Knowledge Leadership

Post-Crisis China:
Saving and Consumption Dynamics

MasterCard Worldwide Insights

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In 2003, MasterCard established the MasterIntelligence Knowledge Panel comprising leading economists and business strategists from China, Hong Kong, India, Japan, Korea and South East Asia. In 2006, it was expanded to become a global knowledge panel, which now conducts research and provides insights on the economic and business environment globally. The panel is headed by Dr. Yuwa Hedrick-Wong, Economic Advisor (Asia/Pacific), MasterCard Worldwide.

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Post-Crisis China: Saving and Consumption Dynamics

An often-repeated myth in today's economic crisis is that Chinese households are saving too much and spending too little compared to their counterparts in the West.

One of the frequently-cited structural causes of the current crisis is that of the global imbalance between over-consumption (under-saving) in the US and to a lesser extent the UK and other wealthy economies; and over-saving (under-consumption) in emerging markets, most notably China. Indeed, Ben Bernanke, current Chairman of the Federal Reserve, had argued as early as in 2005 that the low savings rate in the US has been a response to the saving glut in emerging markets. Capital inflow into the US had lowered interest rates, bidding up government bond prices, thus allowing American households to increase their borrowing continuously at lowering costs.

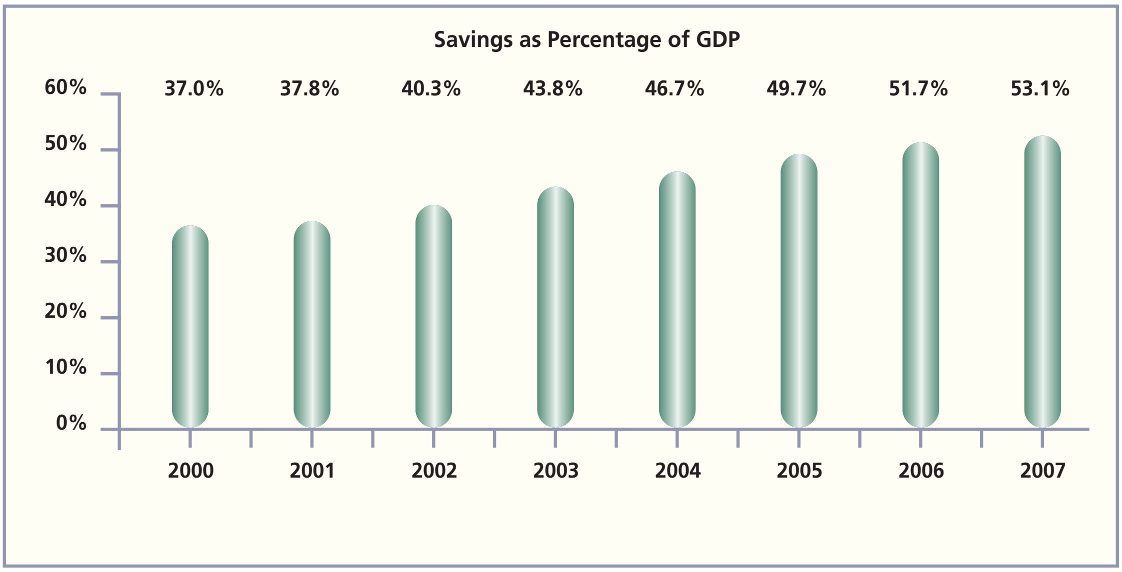
Capital inflow by itself would not be problematic if it is used to finance productive investment, which would generate future returns to repay the foreign savers/lenders. Since 2002, however, much of the capital inflow to the US had been used to fund the housing sector boom. This is because in the aftermath of the dot com bust, business investment in the US was weak as firms turned cautious. While foreign savers/lenders put more and more of their funds into the US, the demand for investment-grade assets surged, outstripping supply. It was at this juncture that financial engineering performed its pivotal role in turning marginal home loans into, on paper, safe investment grade assets; which were then sold and resold worldwide. The rest, as they say, is history.

Table 1. Current Account Surplus/Deficit as Percentage of GDP

	2008 (e)
China	+9%
Japan	+4%
Germany	+7%
US	-5%
UK	-4%
Spain	-10%

Source: IMF

Chart 1. Rising National Savings



Source: CEIC

China has been fingered as having played a major role in this global imbalance, supplying capital to the US with its massive savings, which has shown up in its mounting current account surplus, now reaching almost US$2 trillion. Table 1 provides a snapshot of the global imbalance in terms of current account surplus/deficit of some of the key economies. So one of the key developments needed in redressing the global imbalance is for China to reduce its over-saving.

Myth and Reality of China's Savings

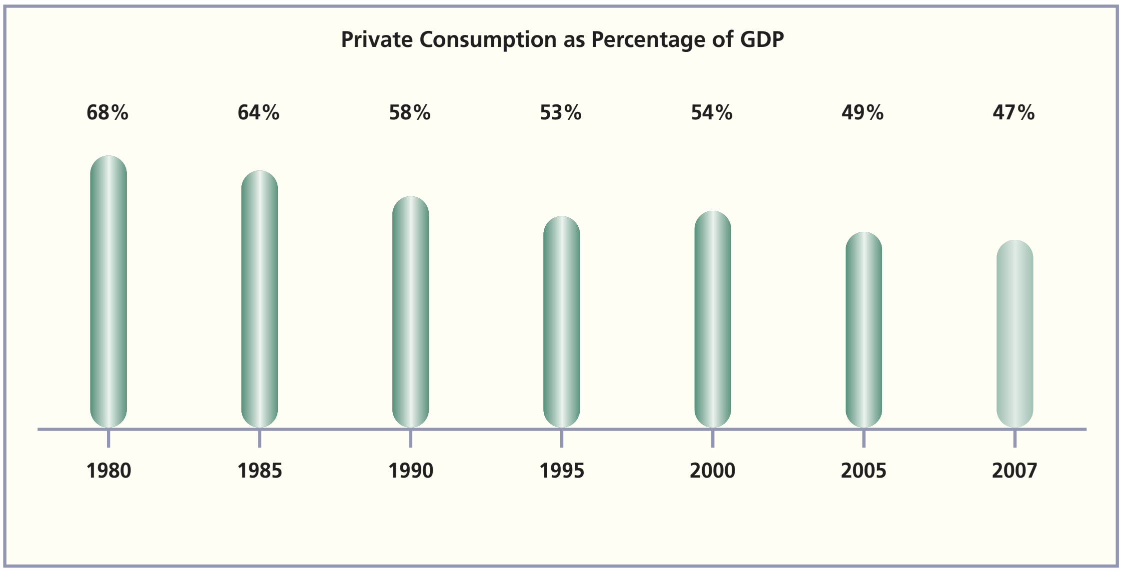
China's massive and rising savings is a fact. Chart 1 shows the steady increase of total savings in China as a percentage of GDP since 2000. From 37% in 2000 the increase has been continuous, reaching over 53% in 2007.

This phenomenon of China's increased savings has led to one of the most persistent and frequently repeated myths about China: that Chinese households are not consuming enough. Prima facie, there seems to be clear evidence for making the case. Private household consumption as a percentage of GDP has indeed been shrinking in the past decade; as shown in Chart 2. In 1980, when economic reform had just started, private household consumption accounted for 68% of GDP (a much smaller GDP then, of course). By 2007, private consumption's GDP share has dropped to 47% (albeit a very much bigger GDP).

A variety of reasons have been put forth purporting to explain why Chinese households are "under-consuming." The lack of a well-developed and generous social safety net is frequently cited as a major reason of why Chinese households save so much. The social and economic dislocation caused by structural reform (such as the downsizing and privatization of the state sector in the 1990s) has also been identified as a cause for anxiety; leading to higher precautionary savings. Given the One Child policy, parents are also keen to have extra funds on hand to pay for private tuition for their single child; and to pay for better quality private healthcare if needed. There is, therefore, a kitchen sink's worth of truths, half-truths and untruths surrounding the issue of household savings in China.

The absence of a well-developed, generous social safety net is often mentioned as a major reason of why Chinese households save so much.

Chart 2. Declining Share of GDP in Private Consumption



Source: CEIC

To clarify matters, it is important to note that private household consumption in China has been growing in absolute terms. Its shrinking shares of a rapidly growing pie (the GDP) turn out to be a series of rapid growth periods in the past decade. As Table 2 shows, private household consumption has been growing, averaging 10.7% per year over the 2001 to 2007 period. Investment, however, has been growing even faster, averaging 17.6% per year over the same time period. It is this difference in these rates of growth that has "squeezed" the GDP share of household consumption, reducing it steadily from 68% in 1980 to 47% in 2007.

China's Eager Consumers

Chinese consumers have actually shown that they are eager and ready for new consumption opportunities. Apart from private condos and consumer electronics, private car ownership was one of the new, exciting, and lifestyle changing expenditures that Chinese consumers have embraced with great enthusiasm in recent years. As shown in Chart 3, private auto sales

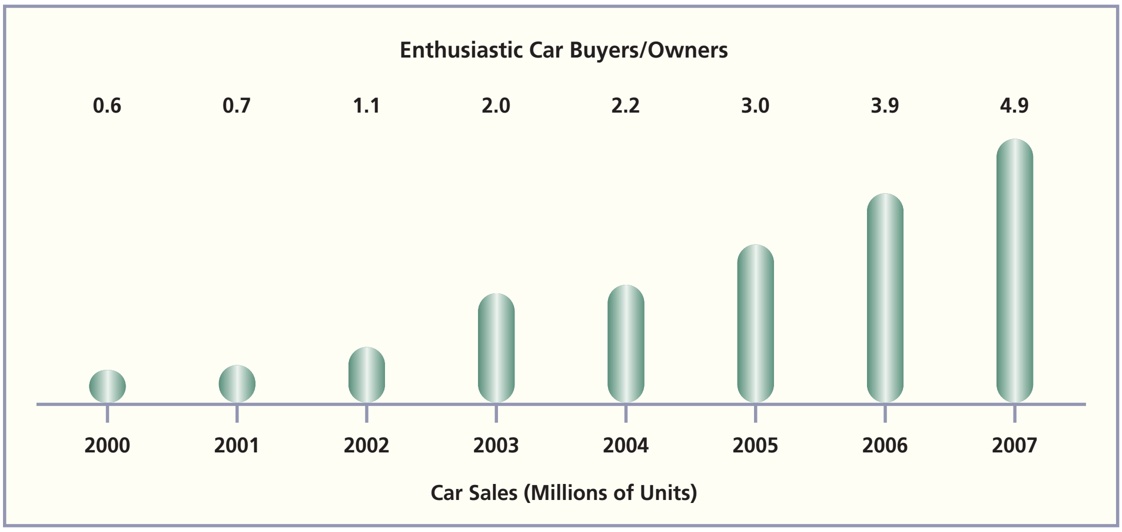
Although they're known for their high rates of saving, Chinese people are actually eager, willing shoppers. For example, they're especially enthusiastic about owning a car.

Table 2. Growth of Household Consumption versus Gross Fixed Capital Formation (Investment)

Year-on-Year Growth	Household Consumption	Gross Fixed Capital Formation
2001	7.3%	11.6%
2002	6.8%	15.6%
2003	8.1%	22.6%
2004	12.3%	21.7%
2005	11.6%	18.7%
2006	13.0%	16.6%
2007	15.9%	16.7%
Average	**10.7%**	**17.6%**

Source: National Bureau of Statistics

Chart 3. Chinese Households are Eager Consumers



Source: CEIC

rose from a meager 600,000 units in 2000 to 4.9 million in 2007; a period of strong growth that translates into an impressive average of 38.7% growth per year.[1] Even from the point of view of the urban middle class, the average price of a regular mid-size sedan is still a significant outlay that typically amounts to more than their annual income. High prices clearly have not deterred Chinese consumers from buying their private cars.

The reality is that Chinese consumers do not save any more than their regional counterparts. Based on the regular surveys conducted by MasterCard Worldwide, fewer urban Chinese households are currently saving for precautionary reasons compared with the average in Asia/Pacific; in spite of deteriorating global economic conditions and rising regional uncertainty, as summarized in Table 3. Furthermore, when Chinese households save, they are more likely to save either in order to make an investment or to buy property as opposed to saving in preparation for retirement.

The fact is that Chinese consumers have been willing to spend as much as their income allows. The shrinkage of private consumption as a share of GDP in recent years is a reflection of the sad truth that wages as a share of GDP has also dropped. In fact, wages accounted for about 53% of GDP in 1998 in the immediate aftermath of the Asian crisis; but has since dropped steadily during the last ten years of rapid economic growth, trending down to around 40% of GDP by 2007.[2]

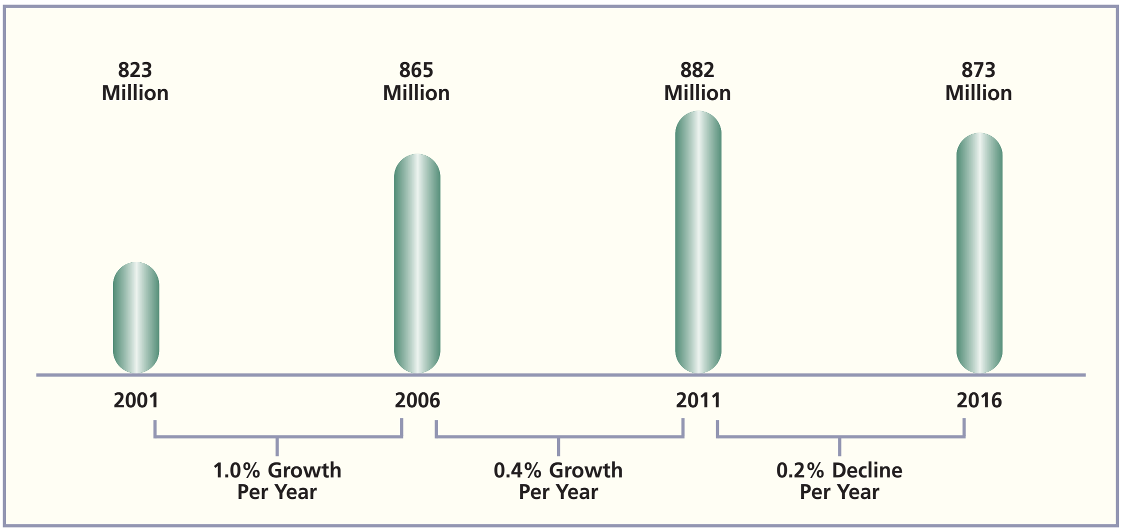
People in China do not save more than their regional counterparts. In fact, fewer urban Chinese households are currently saving for precautionary reasons compared to the average in Asia/Pacific.

Table 3. Savings Behavior: China versus Asia/Pacific

	China	Asia/Pacific
Percentage of Households Engaged in Precautionary Savings	58.5%	65.5%
Percentage of Households That are Saving for Retirement	22.2%	44.7%
Percentage of Households That are Saving for Investment	36.1%	36.0%
Percentage of Households That are Saving to Buy Property	26.9%	31.2%

Source: MasterCard Index of Consumer Purchase Priorities, 2009

Chart 4. China's Tightening Labor Supply



Sources: National Bureau of Statistics, MasterCard Asia/Pacific

A reason for slow growth in wages and consumption was China's extraordinarily low interest rates. Companies invested in capital-intensive technology and increased their production capabilities.

This was propelled further by the availability of export subsidies.

How did this come about? The shrinking share of wages is especially puzzling in light of the significant slowing of labor supply in recent years. As illustrated in Chart 4, the growth of labor supply, which averaged about one percent growth per year between 2001 and 2006, has slowed to 0.4% growth per year today. It is projected to shrink by about 0.2% per year in the 2011 to 2016 period. Such a trend could hardly suggest that an over-supply of labor is a factor in suppressing wage growth. Clearly something else is at work. It turns out that culprit is not on the supply side of labor, but on the demand side.

An underlying reason for this phenomenon of slow growth in wages and consumption is China's extraordinarily low interest rates in recent years. Table 4 summarizes the real "one year loan rates" (adjusted for inflation with the producer price index) over the 2002 to 2008 period. By 2008, the one year loan rate was effectively zero. Such low interest rates for such an extended period powerfully distorted the relative prices of capital versus labor. With capital so cheap, companies started to invest in capital-intensive production capacity; moving up the technology ladder faster than they would otherwise. In the manufacturing sector, this development was further encouraged by the widespread availability of export subsidies; making it even more profitable to invest in export-oriented and capital-intensive industries.

Table 4. Real One Year Loan Rate (Adjusted for PPI)

2002	9.5%
2004	2.0%
2006	2.4%
2008	0.3%

Source: CEIC

The result, when seen from the perspective of the composition of China's exports, is extraordinary. It has been established that there is a direct correlation between the per-capita income level of an economy and its export composition. Not surprisingly, the higher the per capita income, the more technology and capital intensive is its exports.[3] In spite of its reputation as the factory of the world, however, China stands out as an astonishing exception to the rule. It has been estimated that China's exports resemble that of a country with a per-capita income of around US$12,000; instead of the actual of around US$2,500.[4] This is the extent to which the distorted pricing of capital and labor has affected China's exports; and in the process suppressed the demand for labor; and thereby kept the growth of wages lower than it would be otherwise.

Who is behind China's High Level of Savings and Why?

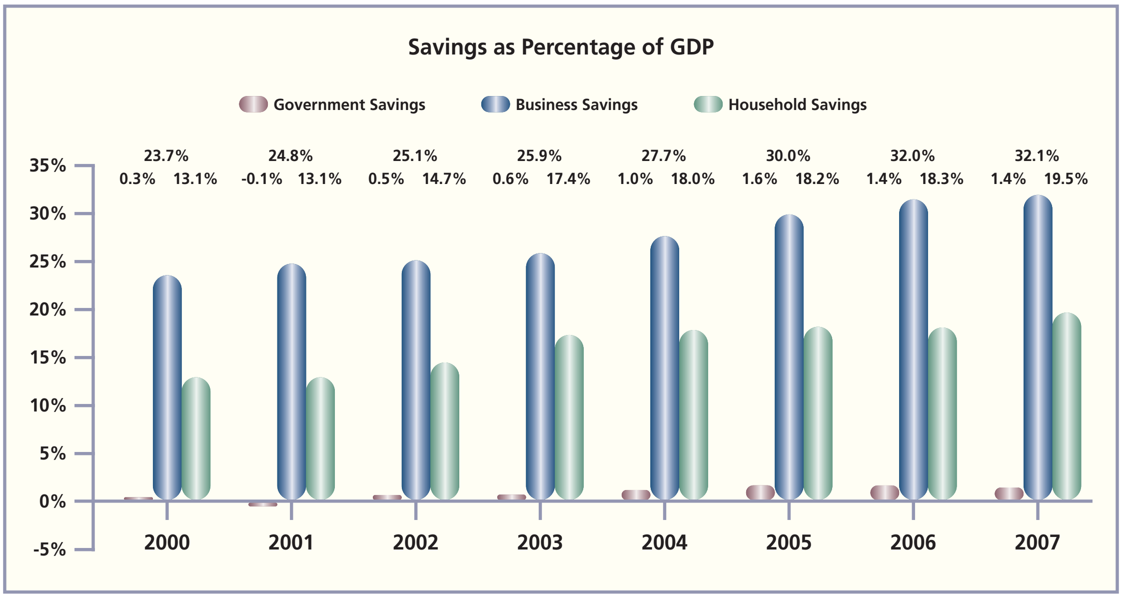
If Chinese households are not over-saving, then who is contributing to the overall high savings; which reached over 52% of GDP in 2007? An analysis of the flow of funds at the macro level pinpoints the business sector as the big saver, not households. As chart 5 shows, savings by the business sector had been rising over the 2000 to 2007 period; reaching 32% of GDP in 2007. In contrast, savings by the household sector has been largely stable, hovering around 18% of GDP in the past four years; rising from the 13 to 14% level in 2000 to 2002.

Businesses save by retaining their profits. But why do businesses have so much profit to enable them to save so much in China? It turns out that the phenomenon of high business savings in China is a quirky legacy of its state sector dominance of the past and how privatization had proceeded in the 1990s.

When the Chinese government started to downsize the state sector and reform the poorly-run and loss-making state-owned enterprises (SOEs); the primary concern then was how to ensure that the SOEs, once reformed and downsized, could compete and survive in the increasingly competitive market. In other words, they were seen as weak underdogs that needed support in order to survive. As a result, SOEs were not required to pay dividends to their shareholders, which is the government. SOEs

Analysis identifies the business sector as where the large savings are occurring, rather than by households. In fact, savings by businesses reached 32% of China's GDP in 2007.

Chart 5. Who is Saving the Most?



Source: CEIC

For the longer term, China must wean its over-reliance on exports; and its present leadership appears to be more focused on achieving this than before.

operating in the resource extraction sector were not required to pay royalties to the owner of the resource, which is, again, the government. All these made sense when, as in 1998, large SOEs collectively made a total loss of over 1% of GDP.

But much has changed since. Strong economic growth has allowed many of the SOEs to turn from loss-making to profit-making. The upswing of commodities in the 2004 to 2007 period further allowed many resource sector SOEs (mostly operating as de facto monopolies) to enjoy massive windfall profits as well. In 2007, for instance, it is estimated that the combined profits of large SOEs amounted to around 4% of GDP.

It is this high level of profit that enabled the SOEs to save so massively. With artificially-low costs of capital, these SOEs were also motivated to invest heavily in capital and technology intensive production facilities, the better for them to compete overseas, riding the exports boom.

Implications: Fiscal spending and Post-Crisis Growth

This analysis strongly suggests that Chinese households are not under-consuming. They have been spending as much as they could; given their income. This is a critically important point at this time as so much hinges on China's domestic demand holding up amidst the global economic turmoil.

As has been made clear earlier, China's households are not in a position to boost the growth of domestic demand. For that to happen, their wages need to grow faster. Given that rural under-employment is still widespread and that anywhere upward of one million migrant workers are looking for work in urban areas; raising labor-intensive employment is the right answer. In this regard, the so called "stimulus package" announced by the government appears to make sense. Apart from the size of the package (one can debate the details of how much double counting there is, etc., but it is big), the immediate focus on infrastructure construction is the right stop-gap measure in generating labor-intensive employment. Table 5 summarizes, based on government's announcements, estimates made on where the stimulus package will be spent. The lion's share will go to construction of highways and secondary roads, improving railways, more airports, and completion of the national power grids. These projects tend to provide labor-intensive employment; and have the added virtue of being able to get started quickly.

These are, however, stop-gap measures. For the longer term, China has to wean its over-reliance on exports; and the leadership appears

Table 5. Components of the Fiscal Spending Package

Roads, Railway, Airports and Power Grids	US$ 270 Billion
Earthquake Reconstruction and Rural Infrastructure	US$ 204 Billion
Low Cost Housing and Environment Conservation	US$ 95 Billion
Health, Education, R&D	US$ 75 Billion

to be more focused on working out how to achieve that than before. And this means boosting domestic demand; and, for reasons mentioned earlier, it can be achieved only if there is a more balanced allocation of income between households and businesses.

China therefore needs to tackle simultaneously (i) stronger employment creation leading to wages gaining higher shares of GDP; (ii) better corporate governance that reduces the business sector's excess savings and investment; and (iii) more market driven interest rates that can better reflect the relative prices of capital and labor.

Sustained domestic demand growth will ultimately require moving away from the current dependency on capital-intensive manufacturing (and thus exports); with the service sector becoming the focus of economic activities. State monopolies will have to be dismantled in many key service sectors to allow private competition and investment. Expanding services will see employment and income growth in both labor-intensive as well as high-end professional services. The higher household income that results will in turn support demand for more such services. Over the long term, this is the way forward for China.

Our analysis strongly suggests that Chinese households are not under-consuming. They have been spending as much as they can, given their incomes.

1. Growth in the second half of 2008 plunged, however.

2. National Bureau of Statistics data.

3. Hausmann, R., J. Hwang, and D. Rodrik, 2005, "What you Export Matters," Center for International Development, Harvard University, Working Paper No. 123

4. Rodrik, D., 2006, "What's so Special about China's Exports?" China and the Global Economy 2010, China Economic Research and Advisory Program, Harvard University.

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