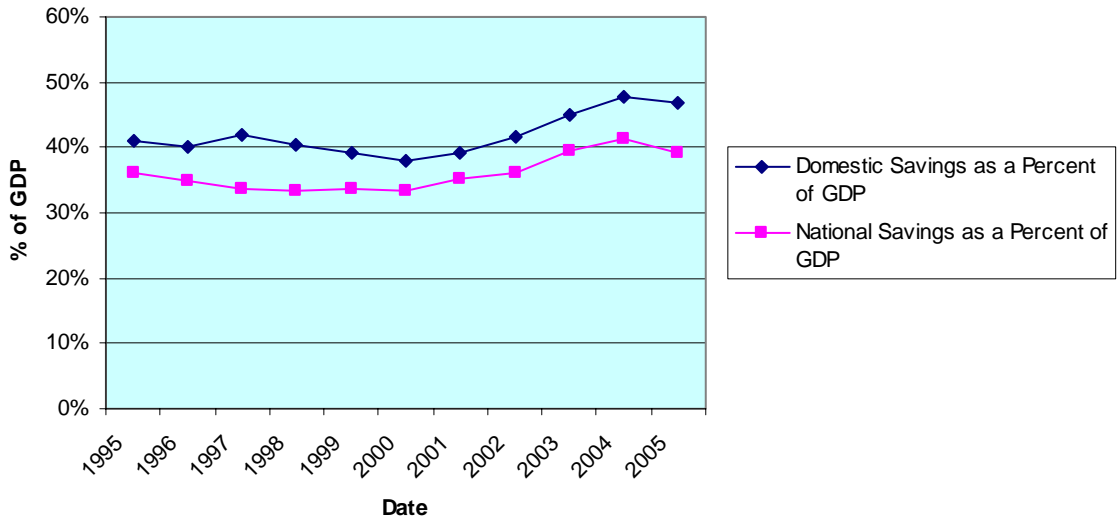
CHART 5: National vs. Domestic Investment

Legend:
- Domestic Investment as a Percent of GDP
- National Investment as a Percent of GDP
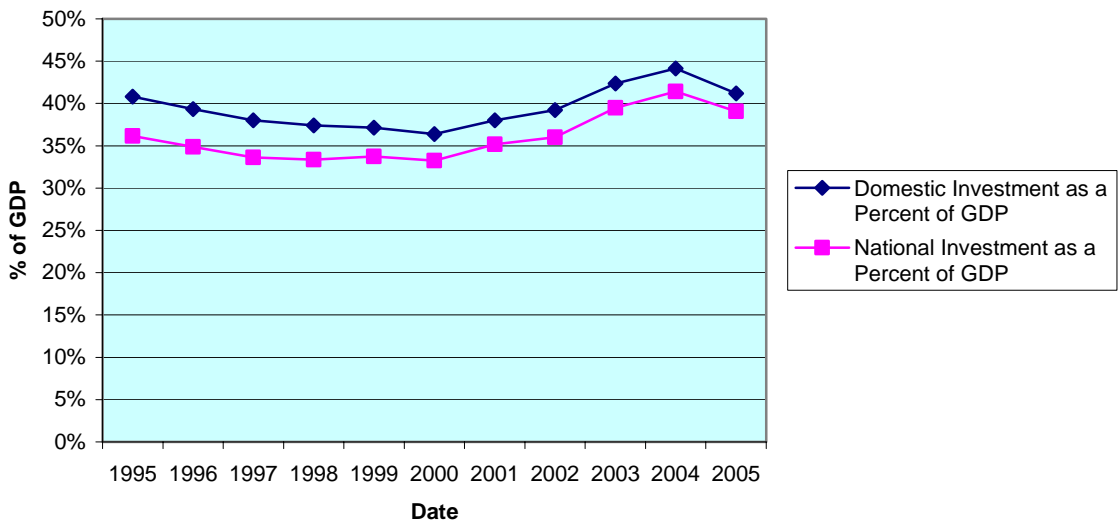
CHART 6: Savings/Investment Government Sector
(High Investment Scenario)
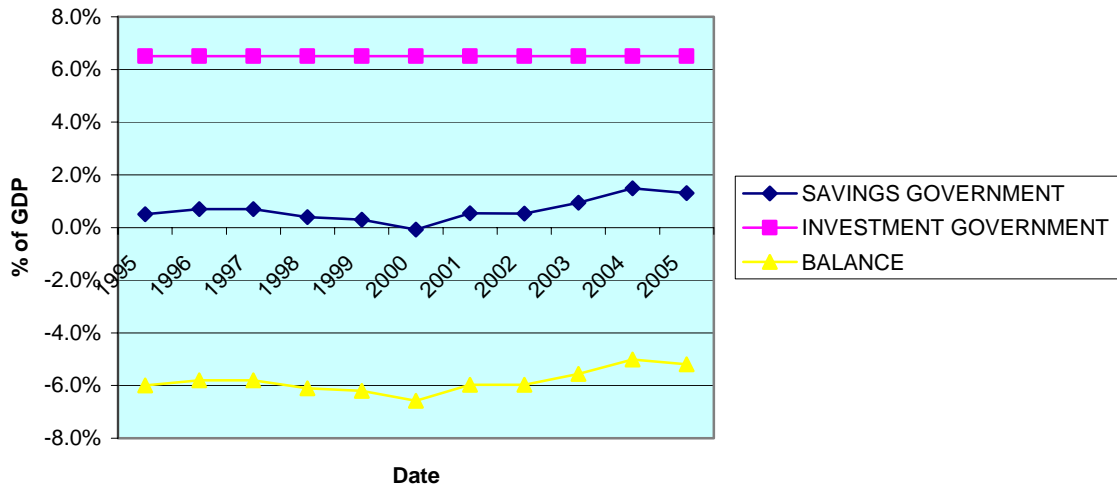
CHART 7: Government Savings/Investment (Low Investment Scenario)
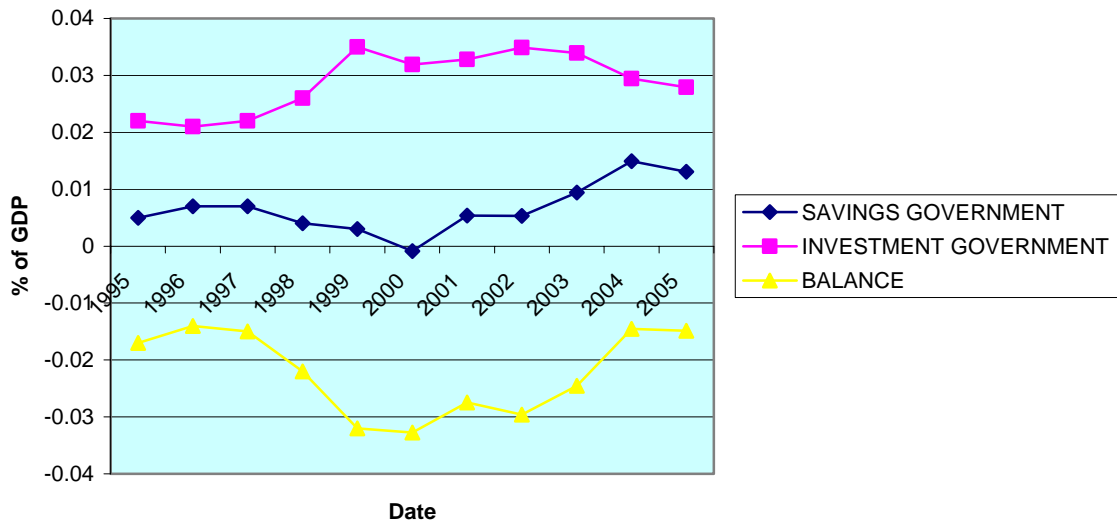
**CHART 8: Savings/Investment Production Sector
(High Investment Scenario)**
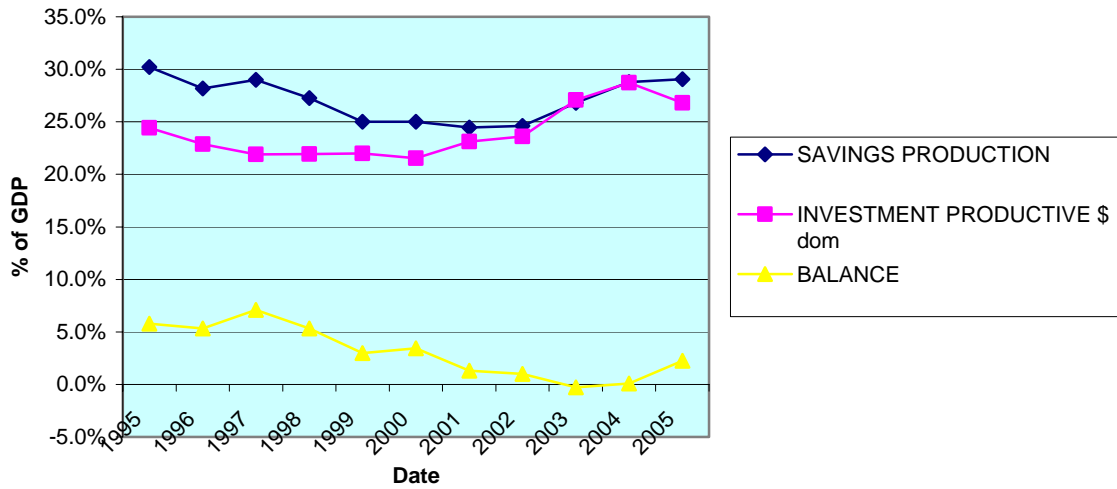
**CHART 9: Production Sector Savings/Investment
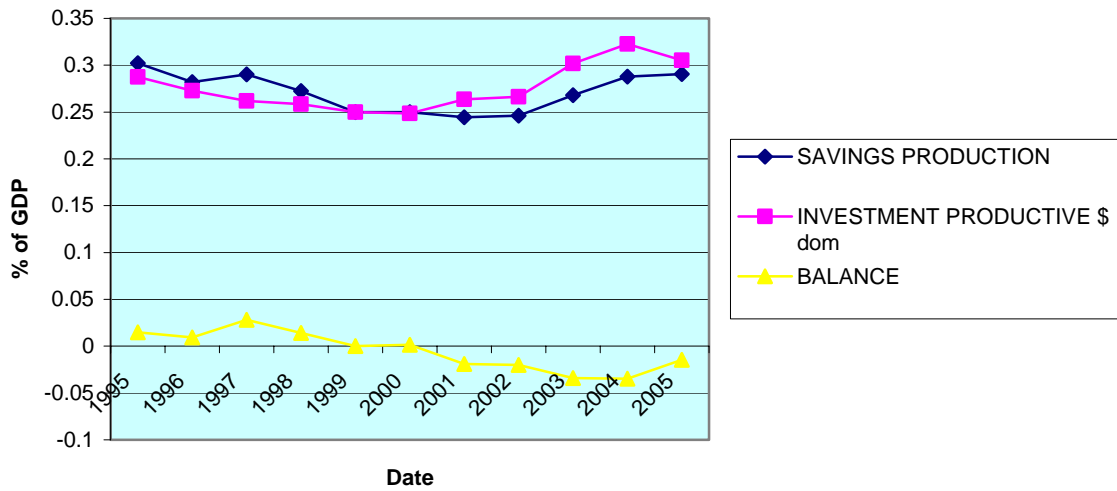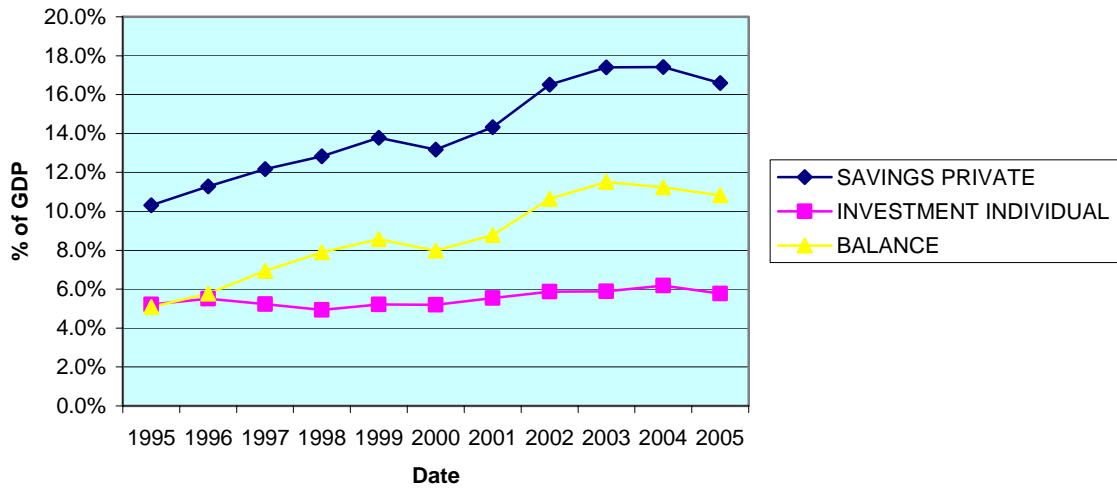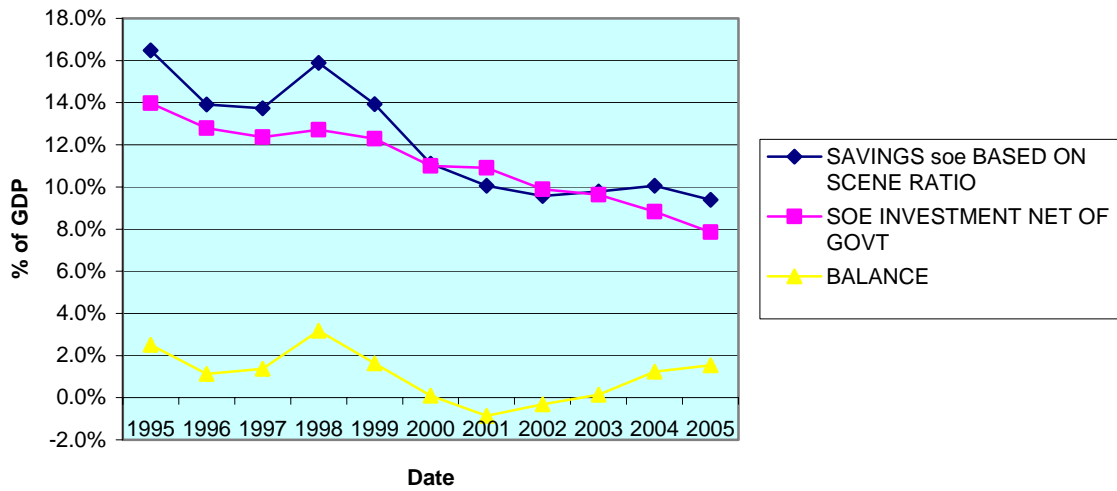(Low Investment Scenario)**

CHART 10: Savings/Investment Private Sector

- SAVINGS PRIVATE
- INVESTMENT INDIVIDUAL
- BALANCE

**CHART 11: SOE Savings/Investment
(High Investment, Value-Added) Scenario**

- SAVINGS soe BASED ON SCENE RATIO
- SOE INVESTMENT NET OF GOVT
- BALANCE

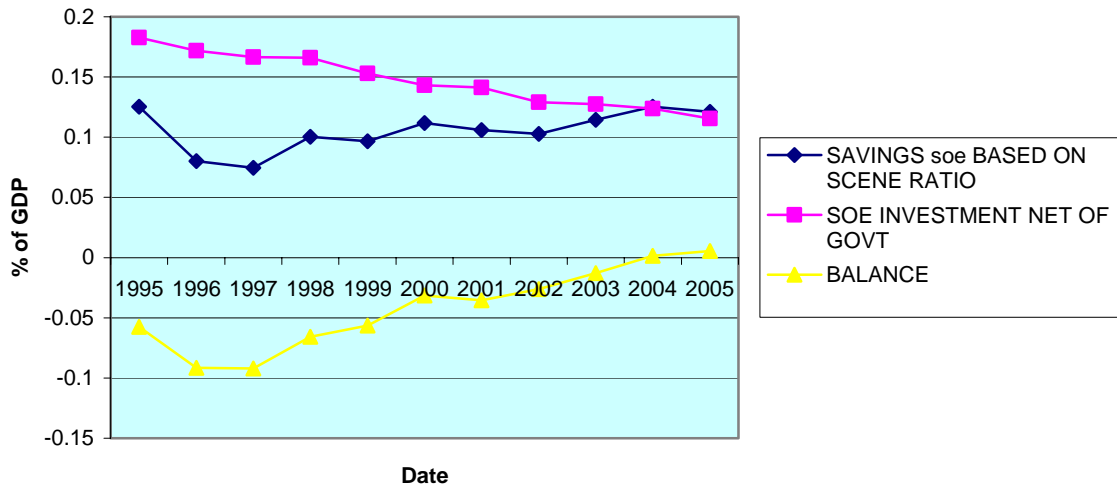**CHART 12: SOE Savings/Investment (Low Investment, Profit Ratio Scenario)**

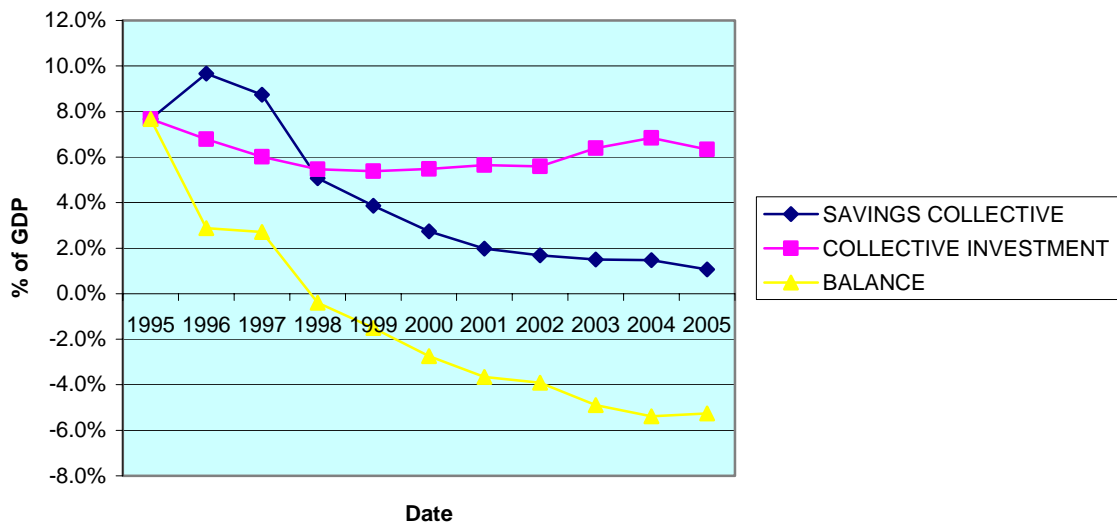**CHART 13: Collective Savings/Investment Value-Added Scenario**

CHART 14: Corporate Savings/Investment Value-Added Scenario

Legend:
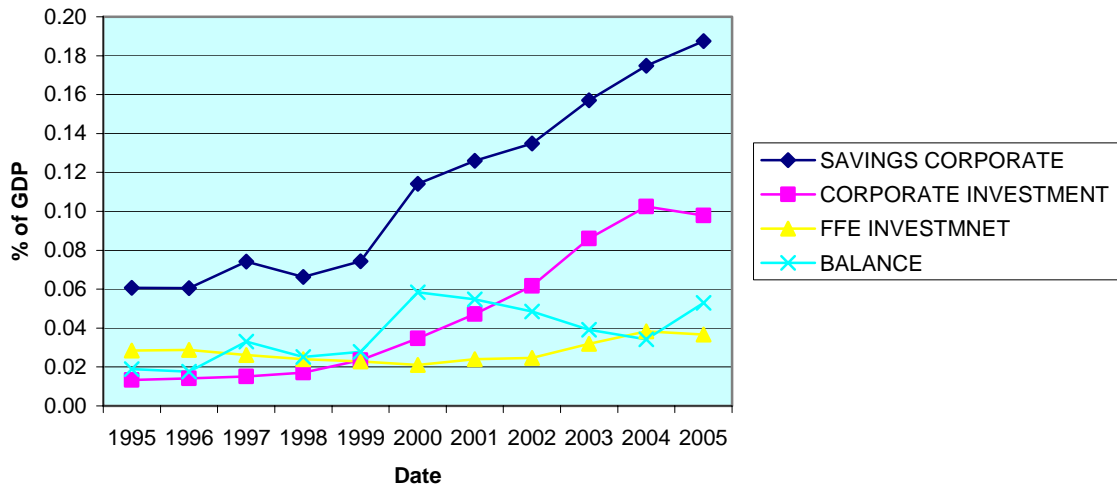- SAVINGS CORPORATE
- CORPORATE INVESTMENT
- FFE INVESTMNET
- BALANCE

CHART 15: Share of Savings Intermediated: Formal vs. Informal

Legend:
- $GBOND ISSUANCE
- $FBOND ISSUANCE
- $CBONDISSUANCE
- Equity Issuance
- INCREASE IN CURRENCY IN CIRCULATI
- INSURANCE PREMIUM PAID
- Act. Increase in Dep@bankding institutions
- Informal Intermediation