Reshaping the Chinese growth model - a formidable challenge of the 12th five-year plan

Annika Melander (or 梅兰德) and Moritz Rudolf (鲁德华)

Introduction

Reshaping the Chinese growth model is key to ensure a more resilient economy ahead. It would also contribute in an important manner to the sought rebalancing of global activity.

While China's brisk growth has contributed in lifting millions out of poverty since the late 1970s, its current growth model is deemed increasingly unsustainable.

First, global demand is constrained by the necessary adjustments ongoing in many advanced economies in the wake of the financial crisis. This process is set to take years in several economies, notably in parts of the EU, which is China's largest export market.

Second, (government) investment at, 47% of GDP is likely to have reached a limit where its efficiency can be increasingly called into question, notwithstanding ample needs, especially in in-land / rural China.

Third, the "end-less supply of cheap labour" is rapidly coming to an end reflecting in part an ageing Chinese population, where labour supply is set to shrink in a few years from now.

The Chinese leadership has therefore repeatedly called for an increased contribution from domestic demand to economic growth, especially from private consumption.

This Economic Brief reviews the main reasons behind the fall in the consumption share to stand at a record low 36% of GDP. A better understanding of e.g. the strong incentives to save will be crucial when assessing the upcoming 12th five-year plan, which the Chinese authorities will present at their National People's Congress in March this year. A rebalancing of China's economy towards more consumption will require strong determination by the leadership to implement difficult reforms and take on vested interests.

Summary

Private consumption is a key component in the rebalancing of growth that China is seeking, and a challenging one. Not only for the 1.3 bn. Chinese citizens, but it could make an important contribution in addressing global imbalances.

Understanding what drove the consumption share down to a mere 36% of GDP in China is thus vital.

This brief explores the many reasons for the high precautionary savings that followed in the wake of the reform process in China. In particular, the privatisation wave of State-Owned Enterprises in the late 1990s caused many millions to not only lose their jobs, but also their social-security coverage. This boosted precautionary savings and contributed to the more pronounced fall of the consumption share noted during the last decade.

The brief also highlights how relatively weak total income growth played a role, stemming above all from sustained low wage growth.

Looking ahead, reform ambitions will be central to the upcoming five-year plan. Financing constraints, especially at the local level, suggest that these efforts risk being constrained in size or coverage.

Thus, while policies are set to go in the right direction, progress may prove slow and/or incremental. A rebalancing of the wage/profit share appears more likely in the short term.
Consumption share exceptionally low

Private consumption has declined from more than 50% of GDP in the early 1980's to stand at only 36% in 2009 in China. The fall has been particularly pronounced over the last decade, see graph 1.

Graph 1: Consumption share increasingly depressed

 Compared to other countries, even at the same stage of development, China's consumption share is notably small. Among the other BRIC economies the consumption share amounted to 55% in Russia, 57% in India and 63% in Brazil. Similar levels are reported from other emerging Asian peers, such as Thailand (at 55%), while advanced economies generally have a consumption share close to or above 60% of GDP (and more than 70% in the case of the US).

The recorded fall, especially during the last decade, can not be attributed to an actual fall in private consumption in China. On the contrary, with the exception of 1982, private consumption has grown uninterrupted; at a rate of 7½% on average per annum in the 1980s and 1990s and a sturdy 8½% in 2000's (in constant prices, that is). It is rather a reflection of a relatively slower growth compared to the surge noted in exports and investments.

China's GDP-per-capita has now reached a critical level where some observers argue that it could, with the right (policy) conditions, follow the development of Japan in the 1970s or Korea in the late 1980s and early 1990s. This would suggest a gradual increase in the consumption share. Other observers point to the risk of stagnation, where the current driving forces are increasingly exhausted and consumption fail to take their place, which has happened to some of China's Asian and Latin-American peers.

With the consumption share at only 36% of GDP in China, the untapped growth potential must be seen as formidable.

Theory fails to explain Chinese savings

In economic theory consumption growth is, in general, explained by changes to households' permanent income whereas the "consumption propensity" is stable regardless of the size of the individual's income. This "given" fraction to consume is, in turn, explained by different variables such as interest rate; expectations regarding (un-) employment; ratio of wealth to income; family size and composition etc.

The life-cycle theory of savings (and thereby consumption) partly challenge this view, as consumers are expected to allocate consumption in the best possible way over their entire life-time. This theory suggests that savings are also a result of individuals' desire to provide for future consumption in old age. Assuming that individuals optimise their consumption based on their life-time income rather than the current one, periods of negative savings will occur when their income is low compared to the life-time average. As a result, the savings ratio is typically negative in individuals' early and late years whereas it is positive in between, resulting in a hump-shaped savings ratio. This follows that aggregate savings (and consumption) will also depend on the age structure of a population; its demographic development as well as the average retirement age and/or the provision of pensions.

Turning to China, however, other reasons must also be at play to explain the high savings ratio, not least for younger and older (urban) households. Literature arguing what determinates China's high savings rate is abundant, albeit not always consistent. Arguments for the sustained high savings rate typically refer to high housing prices, weak social-security systems in terms of levels and coverage, high education costs, job uncertainty, low wage levels as well as wage growth, obstacles to obtain credit and the lack of financing mechanisms apart from bank deposits.
The reform process changed society profoundly, with strong motives for precautionary savings in its wake

Up to the 1990s, State-Owned Enterprises (SOEs) generally catered for possible income losses. Especially in urban areas, SOEs largely covered health care, pensions, and employment guarantees. In rural areas, family members generally provided those services.

The reform process implied a privatisation of the SOEs, initially in the agriculture sector, while the privatisation of industry started in earnest only towards the end of the 1990s, leading to lay-offs corresponding to about 10% of urban employment. The responsibility to cover for income losses was shifted to the individual (or his/her family), causing precautionary savings to soar.

Today, the social-security systems are segmented, complex and uncoordinated, leading to an inadequate coverage for many.

The social-security framework in China is generally based on individual contributions to a decentralized system. For example, schemes differ substantially over China, with coverage ranging from close-to-Western standards of support in urban Shanghai to literally none in parts of rural Gansu.

Furthermore, China has one of the most rapidly ageing population worldwide. With increasing dependency rates and a shift in the traditional family structure, state-supported public-service systems are becoming progressively more important for income support. As a result, increasing income uncertainties have led to sustained high precautionary savings, where the main motives to save are reviewed in greater detail below.

Better health-care coverage, but remains costly for the already poor

Total expenditures on health care have increased to more than 5% of GDP in 2009 (up from 4% in 1990). However, this has in part come about for the "wrong reasons": due to incentives for doctors to subscribe expensive medication and/or the use of costly treatments. In part, the rise also reflects the spread of chronic diseases (such as diabetes, hypertension, and cancer) and an ageing population. At the same time, individual out-of-pocket spending as a share of total health expenditures rose from 36% to 49% between 1990 and 2006.

During the 2000's, health-insurance coverage rates improved significantly. In 2009, 68% of the urban population and 94% of the rural population were insured compared to 55% and 22%, respectively, in 2003. The current system is fragmented over a number of different public programmes, while commercial insurance plays a marginal role.

Reimbursement rates and maximum medical benefits remain low (or very low), however. Reimbursement rates are limited to 50% in urban areas and 41% in rural areas with low maximum medical benefits (ranging from 5.000-20.000 CNY in rural China). Although improved from 2000, when China's health financing system was ranked 188 out of 191 by the World Health Organisation, the current health-care system is considered unfair and entrenches the poor even deeper into poverty.

For the individual, medical and health-care expenditures constitute a large share of their consumption. In 2008, per capita medical and health-care expenditures represented 11½% of rural household's consumption expenditure, compared to 10% for urban households. It is noteworthy, that between 1990 and 2003, the average per capita urban disposable income rose 5½ times, while the average per capita net rural income nearly quadrupled. Average medical spending per capita, on the other hand, multiplied nearly 19 times for urban residents and six times for rural residents over the same period.

For most rural individuals, a possible hospital treatment would correspond to several months', if not years', salary (see graph 2), causing many to reduce their use of medical services for financial reasons (whether refusing hospitalisation despite a referral or discharging themselves early and against medical advice). Possible future health-care related costs are an important motive to "save in advance".
Quality of treatment varies significantly from province to province and between urban and rural areas (as does life expectancy). No mechanism for social-security related fiscal transfers from central to provincial governments exists in China. Poor provinces, who receive the least contributions, generally show the lowest reimbursement rate, reinforcing the incentives to save in these provinces.

In its health-reform plans, the Chinese government announced a safe, affordable and effective basic medical care to all citizens by 2020.

Limited coverage and ageing calls for reforms of the pension system

Pension systems in China are fragmented and uncoordinated. They include about 1,000 different schemes operating simultaneously. Pension rights and benefits are not portable between rural and urban pension schemes, within urban schemes or within rural schemes. Coverage rates remain low, on average, and especially for rural elderly. In 2008, around 50% of urban employees were insured, while, among rural employees, only 12% were covered by the public pension system.

The basic pension amounts to 20% of average urban wages, while providing much lower pensions in the rural areas. The reform of 1990's introduced individual accounts that were meant to "top up" the basic pension in the urban areas. However, with contributions being used to pay the current pension outlays, these accounts are basically empty. In addition and as a side-effect of urbanization and modernization in China, the family has lost its role as the traditional provider of pension in rural areas.

Many workers do not pay into the pension fund as they doubt the sustainability of the system and the future of returned benefits. Local governments, who are responsible for coordinating pension funds, are facing the most severe financial constraints. Several cases of fraud were reported in the past, and pensions were used to finance other "projects" of local governments.

Adding to the future fiscal burden, China’s population is aging rapidly. The ratio of above 65-years old to the working population (i.e. to those aged 15-64 years) is expected to increase from some 11% at present to 38% by 2050 on current trends. This would represent one of the fastest ageing in the world among major economies.

In its current composition, the pension system is not sustainable. It could be made sustainable, however and according to simulations by the OECD, by substantially raising the retirement age (up to 65), thereby cutting the number of persons of retirement age by half over the next two decades. Such a change could reduce pension expenditure by 1-1½ percentage point of GDP, enough to not only ensure stability, but also allow
for a possible raise in the replacement ratio, see graph 4. Nonetheless, high contribution rates are an obstacle for higher coverage, causing a dilemma to reform. This creates additional uncertainty and sets a further important incentive to save.

**Graph 4: Current pension system in stark need of reform on current trends**

As part of its public-service system reform, the Chinese government announced its objective to establish a universal pension system by 2020, whilst recognising that it will be very challenging to extend the coverage to the rural population.

**Increased flexibility in the labour market is not (yet) combined with enhanced security**

Job uncertainty and work injuries are other major sources for precautionary savings in China. Before the establishment of a contract employment system in 1983, urban workers enjoyed a life-long job guarantee and basic work-injury insurance. As several SOEs laid off workers in the late 1980s and 1990s, job uncertainty increased. In 1986, China first introduced an unemployment insurance system which was reformed in 1999 as the State Council adopted the “Regulations on Unemployment insurance”.

The current system covers in particular employees in larger cities. In 2005, 41% urban employees were covered by the unemployment insurances compared to 14% of the total labour force. A further 48% of urban employees were covered by the work-injury insurance. Cover-rates are unequally distributed not only between larger and smaller cities (or the rural areas) in China, but also across income levels, reflecting a discrimination against above all the poor in smaller cities, see graph 5.

**Graph 5: Coverage vary across poverty status and per-capita income quintiles**

The levels of unemployment allowances are set by local governments. Regulations require the level to be higher than those used in minimum living standards schemes for urban residents, but lower than the local minimum wage, averaging a modest 398 CNY per month.

Importantly, most migrant workers are not employed formally and therefore largely excluded from these benefits. In 2008, merely 7% of the migrant workers were covered by unemployment insurance and 22% by work-injury insurance. According to the 2008 labour-law reform, the government is responsible for providing unemployment insurance and eliminating discrimination between workers with urban and rural residency. Furthermore, by making written contracts mandatory, the new Labour Contract Law aims to improve the conditions of especially migrant workers. However, it remains to be seen if these laws will be able to also reduce precautionary savings as the enforcement of laws within the substantial informal sector remains a major challenge for the Chinese authorities.

**Education – a household investment "for a better future"**

The primary education system has expanded rapidly in China, to ensure that all children have at least 9 years of (free) schooling. School fees have
been abolished throughout the country for primary education since 2008, while text books are provided free of charge in the disadvantaged western part of China. Moreover, new entrants to universities have increased by 60% from 2003-2008, although university fees remain largely paid by the students and their families.

To cater for secondary and tertiary education, households use some 30-36% of their annual incomes, according to a survey by the National Bureau of Statistics in 2009. Annual average college fees in China’s universities amounts to 5,000 CNY, which can correspond to an average annual income in rural China and 30% of that in urban China. In fact, with college fees varying greatly across regions, they correspond to some 50-300% of rural annual income (ranging from 2,980 CNY in rural Gansu to 11,668 CNY in rural Beijing) and some 25-130% of urban income. Thus, especially in poor provinces, annual education fees would require several years’ savings. By the end of 2008, financial assistance to poor students was raised to 1,196 CNY annually, which is still too low to fully finance an education.

Education is considered a key tool for social mobility and to help reduce income differentials over time. Many Chinese families try to do their utmost to save in order to be able to afford a good education for their often only child.

**Affordable housing can be a further challenge**

Privatisation of the housing stocks since 1990’s caused a marked increase in home ownership. Following a general urban housing reform in 1992, state-supported welfare housing was replaced by the establishment of a real-estate market. By 2007, the share of home owners had increased to 82% (up from 17% in 1990). In 2008, 7% of disposable income was used for home purchases and construction expenditures compared to less than 1% in 1990.

Housing prices have increased fast, especially in major cities with prices rising more rapidly than average disposable incomes in the past decades. Access to affordable housing has, as a result, become increasingly limited.

According to a survey in 2005, the ratio between housing prices and household annual incomes in larger cities was around 20:1, which is significantly higher than the value of 2:1 to 5:1 recommended by the World Bank. In fact, the ratios of Xiamen (27:1), Beijing and Shanghai (both 25:1) are markedly higher than some major Western cities such as London and New York (both 7:1).

**Could gender development also play a role?**

Beyond these traditional explanations for precautionary savings, a study by Wei and Zhang points to the sex ratio as an important factor reinforcing savings over the past two decades. Based on both cross-regional and household-level evidence, they suggest that the steady increase in the share of male offsprings (from China’s one-child policy) forces Chinese parents with sons to raise their savings even further to increase their son’s relative attractiveness for marriage.
Weak income growth also behind the falling consumption share

Together with the rise in precautionary savings, a relatively weak total income growth (i.e. a rate of household-income growth that did not keep up with GDP growth) explains the decline in the consumption share of GDP. The share of incomes to GDP declined from 68% in 1992 to 58% in 2008, also due to a massive labour-shedding that started in 1997.

Aziz and Cui identify in an IMF working paper that the across-the-board decline in wages; investment income and government transfers as markedly more important than the rise in the savings rate behind the fall and low level of the consumption share. They point to weaknesses in the financial sector as particularly important in keeping wage and investment income shares low and on a declining trend, whilst also underlining the importance of the 1990s SOE-reforms for the decline in government transfers to extremely low levels in an international comparison.

While a decline in the household total income's share can be noted across all main categories, it was particularly strong for wages, being the largest income component. Indeed, wage growth has underperformed productivity development over at least 5 years (with average wage growth of 16%, while labour productivity increased by 22%), further boosting the profit share at the expense of the wage share. With ample supply of cheap labour, the slack in the labour market was sizeable, thereby putting a lid on wage growth. This may be a valid explanation behind the low wage share, but not necessarily its continued decline (unless labour supply rose all the more rapidly).

The earlier ban on trade unions might also have played an important role in explaining the weak wage performance.

If wage growth was so low, why did not employment pick up more (which would have kept the wage share constant)? Aziz and Cui argue that it is the sustained difficulties for firms to obtain financing than explains the co-movements in employment, household income and consumption. In particular, based on firm-level evidence, the paper suggests that borrowing constraints was an important factor in limiting firm’s employment growth.

Households also missed out on the rise in the profit share, which were generally kept in the firms, certainly as regards the SOEs, which pay very limited dividends to the government, that in many other countries are used to provide public goods. Moreover, ownership of Chinese firms is limited and, as regards bank deposits, the cap on interest rates implied a trend reduction in interest earnings for households.

Is a "golden age for consumption" now around the corner?

China has now reached a development stage which could point to a "golden age for consumption" according to a Morgan Stanley report of late 2010. This report draws an analogy from China's stage of development to that of Japan in 1969 and Korea in 1988. According to a so-called "U-curve theory", private consumption is gradually depressed during the early stages of industrialization as the investment intensity rises. At a certain development level, the economy reaches an inflection point, after which the consumption share rebounds (making for a U-shaped consumption-share curve). According to the report, China has reached this inflection point and the consumption-to-GDP-ratio could be expected to grow by 5 percentage points until 2020 (or by 0.7 percentage point per year).

Some other reports argue that not only the investment, but also savings ratio could decline in the coming years, albeit gradually. On the basis of projected structural developments, including expected changes in the economic structure, urbanization and demographics, saving and investment shares would both decline, slightly, in the coming years thereby further strengthening the arguments that the consumption share could be on the rise.

Confidence indicators would, however, point to continued cautiousness among households, suggesting that the scope for a (large) reduction in the savings rate is limited. Confidence in China’s economic situation has been increasing, while the outlook for the individual’s own economic situation has been declining. Despite the fact that most Chinese citizens have shown increasing confidence in their country’s economic situation (up steadily over the past five years), their...
confidence in their own economic situation has been decreasing substantially since 2005 (see graph 7). If these diverging trends are sustained, household savings are likely to remain high in China.

Graph 7: Better confidence in China than in the individual’s own situation

A sizeable and lasting increase in the consumption share can therefore not be taken for granted. Other examples from emerging-Asian countries point to the existence of a middle-income trap where the level of consumption did not increase in a sustained manner. That said, the consumption share is unusually depressed in China.

Policies could speed up such a process...

Policies could prove critical to strengthen the pace of a possible future pick-up in the consumption share. There is no "quick fix" for a country as large as China at its current development stage. A comprehensive set of policies would therefore be needed to:

- address the underlying causes for the high precautionary savings, in particular by a renewed focus on improving the social-security system;
- strengthen redistributional measures, incl. a reduced taxation on labour income; and
- speed up and enlarge reforms of the economy’s supply side (incl. accelerating reforms of the financial sector; reforming the household-registration system; and allowing for a broad-based nominal appreciation of the exchange rate).

First, addressing the shortcomings in the current public-services systems for health care, pensions and unemployment; as well as a lack of affordable education and housing (all discussed at some length above) in a significant and sustainable way could clearly affect the savings propensity going forward.

Second, measures to strengthening the redistribution of income and wealth could be important as the savings propensity typically differs across income brackets. It could also serve to fulfill the authorities’ ambitions of reducing the (currently widening) income gap. Such measures could cover reforming the minimum wage; raising the minimum threshold for the personal income tax to reduce the tax burden on middle- and low-income households; and increasing the marginal tax rate for high income brackets.

Third, reinforcing and extending reforms of the economy’s supply side ought to be a central component in any attempt of rebalancing China’s growth model. The Chinese authorities do aim for a reduction of the dominance of heavy industry by promoting both an industrial upgrade (which would typically go hand-in-hand with higher wages) and the services sector (that is usually more job-rich). But some of these ambitions are not new, so the focus must now be on a forceful implementation.

The financial services sector has a particularly important role to play (through its function of optimizing capital allocation). Further reforms and opening up to foreign and private capital would be essential. Limited access to financing is, for example, often reported as a constraining factor for SMEs, which are usually key for the development of the services sector. Thus, ensuring a greater level-playing field between different operators is important (noting the still close relationship between state-controlled banks and SOEs / bigger firms). Boosting deeper capital markets and fostering the development of the consumer-finance industry in a sustainable manner are other examples. Finally, the development of the insurance sector, with e.g. life and health insurances or corporate annuity schemes, could
also help in reducing households' precautionary savings.

Supply-side reforms could usefully support the ongoing urbanisation further, e.g. by addressing the household-registration (so-called Hukou) system that is currently hampering mobility.

Lastly, enhancing the pace with which the Chinese exchange rate appreciates would allow it to move more quickly "towards a market-determined exchange-rate system, enhancing exchange-rate flexibility to reflect underlying economic fundamentals" as declared at the G20 summit in Seoul. This would not only facilitate the shift of resources from the tradable to the non-tradeable sector (thus support the shift from manufacturing to the services sector), but would also provide an important help in the current combat of inflationary pressures in China. The latter could prove essential in order to lessen the task for other measures, such as interest-rate hikes, that may otherwise cause a hard(er) landing of the Chinese economy.

...but "fiscal constraints" at the local level limits room of manoeuvre

"Lack of financing capability" at the local level is, however, often advanced as a major obstacle for extensive reforms.

It may come across as surprising that a country with the largest foreign-exchange reserves in the world and a high savings ratio across all sectors would have difficulties to cater for needed reforms.

The current fiscal and tax system is undoubtedly putting a high burden on local governments. As outlined by Aziz and Cui, the "enterprise restructuring in 1990s transferred the social expenditure to local governments" while "at the same time, the re-centralization of revenues in 1994 reduced the share of local government in total revenues". The public-service system is thus mainly provided through local governments, who do not have the means to fully finance them.

Disadvantaged regions are the hardest hit in the absence of a well-developed and sophisticated transfer mechanism. Their tax bases are typically weaker and the needs greater, while there is no formalized fiscal transfer mechanism from central to local or from rich to poor provinces. As discussed earlier, the quality of public services varies from province to province, increasing inequality and uncertainty.

As also outlined in the most recent IMF's Article IV Report, the central government is aware of these problems and seems willing to e.g. increase transfers to poorer regions and modernize property taxation.

"Size matters" and building up also a basic coverage for e.g. pensions quickly add up to sizeable amounts in a country with more than 1.3 bn. inhabitants, ageing rapidly, and where GDP / capita stands at € 4.500 only as of the end of 2010.

Strong vested interests make major reforms to improve the public services and/or the fiscal system challenging. Enforcing laws and monitoring local governments has also proven difficult in the past in China. Thus, while progress can be expected regarding public services and the financing thereof, changes are expected to be relatively limited, not least given a general preference for "gradualism" by the Chinese leadership.

Rising dividends paid by SOEs and earmark these revenues for improved public services could be easier to obtain from a political point of view. SOEs are exceptionally favourably treated with access to financing, subsidies on energy; and limited or no dividend paid at present. In 2009 net profits from SOEs accounted €78bn (CNY 702bn), but dividend payments to the Ministry of Finance totalled merely €5.9bn (CNY 44bn), or less than 6%, being even lower than the ratio of China's personal income tax. While rising dividends may improve the situation somewhat, it is unlikely to generate enough capital to allow for a fundamental reform of the social-security systems.

All in all, the easiest solution for the leadership is to focus on total income developments ahead, where there are some reasons to expect a pick-up in the years to come. Assuming that the savings rate were to be kept constant, the question is then if income could be expected to grow faster than GDP (or not), which would allow for a parallel increase in the consumption share?

First, wage increases could be expected to increase more rapidly as the economy approaches the 2nd Lewis turning point (where first, the initial labour
surplus has been largely absorbed in a "two-sector economy", i.e. from the agriculture to the industrial sector in the case of China, and second, where the gap in marginal productivity between the two sectors is about to close).

Second, growth could become more "job-rich", especially if the service sector started to catch up. The services sector has, despite political objectives to the contrary, been on a declining trend in China as a share of GDP and is by now well below that of developing peers. It is also below the levels of Japan and Korea at the corresponding development stage. Reflecting improved living standards, the demand for services could be expected to rise. Combined with possible stronger incentives in the upcoming FYP, a rapidly expanding services sector should contribute to increase the labour intensity in the economy and thereby a higher income share.

Maybe not a rebalancing of growth, but of the wage / profit share in the cards

Policies are set to go in the right direction, but progress is at risk of being slow and incremental. That would suggest steady, but small increases in the consumption share within the next five-year period. The Chinese authorities face formidable challenge in re-shaping their growth model.

Financing at the local level remains a major obstacle. The rebalancing of the economy towards stronger domestic demand will also require changes in various interest groups' access to cheap land, energy and financing, which may not be easy.

Low-paid worker, being a potential threat to the social stability as illustrated by a number of strikes at the summer of 2010, could suggest that the time is ripe to at least allow for a rebalancing of the profit and wage share.
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