

**China's Corporate Savings is Not a Key Driver for Its Current Account Surplus:  
A Cross-country Firm-level Comparative Perspective**

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**Abstract**

China's high corporate savings rate is commonly claimed to be a key driver for the country's large current account surplus. The paper compares the savings of 1557 Chinese listed firms with those of 29330 listed firms from 51 other countries over 2002 to 2007. Chinese firms do not have a higher gross savings (as a share of total assets) than global average. Moreover, Chinese firms' rate of gross savings/assets does not rise from 2002 to 2007 even though the current account skyrocketed. In addition, there is no significant difference in the savings behavior and dividend patterns between Chinese majority state-owned and private firms, contrary to the received wisdom. To understand why Chinese national savings is higher than other countries, one has to focus on areas other than corporate savings.

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## 1. Introduction

China's national savings rate, at 50% of GDP in 2007, is among the world's highest for any economy of a significant size. This has been said to be an underlying cause of the U.S. housing price bubble during 2002-2007 (Bernanke, 2005; and Greenspan, 2009), and by extension, of the current global financial crisis. This illustrates the attention that has been paid to the global implication of China's savings issue. It is therefore useful to understand China's high savings rate.

Several authors have noted that a significant part of China's high national savings rate come from its large corporate savings, which by 2007, accounted for roughly half of the national savings. According to Hofman and Kuijs (2006), what makes China stand out is high savings by enterprises; China has a tradition of low dividend payments, especially for state owned enterprises (SOEs); and SOEs are very much part of this profit story.

Martin Wolf, an influential Financial Times commentator, asserts (Financial Times, October 3, 2006) "But we must then also ask why China is running such large surpluses. ... the frugality of Chinese households is not the chief explanation for China's surplus savings ..., the principal explanation is China's huge corporate savings." More recently, Governor Zhou Xiaochuan of People's Bank of China in his speech, "On Savings Ratio" (Feb 10, 2009), said that "The rate of corporate savings to GDP in China is high compared with other countries in the world. This is closely related to the unsolved distortion of cost/profit of enterprises during China's economic transition... Although private enterprises in China are already market-driven and free of cost distortion, the reforms of the public sector are incomplete ..."

It is hypothesized that this rise in the corporate savings rate is a result of inefficiency and corporate mis-governance: many state-owned firms have benefited from a windfall increase in their profits due to a rise in the global commodity/mineral prices in the last few years. At the same time, managers of state-owned firms are reluctant to pay dividends to the state even if they do not have projects with returns higher than the true cost of capital. This results in undistributed profits in these firms that cannot be justified on an efficiency ground. In other words, Chinese corporations as a whole would not have saved nearly as much as they do now, had these state-owned firms been privatized. While the logic of the hypothesis is plausible, there is no firm-level

evidence or even aggregate corporate savings broken down by firm ownership and sectors to support the assertion. [Based on this hypothesis, the World Bank (and now the Asian Development Bank) has advised the Chinese government to require a higher dividend payout by state-owned firms.]

At the same time, a separate literature in finance has noted a steady rise in corporate savings around the world. For example, J.P. Morgan (2005) and the IMF (2006) have noted that corporations in G-7 economies have all exhibited a rise in undistributed profits. Bates, Kahle and Stulz (2007) note that a typical firm in the United State had so much cash holdings by 2005 that it could pay off its entire corporate debt and still have some cash left over. The corporate finance literature does not presume that the high corporate savings per se reflect inefficiency or corporate mis-governance. Indeed, Bates et al hypothesize that it could be a rational (optimal) response to rising working capital needs faced by corporations. Moreover, Fama and French (2001) document a pattern of disappearing dividends in the U.S. from 1978 to 1999. The fraction of firms paying cash dividends falls from 66.5% in 1978 to 20.8% in 1999. Part of the reason is a rising population of small firms with strong growth opportunities. Hoberg and Prabhala (2007) argue that a rising risk and therefore an increased need for risk control are the main explanation.

The corporate finance literature and the Chinese savings literature haven't interacted with each other so far, but it is natural and indeed necessary to ask the question of whether Chinese corporate savings behavior is out of ordinary when compared with corporations in other countries and in the same sectors. The objective of this paper is to do exactly that.

To answer this question, one needs to work with firm level data in China and other countries. In this paper, we examine whether Chinese firms' gross and net savings over asset is an outlier relative to firms in other countries, controlling for other factors that may affect corporate savings rate. We also examine if majority state-owned firms in China behave systematically differently from majority private-owned firms. Under the hypothesis that Chinese high corporate savings reflect mis-governance and inefficiency, we should see that Chinese firms save more than non-Chinese firms, conditional on sectors, profitability and other factors that normally would affect corporate savings. In addition, we should observe that these extra corporate savings come mainly from majority state-owned firms.

Contrary to the conventional wisdom, we find that Chinese firms do not have higher gross savings (as a share of total assets) than other countries over 2002 to 2007. Moreover, Chinese firms' gross savings declined from 2002 to 2007, albeit insignificantly, even though China's current account surplus rose significantly over the same period. Comparing state-owned vs non-stated Chinese firms, we do not find significant differences between these two groups. These findings have important implications for the policy discussions on the global current account imbalances. As an analogy, even though the skin is the biggest part of an elephant's body, to understand why an elephant doesn't run as fast as a leopard, we would not want to focus on the elephant's skin. Similarly, even though the Chinese corporate savings is the biggest part of its national savings, it is not the driver for why the Chinese national savings rate is so much higher than other countries. The answer to that question lies with the household and/or government savings.

The rest of the paper is organized in the following way. In Section 2, we analyze the savings patterns with macro-level data based on flow of funds or national income accounts. In Section 3, we turn to firm-level data when we have a much better way to control for various determinants of corporate savings, and can separate gross versus net corporate savings. In Section 4, we conclude.

## **2. A comparison at the Macro-level**

We use the flow-of-funds data for China from the CEIC dataset from 1992 to 2005 (the latest available data), the same dataset used in Hofman and Kuijs (2006). We first examine China's gross corporate savings (for non-financial firms), gross household savings and gross government savings (see Figure 1). We find both corporate savings and household savings increased from 2001 to 2005. Corporate savings increased from 16.9% to 19.6%, while household savings increased from 16.6% to 21.5%. Meanwhile, domestic investment has increased as well during the period. As the total savings increased at a faster pace than investment, the current account surplus rose.

We compare China's gross corporate savings with those in other countries over the same period in Figures 2-4. In Figure 2, we present charts similar to Figure 1 but for Australia, India

and the UK. The data for India is from CEIC, while the data for OECD countries are from Source OECD National Account datasets. We find that large or rapid increasing corporate savings may not necessarily lead to a large current account surplus. India has a rapid increase in corporate savings from 2002 to 2007, rising by 5% (from 4% to 9%). But India's corporate saving is much smaller than its household savings which partially finances its large investment and generates a small current account deficit of 1% GDP. Australia and the UK both have gross corporate savings equal to 18% of the GDP, close to China's 20%. But Australia and the UK have smaller household savings, 11% for Australia and 4% for UK, compared with China's 22%. Hence both countries have a current account deficit instead of a surplus.

In Figure 3, we compare China with a broader range of countries by type of savings. Overall, China's gross corporate savings is in line with the global trend. For the level, China's gross corporate savings lies below Korea and Japan, but higher than Australia, UK, Germany and the U.S. For the time trend, China's corporate savings over GDP increased by 2.7% from 2001 to 2005, while the number was around 4% for Japan, 3% for Korea, and 3.6% for UK and 1.2% for US. However, China's net corporate savings is much smaller than other countries due to its high corporate investment rate. Figure 4 analyzes government and household savings. There, China has a government savings much higher than most countries (except Korea), and China has the largest net household savings as a percentage of GDP.

Due to production lags, the flow of funds data for China is only available up to year 2005, while China's current account increased dramatically from 2005 on. It still remains a puzzle what components explain the increase of current account surplus from 2006 on. Also, there are debates on whether China's corporate savings (or retained earnings) are due to the low dividend policies for state-owned enterprises. To address these questions, we would need to examine firm-level data. And this is what we would do next.

### **3. A Closer Look with Firm-level Data**

#### **Data and summary statistics**

We employ data on publicly listed firms in China (1557) and compare them with 29330 firms in 51 other countries from year 2002 to 2007. Our dataset source is the Worldscope dataset. The number of stocks in our sample is listed for each country in Table 1. There we also include

national savings/GDP, investment/GDP, current account/GDP, and government fiscal balance/GDP, averaged over the years from 2005 to 2007.

A major advantage of examining firm-level data is that we can better control for determinants of corporate savings. In addition, we can work with more recent data (up to 2007). At the same time, we also have to be upfront about disadvantages of working with publicly listed firms. The most important drawback is that we exclude savings by non-listed firms. We note, however, the listed firms collectively account 13 percent of gross corporate savings, and 8 percent of the country's investment. Moreover, if the principal reason for a high corporate savings in China is an unusually high savings rate of its majority state-owned firms, we have an opportunity to observe this even just with publicly listed firms since most big state-owned firms are now listed.

Table 2 lists the summary statistics for variables on corporate savings. We define firm gross savings as Net Income (WS 01551) plus Depreciation (WS01151) minus dividends. Dividends are the sum of cash preferred dividends (WS 05401) and cash common dividends (WS 05376). Profit is defined as Net Income (WS 01551) plus Depreciation (WS01151). And the net savings is gross savings minus capital expenditure (WS 04601). For Chinese listed companies, cash dividends are the product of dividends per share (WS05101) and the number of common shares (WS05301, which includes both tradable and non-tradable shares). To conduct comparisons across firm ownership, we classify a firm as majority state-owned if the state is the largest shareholder, (when non-tradable shares are also considered).

According to Table 2 which focuses on non-financial firms, Chinese firms are not different from firms in other Asian economies for gross savings rate. Asian firms generally have a higher gross savings (as a percentage of assets) than firms in other regions when we compare the means. But there is little difference when we compare the medians. Hence the means of Asia and other regions differ due to outlying negative gross savings of some firms in other regions. Moreover, there is no significant difference between majority state-owned Chinese firms and majority privately-owned Chinese firms in gross savings.

On dividend payments, Chinese firms issue dividends no less than firms in other countries. The median/mean of dividends over assets is 0.005/0.016 for Chinese firms, compared to 0/0.011 for the rest firms. The percentage of Chinese firms issuing dividends was 52% in year 2007, while the percentage was 49% for the rest of the world. A recent Economist article (Oct

3<sup>rd</sup>, 2009) put the lower dividend payoff propensity at a key reason for China’s large corporate savings, as “almost 45% of listed companies [In China] did not pay a dividend last year”. However, a comparison between China and the rest of the world suggests that dividend policy is unlikely to be the key reason for China’s relatively larger corporate savings . We then compare the dividends of state-owned Chinese companies with those of non-state-owned Chinese companies. State-owned companies issue slightly larger dividends than non-state-owned companies. In 2007, 56% of state-owned companies issued cash dividends, while 45% non-state-owned companies did the same. Hence state-owned firms actually have a larger propensity of issuing dividends, which contradicts the story of SOE mis-governance—core of the conventional view on China’s corporate savings.

So far we have glanced at the summary statistics, but corporate savings and dividends may differ naturally across firms due to factors such as firm size and sector features. For example, firms in resource sectors may have extra savings due to commodity price booms in the past few years. Also, firms in sectors with an intrinsically higher demand for external finance may also save more. To control for these possibilities, we now use econometric analyses to examine whether Chinese listed firms have more savings.

**Econometric Specification** We start with the model for the key dependent variable, gross savings:

$$Savings / Assets_{ijkt} = \beta_1 Size_{ijkt} + China_k + Sector_j + Year_t + \varepsilon_{ijkt}$$

for firm  $i$  in sector  $j$  of country  $k$  at time  $t$ . Company size is the total value of book assets measured in current US dollars. Sector dummies are at the 3-digit level based on US Standard Industrial Classification (SIC 1987). As we focus on non-financial firms, there are 373 three-digit sectors in the sample. Year dummies control for the global trend. Based on this model, we will also check whether gross savings between Chinese state-owned and non-state-owned companies are systematically different. Then we will examine factors leading to gross savings:

profits and dividends. Then we move onto capital expenditure and net corporate savings. Essentially, we will examine each component of the following equation:

$$\begin{aligned}\text{Gross Savings} &= \text{Profits} - \text{Dividends} \\ &= \text{Net Savings} + \text{Investments}\end{aligned}$$

### ***Corporate gross savings***

In Table 3, we report the results from a regression analysis where we control for determinants of corporate savings. We cluster the standard errors at the country level. In Column 1, we compare China with the rest of the world. Chinese firms have a higher coefficient of gross savings (as a share of GDP) than other countries, but not statistically significant.

We then compare China with each country by adding 51 country dummies, except for the U.S. which serves as our baseline case. For 21 countries with the largest numbers of observations, we plot their coefficients in Figure 5. We find that Chinese corporate savings are close to the median of the spectrum. The Figure shows a coefficient of 0.44 for China, 0.74 for India, 0.63 for Australia, and 0.46 for the UK. That is, listed companies in India, Australia and the UK all have a higher corporate “excess” gross savings than Chinese firms, conditional on the determinants of corporate savings. Meanwhile, these three countries have experienced a current deficit over the sample period. From 2004 to 2007, the average current deficit over GDP was -1%, -6% and -3% for India, Australia and the UK respectively. This suggests that higher corporate savings may not necessarily lead to a current account surplus.

So far we look at the average effect over the sample period. In Column 2, we examine the trend in Chinese firms’ gross savings by interacting the time trend with China dummy. This interaction is negative (but insignificant), suggesting that the gross savings of Chinese firms do not rise from 2002 to 2007. This time pattern of relatively flat corporate savings contrasts with the pattern of China’s current account surplus, which rose gradually from 2002 to 2004 but then dramatically after 2005. Hence China’s corporate savings is unlikely to explain its rising current account surplus.



We now compare state-owned firms vs non-state-owned firms in Column 3. There is no significant difference between the two groups, which is consistent with the summary statistics. In Column 4, we look at the time pattern by adding the interaction of time trend and state-owned dummy. This interaction has a negative coefficient and is significantly different from zero at the 10% level. Meanwhile, the state-owned dummy has a weakly positive coefficient. Taken together, this suggests that state-owned companies have slightly higher gross savings at the beginning of the sample period, but the gap declines gradually to be negligible.

As corporate savings is the difference between profits and dividend payout, we now look at the two components separately.

### ***Profits and dividends***

The patterns of coefficients for profits in Table 4 are similar to those for gross savings. China's firms have somewhat higher profit but not significantly higher (Column 1 of Table 4). We then estimate the coefficients for each country and plot them in the top panel of Figure 6. There India, Australia and the U.K. still have higher profit over asset ratios than China. And compared with the global trend, China's corporate profits seem to decline somewhat from 2002 to 2007 (Column 2). We do not find state-owned Chinese company to have a higher profit ratio compared with non-state-owned companies. To see the time trend, we further add the interaction of the state-owned dummy with the time trend. This interaction term turns out to be weakly negative. The similarity in the patterns for profits and gross savings suggest that profits are the dominant factor for gross savings.

Now we look at the dividend policy of Chinese firms as it is related to corporate governance (Table 5). The coefficient for China's dummy is positive but insignificant, suggesting that Chinese firms issue dividends at least as large as the global average. We then examine the average dividend/asset ratio for each country by adding country dummies. The results are plotted in the bottom panel of Figure 6. There, Chinese firms' dividend payoffs lie in the middle: larger than France, Germany, Korea, Japan and the U.S., but smaller than India, Australia and the U.K.

In Column 2, we add the interaction term of time trend and China dummy. This interaction term is negative, suggesting that the dividend/asset ratio of Chinese firms have

declined over the sample period.<sup>3</sup> To examine the reason, we estimate the percentage of Chinese listed companies that issued dividends over the sample period. The percentage is 55%, 49%, 55%, 47%, 50% and 52% respectively from 2002 to 2007. So there is no clear trend of the percentage of firms that issue dividends. Then, we estimate the average of cash dividend per share (DPS) over the sample years for Chinese firms. The average DPS has indeed increased over the years, with the value being 4.74/ 4.96/ 6.32/ 5.70/ 6.34/ 7.47 cents respectively from 2002 to 2007. Hence the declining of dividend/asset is likely due to increasing assets.

In any case, the magnitude of the time trend in Column 2 is smaller than that of China dummy, hence Chinese firms still issue more dividends than other countries from 2002 to 2007. Moreover, the interaction term here, with a value of -0.001, is only 10% of the magnitude of the same interaction term in the profit regression (with a value of -0.01 in Table 4). Hence China's corporate gross savings (over assets) still did not rise over the sample period 2002 to 2007.

We then compare state vs non-state Chinese companies. State-owned companies issue more dividends than non-state owned companies over the sample period (Column 3). The coefficient for state dummy is 0.002, significantly different from zero at the 10% level. We then interact the state dummy with time trend. The interaction term is not significantly different from zero, suggesting that state-owned firms have been consistently issued more dividends than non-state-owned companies over the sample period.

### ***Investment and net savings***

Current account ultimately depends on net corporate savings--the difference between gross savings and capital investments. We now examine China's corporate investments over assets by using the same right hand side variables for gross savings. The results are presented in Table 6. There China dummy is significant at the 1% level, suggesting that Chinese firms invest significantly more than the global average (Column 1). Then we estimate the dummies for each country, with the corresponding coefficients plotted in Figure 7 (top panel). We see that India

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<sup>3</sup> In October 2008, the China Securities Regulatory Commission (CSRC) required listed firms that applied for refinancing to pay dividends in cash totaling no less than 30 percent of its distributed profits over the past three years. As it is not in our sample period, we cannot test the effect of this requirement on the trend of dividends.

has a higher corporate investment than China, which is consistent with India's current account deficits. Column 2 of Table 6 further analyzes the time trend. Over the sample period, Chinese firms appear to invest relatively less over time (as percentage of assets) when compared with a global trend of rising investment. Then we compare state vs non-state owned firms. State-owned Chinese firms invest less than non-state-owned companies during the sample period (Column 3). The interaction of state dummy and time trend does not show up as significant (Column 4). Hence the gap in investment ratio between state and no-state firms does not shrink over the sample period.

We now examine net savings in Table 7. There is little evidence that Chinese firms have higher net savings as a share of total assets than firms in other countries. The estimated coefficient is positive but insignificant (Column 1 of Table 7). Then we add country dummies and plot them in Figure 7 (bottom panel). There we see that China's net savings are smaller than India, Australia and the U.K. We further examine the time trend of China's net savings. The net savings over assets stay flat over the sample period (The interaction of time trend and China dummy is negative but insignificant). Finally, we compare state-owned Chinese companies with non-state-owned ones. There is no significant difference between the two groups on corporate net savings. And there is no significant time trend either.

### ***Financial constraints***

A question that often comes up in Chinese corporate savings by private firms is that they may have financing constraint, i.e., cannot borrow from banks even though they may have good growth opportunities. Hence private Chinese firms may have to save more. Similarly, some argue that Chinese firms in general have more restricted access to financing and hence are more likely to save more. Following these arguments, then Chinese firms, particularly non-state-owned firms, are likely to save more when they face financial constraints or have large needs on external finance.

We now test these arguments. The first question is how to measure external finance needs in a cross-country setting. Here we use the following indicator for it: Intrinsic dependence on external finance for investment (DEF\_INV). We construct a sector-level approximation of a firm's intrinsic demand on external finance for capital investment following a methodology developed in Rajan and Zingales (1998):

$$\text{Dependence on external finance for investment} = \frac{\text{capital expenditures} - \text{cash flow}}{\text{capital expenditures}},$$

where Cash flow = cash flow from operations + decreases in inventories + decreases in receivables + increases in payables. All the numbers are based on U.S. firms, which are judged to be least likely to suffer from financing constraints (during a normal time) relative to firms in other countries. While the original Rajan and Zingales (1998) paper covers only 40 (mainly SIC 2-digit) sectors, we expand the coverage to around 250/373 SIC 3-digit sectors.

To calculate the demand for external financing of US firms, we take the following steps. First, every firm in the COMPUSTA USA is sorted into one of the SIC 3-digit sectors. Second, we calculate the ratio of dependence on external finance for each firm from 1990-2006. Third, we calculate the sector-level median from firm ratios for each SIC 3-digit sector that contains at least 5 firms, and the median value is then chosen, to be the index of demand for external financing in that sector. Conceptually, the Rajan-Zingales (RZ) index aims to identify sector-level features, i.e. which sectors are naturally more dependent on external financing for their business operation. It ignores the question of which firms within a sector are more liquidity constrained. What the RZ index measures could be regarded as a “technical feature” of a sector, almost like a part of the production function. To capture the economic concept of the percentage of capital expenditure that has to be financed by external funding, we winsorize the RZ index to range between 0 and 1.

We then interact this RZ index with China dummy and later with the state-owned dummy. The results are presented in Table 8. Within sectors with higher external financial dependence (i.e, higher RZ), Chinese firms have higher gross savings than other countries (Column 1). This is because that in these sectors, Chinese firms are making relatively higher profits than their global counterparts (Column 2). A reason might be that Chinese listed firms have relatively lower financing costs. Moreover, within these sectors, Chinese firms issue relatively higher dividends than global counterparts (Column 3), consistent with the argument that Chinese firms may have more access to external finance .

Now we focus on the sample of Chinese firms and include an interaction term of state dummy and external finance dependence. There we find that state companies and non-state companies have similar gross savings, profits and dividends payouts, which are not affected by whether they are in a sector with high dependence on external finance or not.

At least for publicly listed firms, there is no evidence that those Chinese firms in sectors that are intrinsically more dependent on external finance issue smaller dividends in order to save more than counterparts in other countries. If corporate savings reflects concerns for credit constraints, the evidence suggests that the Chinese firms are not more concerned about credit constraints more than their peers in other countries. Publicly traded private firms do not appear to face more credit constraints than their majority state-owned counterparts. Of course, small non-listed private firms may very well be credit constraint and therefore need to save more. However, this is true everywhere in the world. In any case, the evidence is not consistent with the contention that mis-governance in the state firms and favorable price shocks are the primary cause of a high and rising corporate savings rate.

## **Conclusion**

These results call into question the inferences from the recent China-focused literature that the high and rising corporate savings in China is unique and reflects inefficiency and corporate mis-governance in majority state-owned firms.

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**Figure 1 : China's Savings over GDP**

**China's Saving-to-GDP ratio**

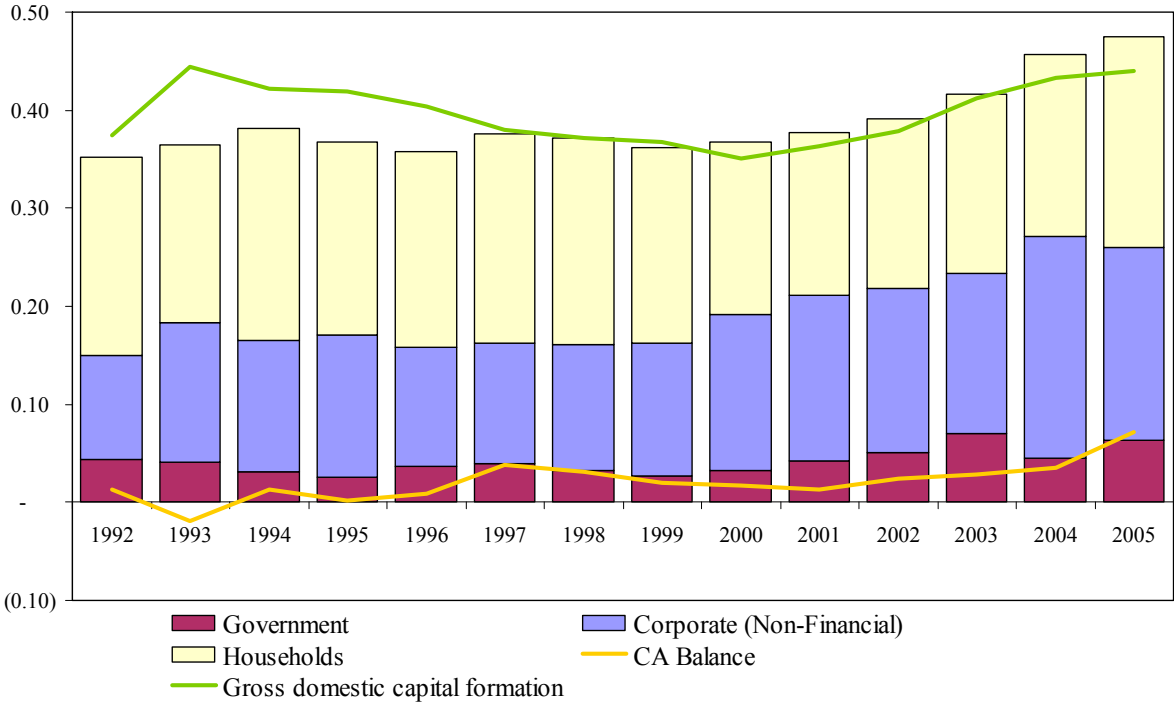
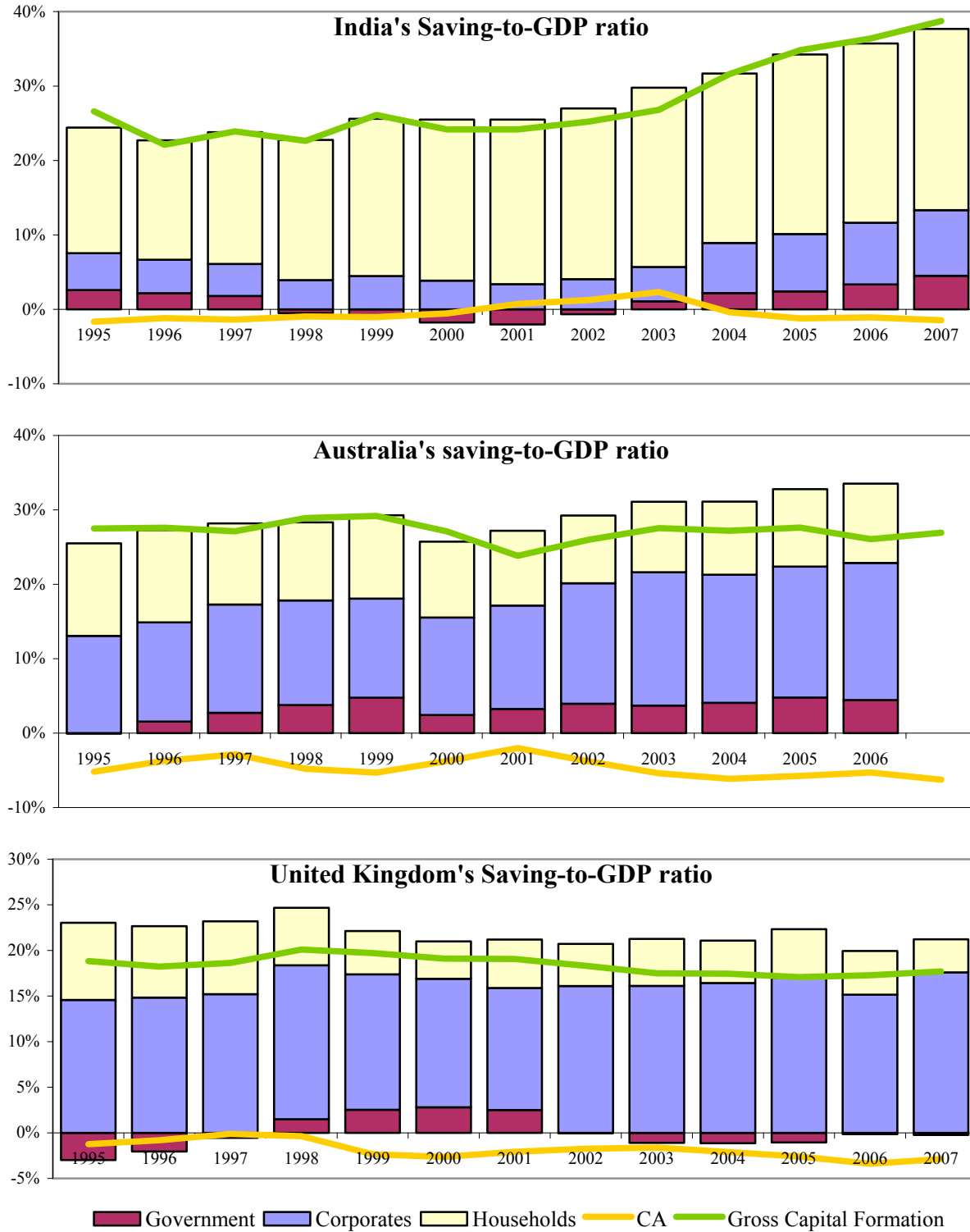
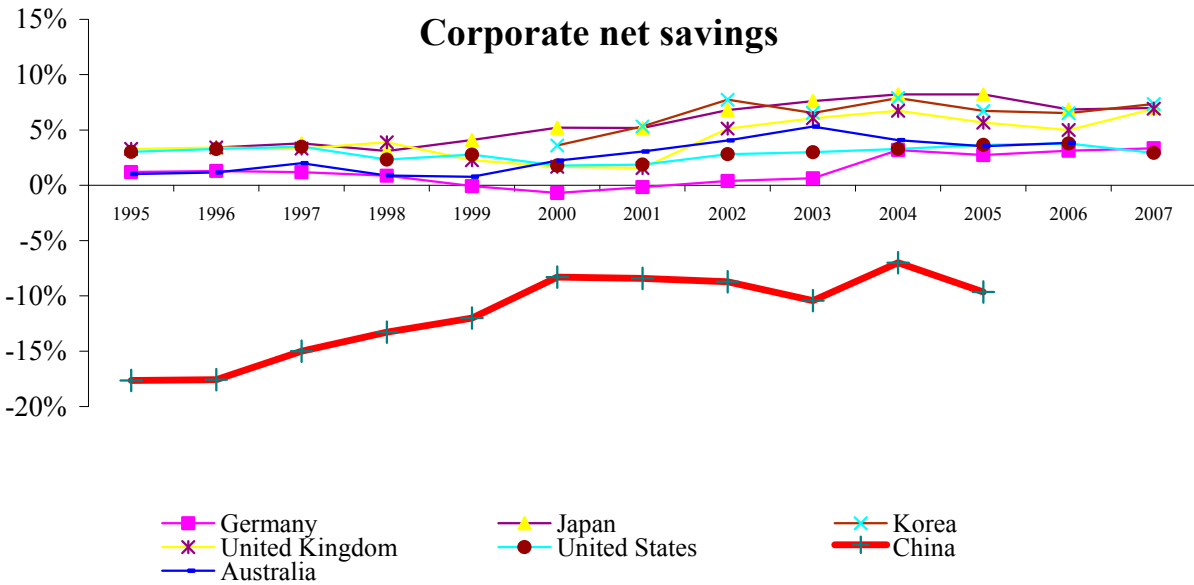
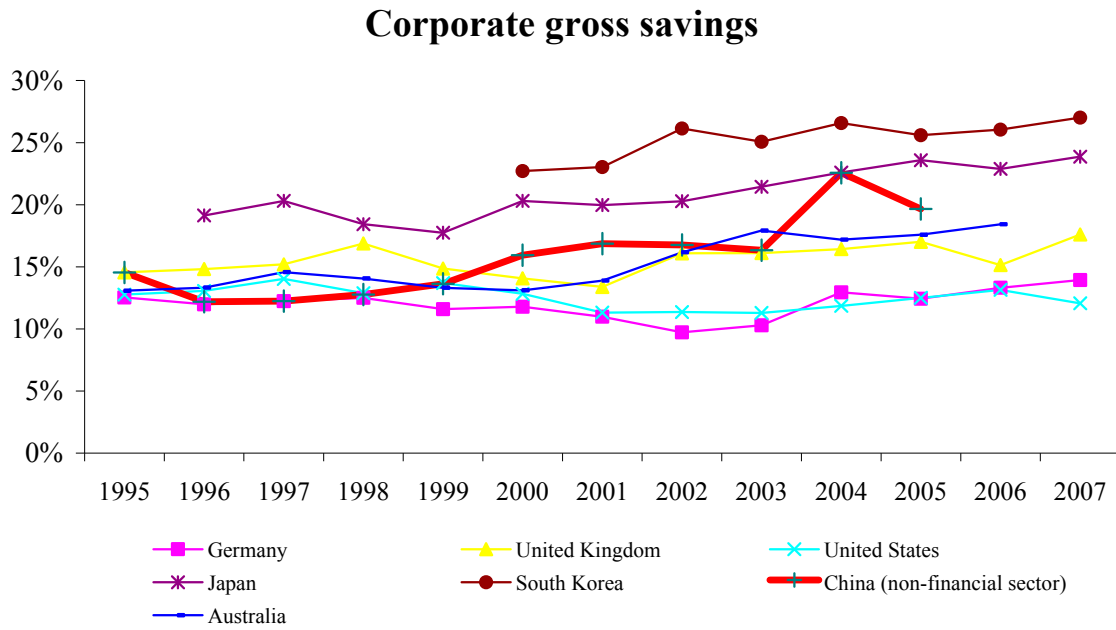


Figure 2. Savings to GDP of Selected Countries

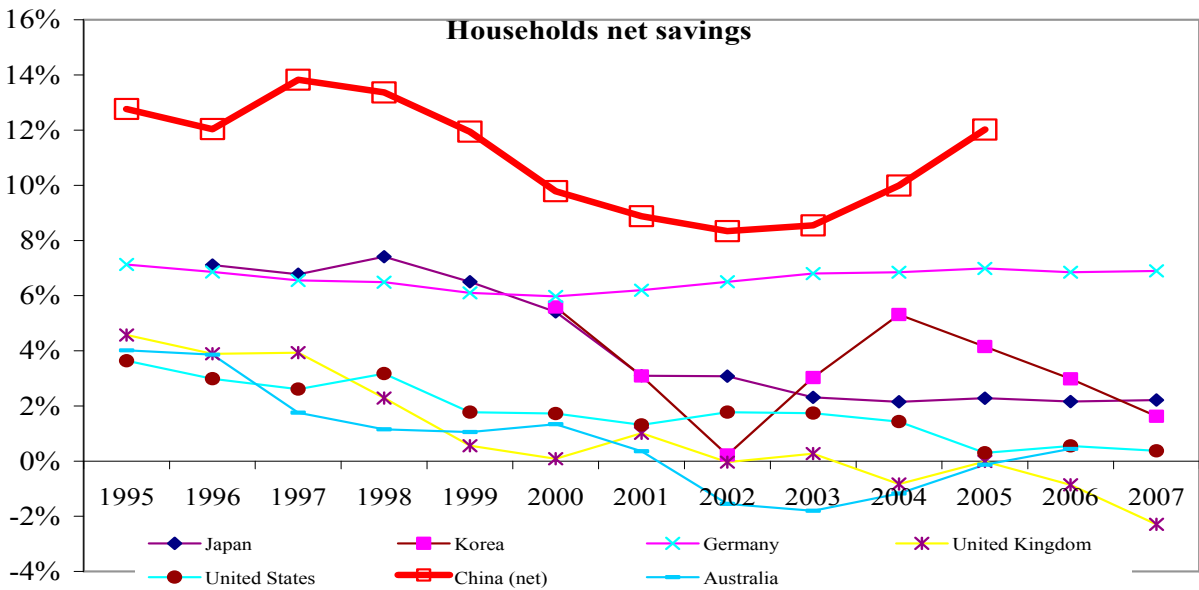
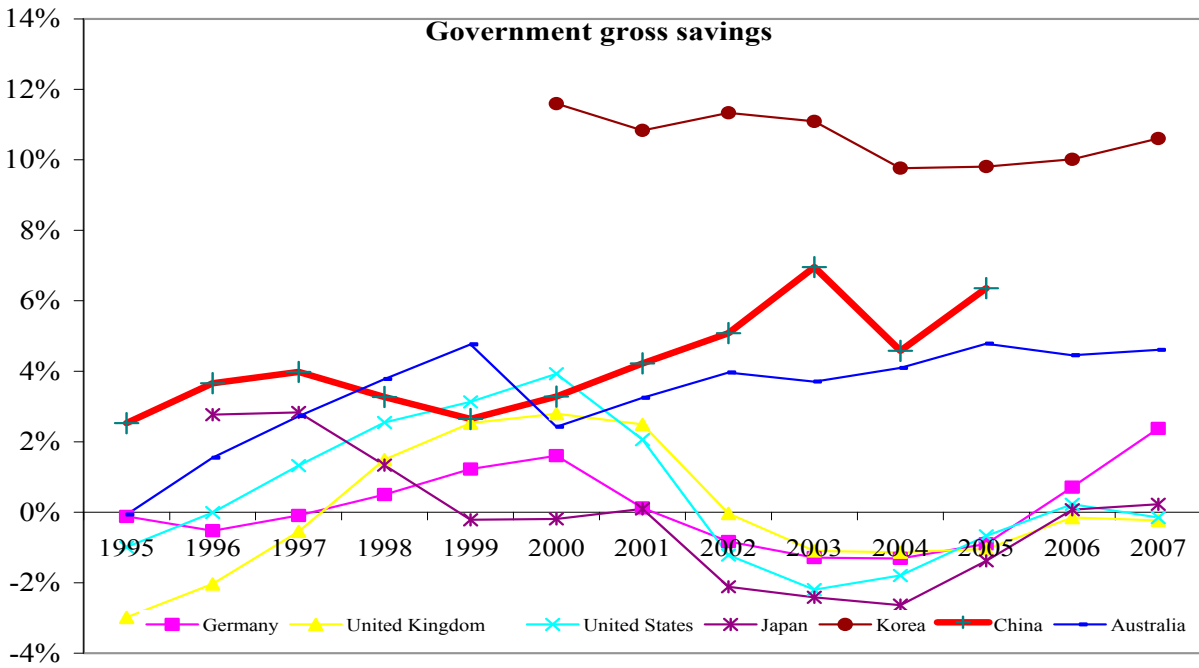




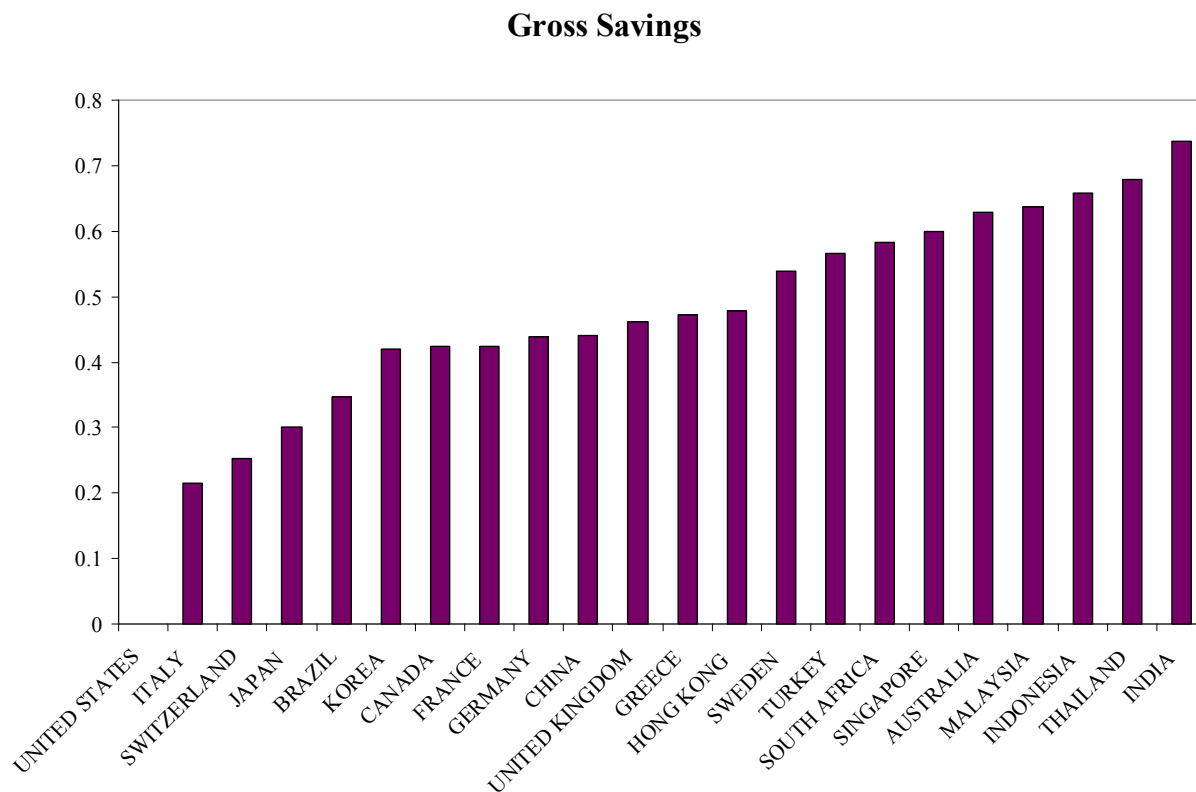
**Figure 3. Cross country Comparison of Corporate Savings**



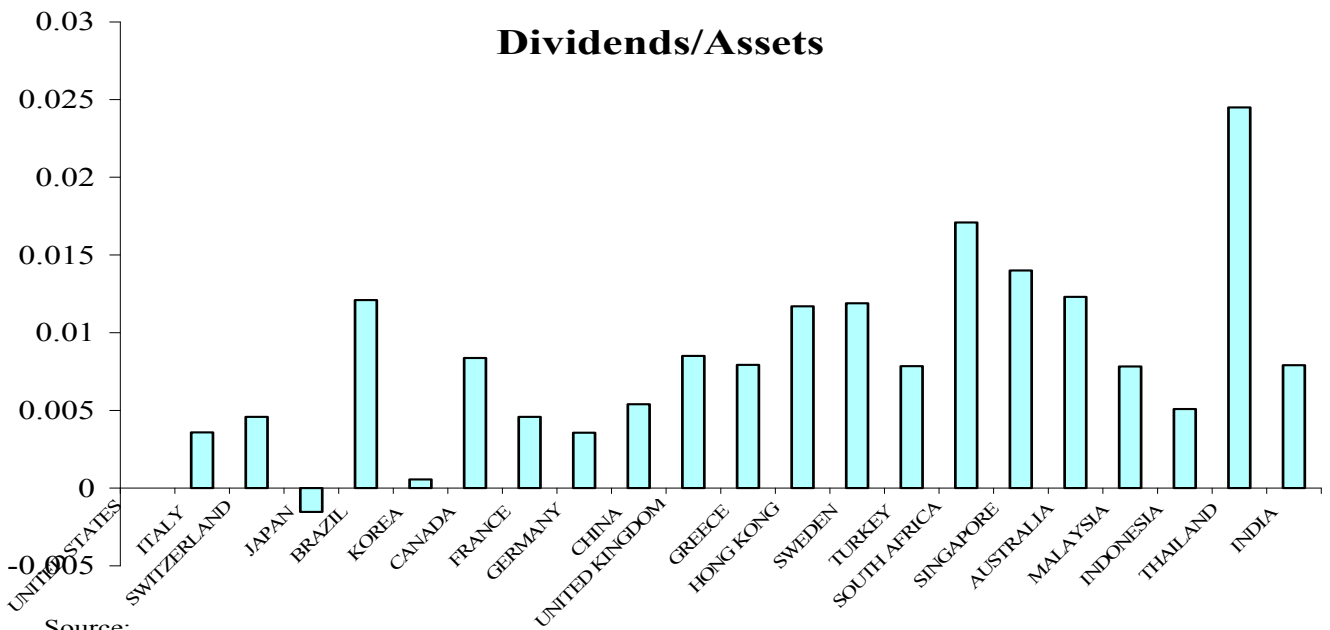
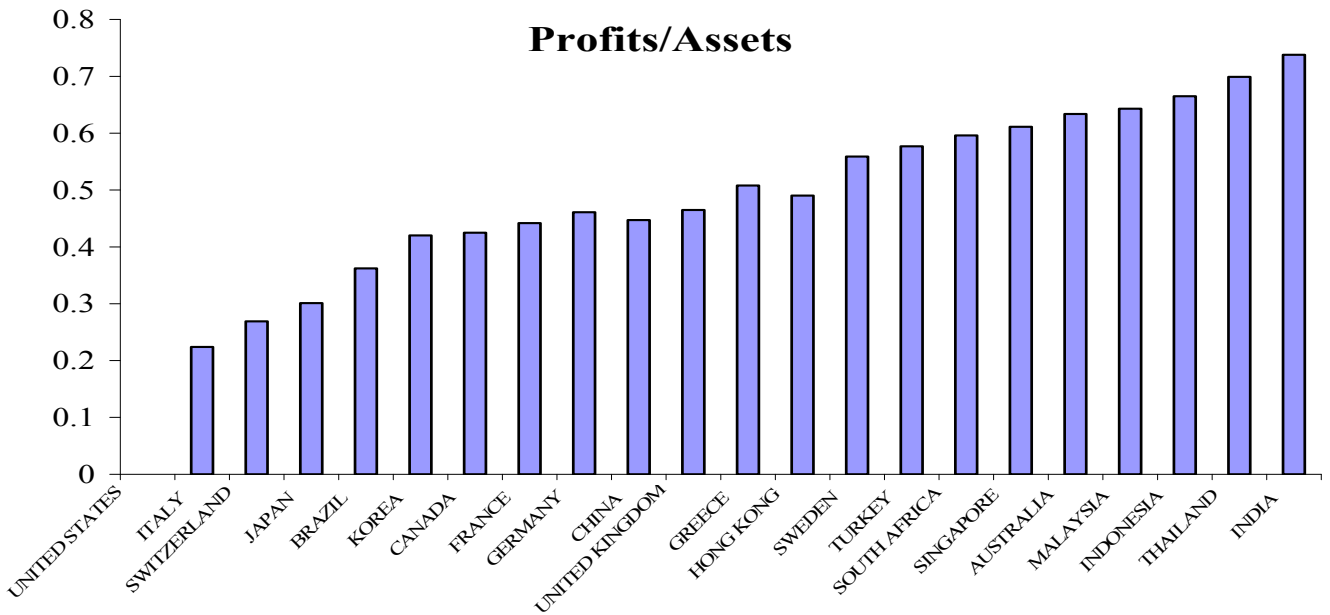
**Figure 4. Cross country Comparison of Government and Household Savings**



**Figure 5. Estimated Coefficients for Gross Savings**

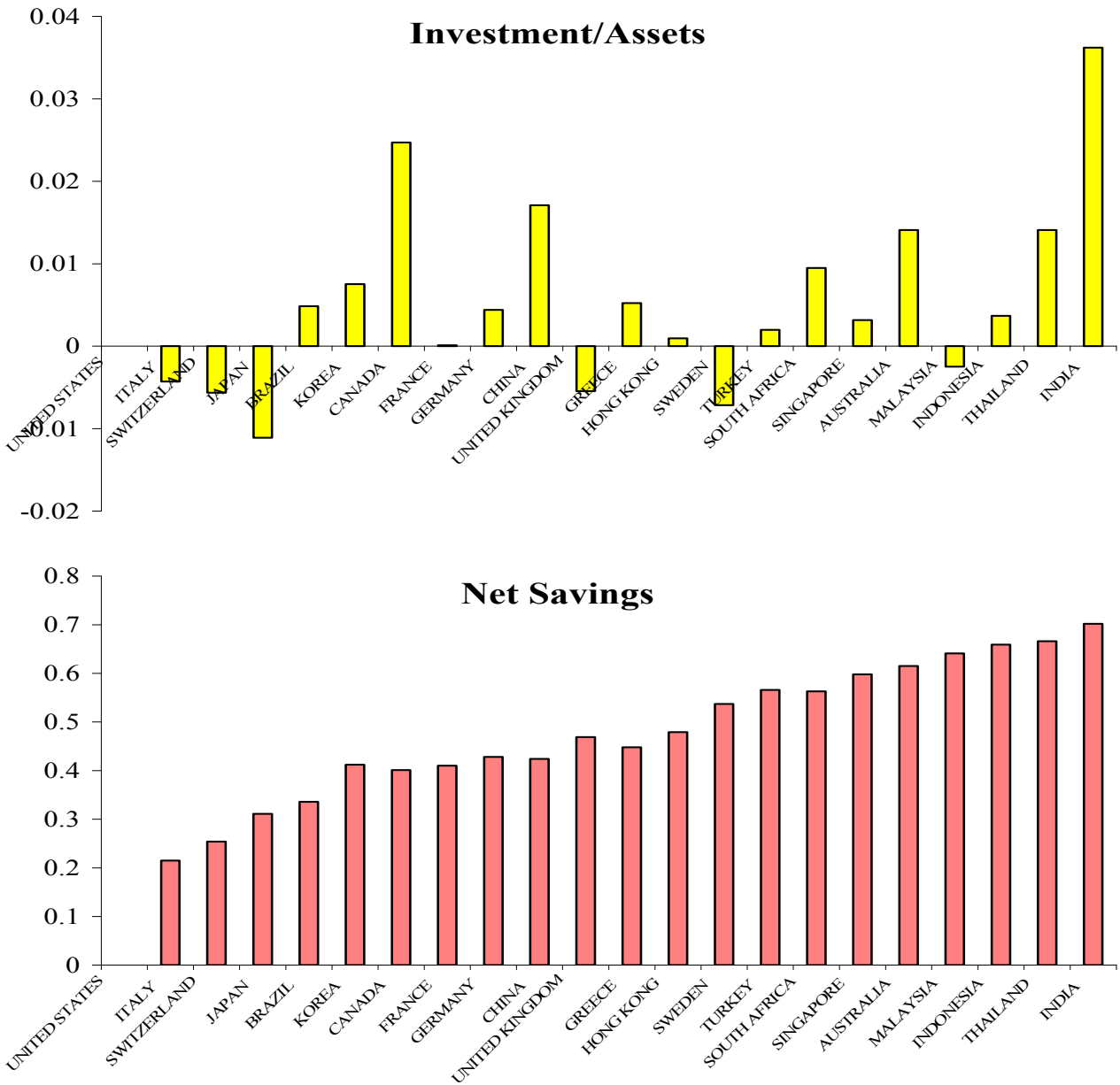


**Figure 6. Estimated Coefficients for Profits and Dividends**



Source:

**Figure 7. Estimated Coefficients for Investments and Net Savings**



Source:

**Table 1. Number of Listed Firms**

COUNTRY	# of listed firms	Current account/GDP	Savings/GDP	Public savings/GDP	Investment/GDP
ARGENTINA	62	0.02	0.25	0.05	0.23
AUSTRALIA	1697	-0.06	0.22	0.06	0.27
AUSTRIA	84	0.03	0.25	0.02	0.23
BELGIUM	128	0.02	0.24	-0.01	0.22
BRAZIL	276	0.01	0.18	0.03	0.17
CANADA	1656	0.01	0.24	0.05	0.23
CHILE	133	0.03	0.24	0.09	0.21
CHINA	1557	0.09	0.54	0.05	0.45
COLOMBIA	25	-0.02	0.21	0.05	0.23
CZECH REPUBLIC	18	-0.02	0.24	0.04	0.26
DENMARK	132	0.03	0.24	0.07	0.22
EGYPT	42	0.02	0.21	-0.03	0.19
FINLAND	131	0.04	0.26	0.06	0.21
FRANCE	820	-0.01	0.21	0.05	0.21
GERMANY	764	0.06	0.24	0.01	0.18
GREECE	294	-0.11	0.11	-0.02	0.22
HONG KONG	834	0.12	0.33	0.05	0.21
HUNGARY	32	-0.07	0.17	.	0.24
INDIA	1792	-0.01	0.36	0.03	0.37
INDONESIA	275	0.02	0.27	0.05	0.25
IRELAND	79	-0.04	0.23	0.04	0.27
ISRAEL	159	0.04	0.23	0.01	0.19
ITALY	248	-0.02	0.19	0.01	0.21
JAPAN	3982	0.04	0.28	0.06	0.24
KOREA (SOUTH)	1024	0.01	0.31	0.10	0.30
LUXEMBOURG	26	0.10	0.31	0.28	0.21
MALAYSIA	940	0.15	0.36	0.15	0.21
MEXICO	111	-0.01	0.25	0.03	0.25
MOROCCO	15	0.01	0.32	0.03	0.30
NETHERLANDS	181	0.08	0.28	0.03	0.20
NEW ZEALAND	120	-0.08	0.16	0.02	0.24
NORWAY	217	0.16	0.39	0.20	0.22
PAKISTAN	113	-0.03	0.18	0.01	0.21
PERU	60	0.02	0.22	0.05	0.20
PHILIPPINES	136	0.04	0.19	0.02	0.15
POLAND	226	-0.03	0.19	0.00	0.22
PORTUGAL	60	-0.10	0.13	-0.02	0.22
RUSSIAN FEDERATION	84	0.09	0.31	0.12	0.22
SINGAPORE	605	0.24	0.44	0.06	0.20
SLOVAKIA	8	-0.07	0.21	-0.01	0.28
SLOVENIA	12	-0.03	0.26	0.03	0.29
SOUTH AFRICA	357	-0.06	0.14	0.04	0.21
SPAIN	129	-0.09	0.22	0.05	0.30
SRI LANKA	18	-0.04	0.24	-0.01	0.28
SWEDEN	362	0.08	0.26	0.03	0.18
SWITZERLAND	210	0.13	0.34	0.04	0.22
THAILAND	436	0.01	0.30	0.07	0.29
TURKEY	193	-0.05	0.16	0.07	0.21
UNITED KINGDOM	2081	-0.03	0.15	0.00	0.18
UNITED STATES	7899	-0.06	0.15	0.00	0.20
VENEZUELA	16	0.14	0.39	0.13	0.25
ZIMBABWE	28	-0.13			

*Table 2: Summary Statistics on Corporate Savings and Investment*

	variable	p50	mean	Std	min	max	Obs
Non-China	Gross Savings /Asset	0.05	-0.18	1.06	-8.37	0.35	12569
	Profit/Asset	0.06	-0.17	1.05	-8.26	0.39	12823
	Dividend/Asset	0.00	0.01	0.02	0.00	0.15	12680
	Investment/Asset	0.03	0.06	0.08	0.00	0.44	12737
	Net Savings/Asset	0.00	-0.24	1.07	-8.48	0.30	12493
China State_owned	Gross Savings /Asset	0.04	0.03	0.18	-8.37	0.35	3893
	Profit/Asset	0.05	0.05	0.18	-8.26	0.39	3924
	Dividend/Asset	0.01	0.01	0.02	0.00	0.15	3909
	Investment/Asset	0.05	0.07	0.07	0.00	0.44	3939
	Net Savings/Asset	-0.01	-0.03	0.18	-8.48	0.30	3891
China Non_State_owned	Gross Savings /Asset	0.04	0.00	0.34	-8.37	0.35	2509
	Profit/Asset	0.05	0.01	0.34	-8.26	0.39	2525
	Dividend/Asset	0.00	0.01	0.02	0.00	0.15	2527
	Investment/Asset	0.04	0.06	0.07	0.00	0.44	2540
	Net Savings/Asset	-0.01	-0.06	0.33	-8.48	0.30	2507
Asia (except China and	Gross Savings /Asset	0.06	0.02	0.36	-8.37	0.35	26245
	Profit/Asset	0.07	0.04	0.36	-8.26	0.39	26960
	Dividend/Asset	0.00	0.02	0.03	0.00	0.15	26329
	Investment/Asset	0.03	0.06	0.07	0.00	0.44	26542
	Net Savings/Asset	0.01	-0.04	0.38	-8.48	0.30	26206
Total	Gross Savings /Asset	0.05	-0.17	1.03	-8.37	0.35	13281
	Profit/Asset	0.06	-0.16	1.03	-8.26	0.39	13555
	Dividend/Asset	0.00	0.01	0.02	0.00	0.15	13396
	Investment/Asset	0.03	0.06	0.07	0.00	0.44	13472
	Net Savings/Asset	0.00	-0.23	1.04	-8.48	0.30	13205

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**Table 3: Corporate Gross Savings over Assets**

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	Case 1	Case 2	Case 3	Case 4
China dummy	0.0713 [0.0533]	0.105** [0.0491]		
China*Time Trend		-0.00916 [0.00624]		
State-owned dummy			0.00263 [0.0101]	0.0270* [0.0159]
State-owned dummy*trend				-0.00665* [0.00400]
Firm size	0.223*** [0.0754]	0.223*** [0.0754]	0.0582*** [0.0181]	0.0585*** [0.0182]
year==2003	0.0214*** [0.00497]	0.0218*** [0.00502]	0.00869 [0.0101]	0.013 [0.0114]
year==2004	0.0248 [0.0152]	0.0256 [0.0155]	-0.0149 [0.0158]	-0.00634 [0.0176]
year==2005	0.0171 [0.0177]	0.0184 [0.0182]	-0.0210* [0.0114]	-0.00842 [0.0153]
year==2006	0.00958 [0.0369]	0.0114 [0.0381]	-0.0176 [0.0173]	-0.00108 [0.0199]
year==2007	-0.0137 [0.0434]	-0.0113 [0.0450]	0.0109 [0.0125]	0.0311 [0.0188]
Observations	132801	132801	6402	6402
R-squared	0.265	0.265	0.086	0.087

Notes: Standard errors in brackets; \*\*\*, \*\*, and \* denote p-value less than 1%, 5%, and 10%, respectively. Corporate gross savings over assets is winsorized at the 1% level. Standard errors are clustered at the country level.

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*Table 4: Profits Over Assets*

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	Case 1	Case 2	Case 3	Case 4
China dummy	0.0699 [0.0538]	0.108** [0.0499]		
China*Time Trend		-0.01 [0.00601]		
State-owned dummy			0.00486 [0.0100]	0.0311* [0.0161]
State-owned dummy*trend				-0.00714* [0.00404]
Firm size	0.222*** [0.0744]	0.222*** [0.0744]	0.0586*** [0.0177]	0.0589*** [0.0177]
year==2003	0.0226*** [0.00501]	0.0230*** [0.00503]	0.00803 [0.0101]	0.0126 [0.0113]
year==2004	0.0257* [0.0149]	0.0265* [0.0151]	-0.0135 [0.0159]	-0.00438 [0.0176]
year==2005	0.0214 [0.0172]	0.0228 [0.0177]	-0.0228** [0.0115]	-0.0093 [0.0153]
year==2006	0.0167 [0.0360]	0.0187 [0.0372]	-0.0197 [0.0173]	-0.0019 [0.0199]
year==2007	-0.00411 [0.0405]	-0.00144 [0.0421]	0.0097 [0.0124]	0.0314* [0.0188]
Obs	135540	135540	6449	6449
R-squared	0.267	0.267	0.092	0.092

Notes: Standard errors in brackets; \*\*\*, \*\*, and \* denote p-value less than 1%, 5%, and 10%, respectively. Profit is winsorized at the 1% level. Standard errors are clustered at the country level.

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*Table 5: Dividends over Assets*

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	Case 1	Case 2	Case 3	Case 4
China dummy	0.000209 [0.00169]	0.00383** [0.00173]		
China*Time Trend		-0.000971*** [0.000106]		
State-owned dummy			0.00188* [0.00107]	0.00314** [0.00155]
State-owned dummy*trend				-0.000344 [0.000355]
Firm size	0.00119*** [0.000287]	0.00119*** [0.000286]	0.00168** [0.000589]	0.00170** [0.000596]
year==2003	0.000766*** [0.000248]	0.000805*** [0.000245]	-0.00102* [0.000612]	-0.000799 [0.000719]
year==2004	0.00181*** [0.000360]	0.00190*** [0.000368]	0.000322 [0.000667]	0.000762 [0.000708]
year==2005	0.00278*** [0.000515]	0.00291*** [0.000496]	- [0.000836]	-0.00154* [0.000902]
year==2006	0.00309*** [0.000543]	0.00328*** [0.000515]	- [0.000734]	-0.0016 [0.000966]
year==2007	0.00334*** [0.000586]	0.00359*** [0.000544]	- [0.000834]	-0.00139 [0.00114]
Obs	133952	133952	6436	6436
R-squared	0.061	0.061	0.106	0.107

Notes: Standard errors in brackets; \*\*\*, \*\*, and \* denote p-value less than 1%, 5%, and 10%, respectively. Standard errors are clustered at the country level.

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*Table 6: Investment over Assets*

	Case 1	Case 2	Case 3	Case 4
China dummy	0.0140*** [0.00307]	0.0290*** [0.00209]		
China*Time Trend		-0.00400*** [0.000803]		
State-owned dummy			-0.00430** [0.00211]	-0.00476 [0.00439]
State-owned dummy*trend				0.000125 [0.000989]
Firm size	-0.000208 [0.000258]	-0.000208 [0.000257]	0.00947*** [0.00163]	0.00947*** [0.00162]
year==2003	-0.00207* [0.00104]	-0.00191* [0.00112]	0.000921 [0.00242]	0.00084 [0.00258]
year==2004	0.00243 [0.00175]	0.00278 [0.00185]	-3.45E-05 [0.00295]	-0.0002 [0.00332]
year==2005	0.00504** [0.00213]	0.00561** [0.00223]	-0.00805*** [0.00288]	-0.00829** [0.00345]
year==2006	0.00750** [0.00311]	0.00829** [0.00318]	-0.0142*** [0.00260]	-0.0145*** [0.00367]
year==2007	0.00856** [0.00361]	0.00965** [0.00381]	-0.0120*** [0.00269]	-0.0124*** [0.00444]
Observations	134711	134711	6479	6479
R-squared	0.163	0.164	0.178	0.178

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**Table 7: Net savings over Assets**

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	Case 1	Case 2	Case 3	Case 4
China dummy	0.0596 [0.0517]	0.0789 [0.0482]		
China*Time Trend		-0.00519 [0.00578]		
State-owned dummy			0.00694 [0.00982]	0.0310** [0.0155]
State-owned dummy*trend				-0.00656
	0.225*** [0.0756]	0.225*** [0.0756]	0.0491*** [0.0182]	0.0494*** [0.0183]
year==2003	0.0229*** [0.00494]	0.0231*** [0.00499]	0.00766 [0.0104]	0.0119 [0.0116]
year==2004	0.0217 [0.0155]	0.0221 [0.0158]	-0.0146 [0.0158]	-0.00621 [0.0175]
year==2005	0.0117 [0.0182]	0.0124 [0.0187]	-0.013 [0.0118]	-0.000604 [0.0158]
year==2006	0.00131 [0.0364]	0.00234 [0.0375]	-0.00318 [0.0176]	0.0131 [0.0202]
year==2007	-0.0235 [0.0427]	-0.0222 [0.0440]	0.0228* [0.0129]	0.0427** [0.0189]
Observations	132040	132040	6398	6398
R-squared	0.264	0.264	0.068	0.068

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**Table 8. The Role of External Financial Dependence (RZ Index)**

	gross savings	profits	dividends	investment	net savings	gross savings	profits	dividends	investment	net savings
China	0.0433**	0.0389**	-0.00154*	0.0162***	0.0289					
	[0.0180]	[0.0181]	[0.000883]	[0.00328]	[0.0189]					
China*RZ	0.121**	0.129**	0.00497***	-0.00698	0.129**					
	[0.0531]	[0.0534]	[0.00168]	[0.00554]	[0.0502]					
State						-0.0124	-0.0105	0.00191	-0.00065	-0.0118
						[0.0137]	[0.0138]	[0.00171]	[0.00308]	[0.0131]
State*RZ						0.0426	0.0421	-0.00121	-0.0110**	0.0539*
						[0.0304]	[0.0300]	[0.00279]	[0.00470]	[0.0311]
Firm Size	0.227***	0.225***	0.00116***	-0.0002	0.229***	0.0594***	0.0595***	0.00161***	0.00915***	0.0506***
	[0.0229]	[0.0226]	[0.000127]	[0.000408]	[0.0234]	[0.0193]	[0.0188]	[0.000605]	[0.00171]	[0.0194]
_Iyear_2003	0.0241**	0.0254**	0.000753***	-0.00225***	0.0255**	0.0121	0.0111	-0.00117*	0.00137	0.0104
	[0.0106]	[0.0104]	[0.000120]	[0.000857]	[0.0111]	[0.0111]	[0.0111]	[0.000613]	[0.00258]	[0.0114]
_Iyear_2004	0.0273*	0.0277*	0.00183***	0.00212	0.0239	-0.0154	-0.014	0.000306	-0.00057	-0.0148
	[0.0151]	[0.0152]	[0.000191]	[0.00133]	[0.0159]	[0.0176]	[0.0176]	[0.000698]	[0.00314]	[0.0176]
_Iyear_2005	0.0191	0.0233	0.00278***	0.00458***	0.0144	-0.0179	-0.0202	-0.00257***	-0.00828***	-0.00974
	[0.0182]	[0.0184]	[0.000310]	[0.00165]	[0.0191]	[0.0125]	[0.0125]	[0.000833]	[0.00306]	[0.0129]
_Iyear_2006	0.0123	0.0194	0.00310***	0.00694***	0.00426	-0.0178	-0.0202	-0.00275***	-0.0149***	-0.00296
	[0.0211]	[0.0211]	[0.000330]	[0.00173]	[0.0221]	[0.0193]	[0.0192]	[0.000778]	[0.00267]	[0.0196]
_Iyear_2007	-0.013	-0.00381	0.00336***	0.00754***	-0.022	0.0118	0.0108	-0.00219**	-0.0119***	0.0233
	[0.0173]	[0.0176]	[0.000406]	[0.00159]	[0.0182]	[0.0138]	[0.0137]	[0.000891]	[0.00285]	[0.0142]
Observations	119598	121988	120589	121302	118952	5738	5783	5769	5811	5735
R-squared	0.267	0.268	0.059	0.169	0.266	0.085	0.089	0.094	0.163	0.067

Notes: Standard errors in brackets; \*\*\*, \*\*, and \* denote p-value less than 1%, 5%, and 10%, respectively. Standard errors are clustered at the sector level.