What does a "good" Chinese adjustment look like?

By Michael Pettis · September 1, 2014

I have always thought that the soft landing/hard landing debate wholly misses the point when it comes to China's economic prospects. It confuses the kinds of market-based adjustments we are likely to see in the US or Europe with the much more controlled process we see in China. Instead of a hard landing or a soft landing, the Chinese economy faces two very different options, and these will be largely determined by the policies Beijing chooses over the next two years.

Beijing can manage a rapidly declining pace of credit creation, which must inevitably result in much slower although healthier GDP growth. Or Beijing can allow enough credit growth to prevent a further slowdown but, once the perpetual rolling-over of bad loans absorbs most of the country's loan creation capacity, it will lose control of growth altogether and growth will collapse.

The choice, in other words, is not between hard landing and soft landing. China will either choose a "long landing", in which growth rates drop sharply but in a controlled way such that unemployment remains reasonable even as GDP growth drops to 3% or less, or it will choose what analysts will at first hail as a soft landing – a few years of continued growth of 6-7% – followed by a collapse in growth and soaring unemployment.

A "soft landing" would, in this case, simply be a prelude to a very serious and destabilizing contraction in growth. Rather than hail the soft landing as a signal that Beijing is succeeding in managing the economic adjustment, it should be seen as an indication that Beijing has not been able to implement the reforms that it knows it must implement. A "soft landing" should increase our fear of a subsequent "hard landing". It is not an alternative.

Surprisingly enough until the announcement last month that Zhou Yonkang was under investigation, Premier Li has been pretty insistent that China will make its 7.5% growth targets, even as many analysts have lowered their expectations (Moody's and the IMF are now saying that 6.5% is a possibility), and it is clear that President Xi is taking far more responsibility for and control of the economy than any recent president. My guess is that as the problems of the real estate sector kick in, with lower prices causing a drop in real estate development, which matters for employment, we are likely to see additional stimulus spending aimed at managing the threat of unemployment and, perhaps more importantly, at managing the possibility of rising anger among provincial elites as the glorious prospect of easy money continues to retreat.

This, to me, is the explanation for the rather surprising insistence by Premier Li in June that 7.5% GDP growth was a hard target. GDP targets are part of domestic signaling about the expected pain of adjustment. I suspect that lower growth targets are likely to generate greater opposition.

Certainly it does seem that growth has temporarily bottomed out. According to this June's *Financial Times* "Expenditure by local and central governments in China jumped nearly 25 per cent from the same month a year earlier, a sharp acceleration from the 9.6 per cent growth registered in the first four months of the year, according to figures released by the finance ministry," and HSBC's Flash PMI index suggests for the first time in six months that there has been an expansion in manufacturing, although the flash index is, of course, preliminary and may be revised.

Can Beijing rein in credit?

There should be nothing surprising about the improvement in some of the numbers. The "soft landing" that we are seeing is a consequence of credit growth. It means that it is proving politically hard to implement reforms as quickly as some in the administration would like, and it also means that we are getting closer to debt capacity constraints. We would be better off with the long landing scenario, in which GDP growth rates drop sharply but manageably by 1-2 percentage points every year.

I have written many times before that what will largely determine the path China follows is the political struggle the Xi administration will have in imposing the needed reforms on an elite that will strongly resist these reforms – mainly of course because these reforms must necessarily come at their expense. As an aside my friend, Ken Miller, with whom I was having a very different discussion last week, just sent me one of his favorite John Galbraith quotes (from *The Age of Uncertainty*) that seemed apropos.

People of privilege will always risk their complete destruction rather than surrender any material part of their advantage. Intellectual myopia, often called stupidity, is no doubt a reason. But the privileged also feel that their privileges, however egregious they may seem to others, are a solemn, basic, God-given right. The sensitivity of the poor to injustice is a trivial thing compared with that of the rich.

Although I don't think China's economy is adjusting quickly enough, especially credit growth, I remain cautiously optimistic that Beijing knows what it must do and will be able to pull it off. In an older issue of my blog, I tried to place the last 3-4 decades of Chinese growth in a historical context that recognizes four different stages of this growth process. By doing so I try to show how China's own recent history can help us understand how to consider the policies President Xi must implement.

The first stage of China's growth story, which occurred mainly during the 1980s, consisted of liberalizing reforms that undermined the Communist elite and which were strongly opposed by them. Because power was highly centralized under Deng Xiaoping, however, including a loyal PLA, he and the reform faction were nonetheless able to force through the reforms.

The next two stages of growth, I argued, required policies that had a very different relationship to the interests of the Chinese elite. Because they involved the accumulation and distribution of resources to favored groups whose role was to achieve specific economic targets, they helped to reinforce the wealth and power of a new elite, many of whose members were, or were related to, the old elite. Not surprisingly this new elite strongly supported the growth model imposed by Beijing during these stages.

The fourth stage, I argued, is the stage upon which we are currently trying to embark. In an important sense it involves liberalizing reforms similar politically to those that Deng imposed during the 1980s, making it vitally important to their success that the current administration is able to centralize power and create support to overcome the inevitable opposition, which it seems to be doing.

This is why, even though Beijing doesn't seem to have yet gotten its arms around the problem of excess credit creation, I nonetheless think it is moving in the right direction. For now I would give two chances out of three that Beijing will manage an orderly "long landing", in which growth rates continue to drop sharply but without major social disruption or a collapse in the economy. In this issue of the newsletter I want to write out a little more explicitly what such an orderly adjustment might look like.

Will financial repression abate?

The key economic policy for China over the past two decades has been financial repression. There have been three components to financial repressive policies. First, by constraining the growth of household income and subsidizing production, China forced up its savings rates to astonishingly high levels. Second, by limiting the ways in which Chinese households could save, mostly in the form of bank deposits, Beijing was able to control the direction in which these savings flowed. Finally, Beijing controlled the lending and deposit rates and set them far below any "natural" level.

Very low interest rates had several important impacts. First, because they represented a transfer from net savers to net borrowers, they helped to exacerbate the split between the growth in household income (households are net savers) and the growth in GDP (which is generated by net borrowers), and so led directly to the extraordinary imbalance in the Chinese economy in which consumption, as a share of GDP, has declined to perhaps the lowest level ever recorded in history.

Second, by making credit extremely cheap for approved borrowers, it created among them an almost infinite demand for credit. Financial repression helped foster tremendous growth in economic activity as privileged borrowers took advantage to borrow and invest in almost any project for which they could get approval.

Third, when China desperately needed investment early in its growth period, this growth in economic activity represented real growth in wealth. But low interest rates, along with the moral hazard created by implicit guarantee of nearly all approved lending, led almost inevitably to a collapse in investment discipline. Financial repression has been the main explanation for the enormous misallocation of capital spending we have seen in China during the past decade.

This is why understanding financial repression is so important to understanding the way in which China will adjust. There are two ways to think about the "cost" of financial repression to net savers. The least sophisticated but easiest to explain is simply to look at the real return on loans and deposits. In this case you would subtract the appropriate deflator from the lending or deposit rate.

In the US we usually use CPI inflation as the deflator, but for many reasons this won't do in China. Consumption is a much lower share of GDP in China than in the US or anywhere else, so that it is less "representative" of economic activity, and there is anyway a great deal of dispute about the rate at which the consumption basket is actually deflating (Chinese households seem to think it seriously understates inflation). I prefer to use the GDP deflator, which until about 3-4 years ago was in the 8-10% region and currently runs around 1-2% or even less, depending on the period you are looking at.

Using the GDP deflator suggests that the real rate for savers has been very negative for most of this century until the past three years – with savers implicitly losing perhaps as much as 5-8% of their real savings every year. It also suggests that the real rate for borrowers has also been negative, perhaps by 1-3% for most of this century. Clearly these interest rates are too low, especially for a very volatile, poor, and rapidly growing economy.

The more appropriate measure of financial repression is not the deflator, whichever one we choose to use, but rather very roughly the gap between the nominal lending rate and the nominal GDP growth rate, the latter of which broadly represents the return on investment within the economy. Until a few years ago nominal GDP grew at around 18-21% while the lending rate was around 7%.

This is a huge gap. In this case the "cost" of financial repression to households was the gap between nominal GDP growth and nominal lending rates, plus an additional 1-1.5% to account for the larger than normal gap between the lending rate and the deposit rate. This is because in China the gap between lending and deposit rates during this century has been much higher than in other developing countries, probably as part of the process of recapitalizing the banks after the last banking crisis at the turn of the century.

If you multiply the sum of these two gaps by the total amount of household and farm deposits (very roughly around 80-100% of GDP a few years ago, when I last checked), you get an estimate of the total transfer from the household sector to banks and borrowers. Because I think China's nominal GDP growth has been overstated by a substantial amount because of its systematic failure to write down bad loans, I usually have subtracted 2-4 percentage points from the nominal GDP growth rate before I did my very rough calculation. This was how I got my 5-8% of GDP estimate for the amount of the annual transfer from households to borrowers. This of course is a huge transfer, and can easily explain most of the decline in the household share of GDP over this period.

It is worth noting by the way that a recent widely-discussed study by Harry Wu of the Conference Board claims the China's average GDP growth from 1978 to the present was not 9.8% but rather 7.2%. The main reason for the revision, according to Wu, is that the GDP deflator had been significantly underestimated which, if even partially true, means real interest rates were even lower (more negative) than I have assumed.

There is some controversy about whether it is true that the nominal lending rate should be broadly equal to the nominal GDP growth rate. In fact most studies of developed countries suggest that over the medium and long term this is indeed the case. UBS tried to show that this was not applicable to China and did a study several years ago showing that among developing countries this relationship didn't hold. Their studies suggested that among developing countries nominal lending rates had on average been around two-thirds on nominal GDP growth rates (although China, at around one-third, was still well below anyone else's at the time).

I had a real problem with their sample of countries however. Their sample included a lot of small OPEC countries, who necessarily had high growth and low interest rates when oil prices were high, as well as a lot of Asian countries that followed the Japanese development model and themselves practiced financial repression, which of course made them pretty useless as points of comparison. Neither group of countries, in other words, could help us determine what a "normal" interest rate is compared to nominal GDP.

But regardless of the debate, the point to remember is that when the nominal lending rate is much below the nominal GDP growth rate, two very important things happen. First, it helps eliminate capital allocation discipline. If GDP is growing nominally at 20%, for example, and you can borrow at 7% (which was the case in China for much of this century), you should rationally borrow as much as you can and invest it into anything that moves, no matter how poorly thought out the investment. Imagine a totally ineffective investor, or one whose incentives do not include earning a reasonable return on capital, who manages to earn on his investment only half of nominal GDP. This would be a pretty poor use of capital.

Adjusting the repression gap

But with nominal GDP is growing at 20%, this extremely incapable investor still makes a substantial profit by borrowing at 7% and earning 10%, even though his investment creates no value for the economy. His "profit", in this case, is simply transferred from the pockets of saving households.

Under these conditions it should be no surprise that borrowers with access to bank credit overuse capital, and use it very inefficiently. They would be irrational if they didn't, especially if their objective was not profit but rather to maximize employment, revenues, market share, or opportunities for rent capture (as economists politely call it).

The second point to remember is that in a severely financially repressed system the benefits of growth are distributed in ways that are not only unfair but must create imbalances. Because low-risk investments return roughly 20% on average in a country with 20% nominal GDP growth, financial repression means that the benefits of growth are unfairly distributed between savers (who get just the deposit rate, say 3%), banks, who get the spread between the lending and the deposit rate (say 3.5%) and the borrower, who gets everything else (13.5% in this case, assuming he takes little risk – even more if he takes risk).

This "unfair" distribution of returns is the main reason why the household share of income has collapsed from the 1990s until recently. I calculate that for most of this century as much as 5-8% of GDP was transferred from households to borrowers. The IMF calculated a transfer amount equal to 4% of GDP, but said it might be double that number, so we are in the same ballpark. This is a very large number, and explains most of why the growth in household income so sharply lagged the growth in GDP.

This was why financial repression, although useful in the early stages of China's growth period because it turbocharged investment, ultimately became one of the county's biggest problems once investment no longer needed turbocharging. For many years nominal GDP growth in China was 18-21% and the official lending rate was around 7%. This, combined with widespread moral hazard, had inevitably to result in both tremendous misuse of capital and a sharp decline in the consumption share of GDP (as the household income share declined) – both of which of course happened to a remarkable degree in China.

In the last year or so, however, the official lending rate has risen to 7.5% and nominal GDP has dropped to 8-9% (and just under 8% in the first quarter of 2014). This changes everything in China. First, it is now much harder for borrowers to justify investment in non-productive projects because they can no longer count on the huge gap between nominal GDP growth and the lending rate to bail them out of bad investments. Of course this also means a dramatic slowdown in economic activity, but because this slowdown is occurring by the elimination of non-productive investment, the slowdown in Chinese growth actually represents higher wealth creation and greater real productivity growth. China is getting richer faster now than it did before, even though it looks like wealth creation is slowing (the difference is in the slower required accumulation of bad debt).

Second, the huge transfer from net savers to net borrowers has collapsed, so that growth in the future must be far more balanced. Over time this means that households will retain a growing share of China's total production of goods and services (at the expense of the elite, of course, who benefitted from subsidized borrowing costs) and so not only will they not be hurt by a sharp fall in GDP growth, but their consumption will increasingly drive growth and innovation in China.

Interest rates are still too low, but not by nearly as much as in the past, and over the next two years as nominal GDP growth continues to drop, the financial repression "tax" will be effectively eliminated. When this happens solvent Chinese businesses will be forced to use capital much more productively, and slowly they will learn to do so. In that case the PBoC will be able to liberalize interest rates (although not without tremendous political opposition from those that have depended on having great access to very cheap capital for their wealth) without worrying about either the deposit rate of the lending rate surging.

There is, however, one group of wasteful borrowers for whom higher interest rates will not represent a more careful approach to borrowing and investing and these, of course, are borrowers that are already effectively insolvent or otherwise unable to repay loans coming due. In that case as long as they can borrow they will do so, no matter the interest rate. It is not clear to me how many such borrowers exist, but I'd be surprised if there weren't an awful lot of them. These borrowers can only really be disciplined by constraining credit growth and eliminating government support, including implicit guarantees, but this might not be happening.

One of the ways Beijing seems to be reducing the pain of more expensive borrowing (relative to nominal GDP growth) is to loosen credit in a targeted way. We have heard talk of targeted bond purchases although it is not yet clear what exactly Beijing plans to do. An article in *Caixin* suggests that regulators may also be trying to relax the loan to deposit constraint:

The China Banking Regulatory Commission (CBRC) will change the rules for figuring the loan-to-deposit ratio so banks can have more money to lend to businesses, an official with the regulator says. The requirement that the ratio not exceed 75 percent – meaning banks cannot lend more than 75 percent of their deposits out – would remain the same, but the way ratio is calculated would be adjusted, Wang Zhaoxing, deputy chairman of the CBRC, said June 6.

The regulator would consider broadening the scope of deposits to include "relatively stable" funds that are not now used to calculate the ratio, he said. He did not say what the funds could be, and added that a precondition for doing this was keeping the money market stable.

I suspect that over the next few months we are going to get very inconsistent signals about credit control. But as long as the PBoC can continue to withstand pressure to lower interest rates – and it seems that the traditional poor relations between the PBoC and the CBRC have gotten worse in recent months, perhaps in part because the PBoC seems more determined to reduce financial risk and more willing to accept lower growth as the cost – China will move towards a system that uses capital much more efficiently and productively, and much of the tremendous waste that now occurs will gradually disappear. Just as importantly, lower growth will not create social disturbance because Chinese households, especially the poor and middle classes, will keep a larger share of that growth.

So what does "good" rebalancing look like?

It seems pretty clear to me that the great distortions in the Chinese economy that led both to rapid but unhealthy growth and to the consumption imbalance (by forcing down the household income share of GDP) are gradually being squeezed out of the system. One distortion has been the excessively low exchange rate, but after seven years of 30-40% net appreciation against the dollar, the RMB is far less undervalued today than it has been in the past. I still do not agree, however, with analysts who say the currency is actually overvalued and call for a depreciation, nor, more importantly, does the PBoC seem to agree.

Another one of the great distortions that led to China's current imbalances was the very low growth in wages relative to productivity. This too has improved. The surge in wages in 20010-11, and their continued relatively rapid pace of growth, has reduced this distortion significantly, especially as it is becoming increasingly clear that productivity growth has been overstated in recent years.

Most importantly, with nominal GDP growth rates having dropped from 20% to 8-9% the greatest of all the distortions, the interest rate distortion, has been the one most dramatically to adjust in the past three years. This is why even though many people I respect are still insisting that China has not really rebalanced I am moderately optimistic that in fact China is adjusting as quickly as could be expected. Credit growth remains a serious problem, but the forces that put China in the position of relying on excess credit growth have genuinely abated.

And it is this abatement of the great distortions that have caused growth to slow so rapidly, and although we haven't seen much evidence of significant rebalancing yet, it should take a few years for the effects fully to be worked out. Chinese growth is less dependent than ever on the hidden transfers from the household sector, and these transfers both encouraged massive waste and created the imbalances that required this massive waste to continue.

China is still vulnerable to a debt crisis, but if President Xi can continue to restrain and frighten the vested interests that will inevitably oppose the necessary Chinese economic adjustment, he may in the next one or two years be able even to get credit growth under control, before debt levels make an orderly adjustment impossible.

It won't be easy, and already there are many worried about the politically destabilizing impact his measures may have. The *Financial Times*, for example, had the following article:

Mr Xi came of age in that turbulent time and watched as his elite revolutionary family and everything he knew were torn to pieces. Now it seems it is his turn to wreak havoc on the cozy networks of power and wealth that have established themselves in the era of "socialism with Chinese characteristics". In recent weeks, the president's signature campaign against official corruption appears to have spilled into something more significant and potentially destabilising for the increasingly autocratic regime.

Clearly there are many risks to Xi's political campaign, and unfortunately I have no special insight into how these are likely to play out, but if Xi is able to consolidate power enough to impose the reforms proposed during the Third Plenum, Chinese growth rates will continue to decline sharply but in an orderly way. Average growth during the decade of his administration will drop to below 3-4%, but an orderly adjustment means that not only will the hidden transfers from the household sector be eliminated, they will also be reversed.

If China can reform land ownership, reform the hukou system, enforce a fairer and more predictable legal system on businesses, reduce rent-capturing by oligopolistic elites, reform the financial system (both liberalizing interest rates and improving the allocation of capital), and even privatize assets, 3-4% GDP growth can be accompanied by growth in household income of 5-7%. Remember that by definition rebalancing means that household income must grow faster than GDP (as happened in Japan during the 1990-2010 period).

This has important implications. First, the idea that slower GDP growth will cause social disturbance or even chaos because of angry, unemployed mobs is not true. If Chinese households can continue to see their income growth maintained at 5% or higher, they will be pretty indifferent to the seeming collapse in GDP growth (as indeed Japanese households were during the 1990-2010 period). Second, because consumption creates a more labor-intensive demand than investment, much lower GDP growth does not necessarily equate to much higher unemployment.

A "good" and orderly adjustment, in other words, might look a little like this:

1. GDP growth must drop every year for the next five or six years by at least 1 percentage point a year. If it drops faster, the period of low growth will be shorter. If it drops more slowly, the period of low growth will be stretched out. On average, GDP growth during President Xi's administration will not exceed 3-4%.

2. But this does not mean that household income growth will drop by nearly that amount. Rebalancing means, remember, that household consumption growth must outpace GDP growth, and the only sustainable way for this to happen is for household income growth also to outpace GDP growth.

If consumption grows by four percentage points more than GDP, Chinese household consumption will be 50-55% of GDP in a decade – still low, but no longer exceptionally low and quite manageable for the Chinese economy. This suggests that if investment growth is zero and the trade surplus does not vary much, 3-4% GDP growth is consistent with 6-7% household income growth. It might be in principle possible to pull this off if Beijing is able to transfer 2-4% of GDP from the state or elite sector to the household sector by reforming the hukou system, land reform, privatizations, and other transfers, but of course we shouldn't assume that this level of household income growth will be easy to maintain once investment growth, and with it GDP growth, drops sharply.

3. What about employment? If investment growth falls sharply, especially investment in the real estate sector, it should cause unemployment to surge, which of course puts downward pressure on household income growth as well as on consumption growth, potentially pushing China into a self-reinforcing downward spiral. This, I think, is one of the biggest risks to an orderly adjustment. The good news is that if large initial wealth transfers to households can kick start a rise in consumption, growth driven by household consumption, especially growth in services, tends to be much more labor intensive than the capital-intensive investment growth that too-low interest rates have forced onto China. A transfer of domestic demand from investment to consumption implies, in other words, that employment growth can be maintained at much lower levels of GDP growth.

Alternatively the state sector can mop up unemployed workers by putting them into make-work jobs, even if they are not economically productive – more infrastructure anyone? – but if we do not want this to worsen the imbalances and reverse the adjustment, they key is how these jobs are funded. If the state funds these unproductive workers by borrowing at repressed rates from households, or by otherwise raising direct or hidden household taxes, this way of managing unemployment will indeed serve simply to prevent or even reverse the adjustment process. But if these jobs are funded by the liquidation of state assets, by borrowing at real market rates, or by indirect transfers from the state, they become one of the ways in which wealth is transferred to households, and the Chinese economic can continue to adjust successfully.

4. What about the debt, which is the other great risk to an orderly and successful Chinese adjustment? There are two things China can do to address its substantial debt problem. First, it can simply transfer debt directly onto the government balance sheet so as to clean up banks, SOEs and local governments, thus preventing financial distress costs from causing Chinese growth to collapse. As long as this government debt is rolled over continuously at non-repressed interest rates, which will be low as nominal

GDP growth drops, China can rebalance the economy without a collapse in growth. This, essentially, is what Japan did in the 1990s.

The problem with this solution is that it is politically attractive (no wealth transfers from the elite to ordinary households) but it does not fundamentally address China's debt problem, but rather simply rolls it forward. In that case the burgeoning government debt will itself prevent China, once the economy is rebalanced, from ever regaining rapid growth. I have previously explained why the debt burden can prevent growth in my discussions of why I do not think Abenomics can succeed, if by success we mean raising inflation and real GDP growth. What's more, if a relatively poor, volatile economy like that of China cannot bear the debt levels that a country lie Japan can bear, it is not clear that this solution will work even during the rebalancing period.

A real solution to the debt problem, in other words, may involve initially a transfer of debt onto the government balance sheet, but ultimately Beijing must then take real steps to lower debt relative to debt capacity. This may involve using privatization proceeds to pay down debt, higher corporate taxes, and even higher income taxes if other forms of wealth transfer are robust enough to support them, but one way or another total government debt must be reduced, or at least its growth must be contained to les than real GDP growth.

5. Although it may be hard to see it in the economic ratios, or in any real restraint in credit expansion, in fact Beijing has already taken serious steps towards rebalancing, although it may take a few more years to see this in the consumption share of GDP. The three most important of the transfers that created the imbalance have all reversed. The currency may still be undervalued, but not by nearly the extent it has been in the past, wages have risen quickly in recent years, and, most importantly by far, the financial repression tax has collapsed, and even nearly disappeared, which it will do fully in the next two years as nominal GDP growth continues to fall (as long as the PBoC does not reduce rates by much more than one or two percentage points over the next two years). Even the much-ballyhooed decision to improve the environment represents a partial reversal of one of the sources of the household share imbalance.

All of these mean that the hidden transfers that both generated spectacular growth in economic activity (if not always in economic value creation) and the unprecedented drop in the household income share of GDP no longer exist, or do so to a significantly reduced extent. It will take time for the elimination of these transfers to work themselves fully though the economy, but we are already seeing their very obvious initial impacts in the much lower GDP growth numbers, even as credit creation remains high.

Credit creation remains the great risk to the economy. It is still growing much too quickly. I think there are few people in Beijing who do not understand the risk, so my guess is that political constraints are the main reason that credit has not been more sharply reduced. I believe that the president cannot allow too sharp a contraction in credit growth until he feels fully secure politically, and for me the pace at which credit is brought under control is, to a large extent, an indication of the pace of the process of power consolidation.

The best-case scenario

Although I am still cautiously optimistic that Beijing will pull off an orderly rebalancing, I want to stress that the scenario described above is not my predicted scenario. It is, instead, an examination of the best case of an orderly transition towards a more balanced economy.

As regular readers know I am not very comfortable making predictions, preferring instead to try to understand the structure of an economic system and work out logically the various ways in which that system can evolve. The description above is one of the ways in which it can evolve, and because I think this is probably the best-case scenario, I thought it might prove useful as a way of framing thinking about the adjustment process for China.

One caveat: This is not necessarily the best-case assumption. I can make certain assumptions, which I haven't made because I believe them to be implausible, although not impossible, that lead to a better outcome. If the global economy were to recover much more quickly than most of us expect, and, much more importantly, if Beijing were to initiate a far more aggressive program of privatization and wealth transfer than I think politically possible, perhaps transferring in the first few years the equivalent of as much as 2-5% of GDP, the surge in household income could unleash much stronger consumption growth than we have seen in the past. This could cause GDP growth over the Xi administration period to be higher than my 3-4% best-case scenario.

The amount of the direct or indirect wealth transfer from the state sector to ordinary households is, I think, the most important variable in understanding China's adjustment. The pace of growth will be driven largely by the pace of household income growth, which will itself be driven largely by the pace of direct or indirect wealth transfers to ordinary Chinese households. If we could guess this right, much else would almost automatically follow.