Restructuring and Reform: China 2016
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1. Introduction
Since 2010, China has been grappling with the consequences of the end of the miracle growth era. Economic conditions are changing extremely rapidly. It is obvious that the potential growth rate has been declining for several years, but the associated changes flowing through the economy are complex. The challenge for policymakers is to respond to these dynamic and multidimensional changes, helping to unlock new sources of demand while buffering the shock to declining industries. We know from the experience of Japan and South Korea that adapting to the end of miracle growth is challenging and that finding the appropriate policy mix in this transition is extremely difficult. Indeed, we probably know more about how such policy responses fail than about how they succeed.

Ideally, during this period of slowing growth, policymakers assist the transition with a combination of structural and reform policies. Structural policies should help shift the structure of demand and, to a lesser extent, supply in order to facilitate a new sustainable medium-to-high speed growth phase. The reform policies should adapt institutions and liberalise access to resources in order to facilitate the structural shifts and unlock new sources of growth. Policy is important but, of course, most of the adaptation is achieved by companies and households responding to changing opportunities and prices. Sometimes the most important requirement for effective policy is that it not obstruct the adaptation of business and households. In China, with growth still moderately fast, technology changing quickly, entrepreneurship high and relative costs (especially of labour) changing rapidly, we should expect structural change to be rapid at both the macro and micro levels. The starting point of this paper is the assumption that it would be very surprising indeed if there were no evidence of major changes in the composition of output, that is, no evidence of structural change at the broadest aggregate level.

While there is a fairly widespread view of the Chinese economy that asserts that this kind of structural change is now well under way, this paper critically examines recent data to see whether it does indeed provide evidence of robust structural change. Typically, advocates of this view rely on two types of data: national accounts that show that services produced more than 50 per cent of GDP for the first time in 2015, and employment data showing rapid job creation in the services sector. Section 2 of this paper examines those two data sources and shows that they do not reliably show substantial structural change. In fact, evidence of large-scale structural change is remarkably weak, and this is quite surprising. The paper then discusses the policy background to this apparent lack of restructuring. The focus is on economic reform policy over the past two years. Selecting state enterprise reform and local government debt restructuring, I demonstrate a pattern of inconsistent and unsuccessful economic reform policymaking.
The paper does not demonstrate a link between reform policy failure and slow restructuring, and perhaps such a causal link would be impossible to prove in any case. However, there is a plausible broad relationship between the two. Moreover, new ‘Supply-side Structural Reforms’ were introduced in late 2015/early 2016 precisely in order to accelerate the restructuring process. I argue that the adoption of this policy is a logical response to the failure of existing reform and restructuring. The new policy mix is an improvement, but it is unlikely to result in significant structural change by itself. However, the fact that Chinese policymakers are still adaptable and learning from experience means that we should not be too pessimistic.

2. The End of ‘Miracle Growth’ and Structural Change

The end of a period of miracle growth presents enormous challenges to policymakers. Even the adjustment that should be easiest – lowering growth expectations – flies in the face of normal human habits and aspirations. These adaptations proved very difficult for policymakers in Japan and South Korea at the end of their growth miracles. For China, with 2015 purchasing power parity GDP per capita just over US$13 000 (in 2011 prices), or around 26 per cent of the GDP per capita of the United States, a lot of room for catch-up remains. However, offsetting this positive factor, China faces the difficulties of an especially abrupt and complex transition. The Lewis turning point, the point at which surplus rural labour declines to zero, has just been reached, while at almost the same time, the working age population has begun to decline. As these two important changes kick in, the share of labour force entrants with college educations has soared. In earlier miracle growth transitions, such as in Japan and South Korea, these changes took place more than 20 years apart. Externally, trade has dropped, so the growth generated by export growth has vanished, even though China’s share of world exports has not declined. These changes mean that investment profitability (and productivity) must also be changing very rapidly. Certainly we would expect the growth rate of investment to drop dramatically and the composition of investment to change. Taken together, these forces mean that the Chinese economy is undergoing extremely rapid changes in factor supplies, the structure of demand and, probably, productivity growth. It would not be surprising to see rapid structural change right now.

Broadly speaking, there is agreement about the type of structural change needed: demand should shift to domestic sources, consumption should increase as a share of GDP; a larger share of growth should come in services and high technology sectors; and there should be an improvement in productivity. Of course, at the micro level, there are many sectors where structural change is taking place. In 2015, cement production declined 5.3 per cent, while international air travel increased 34 per cent; electricity production grew only 0.3 per cent, while data transmission on China Mobile’s network grew 152 per cent. There is no question that, as in any economy, some businesses are booming even as others decline. Among this constant change, it is reasonable to ask whether a broad-based restructuring is in fact taking place. The Chinese Government has been releasing data which, to some, show that these transitions are already underway. On closer inspection, however, the data are too limited to support this claim.
2.1 National accounts data

The national accounts data are often used to argue that China has shifted to services sector-driven growth (Figure 1). At first glance, the data appear to strongly support the assertion since between 2011 and 2015 the services sector share of GDP jumped from 44.3 per cent to 50.5 per cent. However, a look at the longer-term trend should alert us to the danger of this type of reasoning: the services share has been increasing since 1980, when it was an extraordinarily low 22.2 per cent of GDP. The steady increase of the services sector share since 1980 would seem to indicate that China’s miracle growth has always been driven by services sector development. In fact, looking at current price shares of GDP can be extremely misleading.

The reality is that the increased services sector share is almost entirely the result of changing relative prices. Between 2011 and 2014, the implicit price deflator for services was just over 5 percentage points higher than the deflator for the secondary sector, and in 2015 the gap was almost 8 percentage points. Industrial ex-factory prices have been falling for the past four years, and the secondary sector implicit deflator has been falling for the past two years. Meanwhile, prices of services have continued to increase, just as we would expect in a labour-intensive sector during a period of rising wages.

The difference in price trends accounts for almost all of the change in the nominal share. Based on constant price data, the increase in services sector share between 2011 and 2015 is only 1.2 percentage points (Figure 2). From 2011 to 2015, less than 20 per cent of the increase in the services sector share of GDP was driven by differences in real growth rates, and over 80 per cent was driven by changes in relative prices. (In fact, the official data indicate similar real growth rates of industry and services over this period, so the change in shares must be a price phenomenon.)
The only long-run generalisation supported by the data is that, since 1993, the share of agriculture has fallen steadily while the shares of industry and services have both grown. This will surprise no one.

![Figure 2: GDP by Sector](image)

Source: National Bureau of Statistics of China

This pattern of relative price changes itself deserves comment. It is, in some respects, a positive development, since it indicates that the relative profitability of investment in services is probably increasing and the profitability of investment in industry is almost certainly decreasing. These relative price changes will contribute to the impetus for future structural change. However, it is the reverse of what one would expect to see if a healthy structural transformation were already underway. Generally speaking, productivity growth is more rapid in fast-growing sectors, so that current price changes in structure are less marked than constant price changes. The fact that this is not true in China might suggest that structural change is only occurring gradually.

The lack of structural change is even more striking when using 2015 constant prices and focusing in on the period from 2007 through 2015 (Figure 3). Despite the enormous changes sweeping the Chinese economy, almost no change in the constant price relative share of the three large sectors can be seen.

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1 Indeed, this is why the current price share of industry in China did not increase between 1978 and 2008: productivity growth was rapid and the relative price of industrial goods was declining.
To be sure, there are problems with China’s national accounts. While they are adequate for rough generalisations, perhaps they are not sufficiently accurate to support broad conclusions about structural change. After all, the discussion here depends on the quality of the deflators used. However, from the limited information we have about the deflators used in calculating services sector growth, it appears that, if anything, they are biased in a way that overestimates real growth of the services sector. That is, they tend to overstate structural change toward the services sector in constant price terms.

Generally speaking, China’s statisticians calculate national accounts by collecting income (revenue) data and then deflating through various expediencies. Among services, the two largest sub-sectors are retail and wholesale trade (9.8 per cent of GDP in 2014) and financial services (7.3 per cent in 2014). In both of these sub-sectors, the deflation procedures that are used appear to understate inflation. In the retail and wholesale trade sub-sector, value added is deflated by the retail goods price index. In an economy where wages are rising while ex-factory prices have been falling since February 2012, the resulting deflator is obviously biased downward and real growth therefore biased upward.

Financial services has four sub-components: money and banking services, capital market services, insurance services and other. For capital market services, value added is calculated based on income data and an implicit deflator is then backed out using a physical output indicator (this is the procedure Chinese statisticians use in many sectors). In 2015, the only physical output indicator used was the volume of turnover on the stock market. For 2015, when stock market

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2 These following two examples come from the vice-head of the National Bureau of Statistics, Xu Xianchun (Xu 2016).
3 This is why they are able to produce GDP estimates so quickly. They attempt to double-deflate as much as possible, but often resort to single deflation.
turnover exploded, this measure overstated the real growth of capital market services as a whole. This is because, while the volume of nominal business grew rapidly, the physical output indicator doubtless grew even more rapidly, since there are economies of scale in stock market trading, and this would lead to a low or negative implicit deflator which is then applied to the whole sub-sector. To compound the problem, the capital market implicit deflator is then also used in the insurance sub-sector, where the deflator is calculated as a weighted combination of the capital market services deflator and a ‘consumption-investment price index’. Again, a low deflator biases real growth of that component upward. These problems are large enough to make a difference. Real financial services growth was officially calculated at 15.9 per cent in 2015. It is a significant part of the overall services sector growth, and indeed accounted for 1.5 percentage points of 2015 GDP growth (NBS 2016a). It is striking that nominal wages (which are rising rapidly) are never used as part of the deflation strategy for these two labour-intensive services sub-sectors. Overstatement of growth in retail and wholesale trade plus financial services would significantly exaggerate the pace of structural change in real terms.4

To be sure, there are services sub-sectors that are growing rapidly, particularly those related to internet services and sales. It is entirely possible that Chinese statistics undercount these services, and no doubt there are errors in various places that could offset the overstatement in wholesale–retail and financial services. But a quick search does not turn up any obvious examples. Indeed, the National Bureau of Statistics recently published the following remarkable statement: ‘Among above-scale service sector firms, the business income of those in high technology services, technology consulting services, strategic emerging services, and cultural and related services grew in 2015 by 9.4 per cent, 8.6 per cent, 12.0 per cent and 11.1 per cent, all higher [sic] than the 9.5 per cent growth rate of all service sector firms’ (trans by author).5 Such relatively small growth rate differentials for the (small) highly dynamic sectors are not going to drive major structural change.

2.2 Employment data

China has reported some impressive numbers on employment creation. Before considering them, we should note that China’s overall employment data have always been a relatively weak part of the statistical reporting system. While precise numbers are collected from large firms that report directly to statistical authorities, coverage of the small-scale economy is spotty and inconsistent. For example, there have been large revisions in the categories of ‘other’ urban workers and some series reported in the China Labour Statistical Yearbook were discontinued in 2012 (Naughton 2007, ch 8).6 In early 2016, Chinese spokesmen regularly claimed that China had created 13.1 million jobs in 2015, following on from the successful performance in 2013 (13.1 million) and 2014 (13.2 million). These figures should be immediately discarded. They are not net figures: they are the aggregate of all local labour bureaus reporting the results of their

4 Note that a faster growing implicit deflator would result both in slower real services sector growth and higher inflation in the services sector, strengthening both sides of the argument presented here.

5 Above-scale firms report their revenue data directly to the State Administration for Industry & Commerce (NBS 2016a). It is extremely unusual for a release from the National Bureau of Statistics to contain an internal inconsistency in a single sentence, as this one does.

6 Moreover, the government encourages confusion caused by the rapid increase in newly registered businesses, most of which come from previously unregistered informal sector businesses.
work supporting employment. Not only are they subject to reporting bias – since they are a success indicator for an agency of government – they are also irrelevant, since we are interested in net job growth, not churn.

A more useful set of numbers is the overall employment data (Table 1). Again, these data highlight what seems to be a remarkable achievement, namely the addition of 14.8 million jobs in the tertiary sector in 2015. This implies new services sector jobs accounted for almost 2 per cent of the 797 million employed persons. However, these data also raise some troubling questions of consistency and plausibility. First, the population at working age (15–59) is now declining rapidly, by some 4.9 million in 2015 (and even more during 2011–14). Together with a net increase of 2 million employed persons, this implies that over the past five years, China has drawn 10 million workers a year from increased labour force participation. This is quite an unusual pattern and it is not strongly supported by other types of data. For example, actual retirement ages remain young in the city and female labour force participation has not obviously increased in recent years.

### Table 1: Change in Labour Force and Employment

<table>
<thead>
<tr>
<th>Working age</th>
<th>Employed</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011–14 average</td>
<td>8.3</td>
<td>2.8</td>
<td>-12.7</td>
<td>1.9</td>
</tr>
<tr>
<td>2015</td>
<td>-4.9</td>
<td>2.0</td>
<td>-8.7</td>
<td>-4.1</td>
</tr>
</tbody>
</table>

Source: National Bureau of Statistics of China

Second, the data show that the secondary sector lost over 4 million jobs in 2015. While it is obvious that some of China’s traditional heavy industries – especially coal and steel – suffered contractions in 2015, a net drop of 4 million workers is surprisingly large. If this number is correct, we may have underestimated the degree of distress currently being experienced by China’s rust belt workers.

Third, the largest source of tertiary sector workers is rural workers leaving the agricultural sector. The official employment data indicate that almost 9 million farmers left agriculture in 2015. To be sure, it is well known that the exodus from Chinese agriculture has been huge, the largest mass movement of people in history. Still, these numbers are very large, as many as during the 2003–07 peak, and the fastest ever in percentage terms. Agricultural labour, by this accounting, declined 18 per cent in the four years to 2015, compared with 16 per cent in the four years to 2007, when workers were flooding into export-oriented manufacturing. This is unlikely to be true. There is substantial evidence that migration from the Chinese countryside began to slow after 2011; in part this is due to the demographic factors that are producing a declining population of working age and, in part, because so many young people have already left the villages.
An alternative source of labour data is based on a large-scale household-based survey of migrant workers, and is relatively transparent (Figure 4; Table 2). The data have been collected since 2008, initially in response to worries about the effect of the global financial crisis. The survey covers 235 000 workers in stratified samples of 8 930 villages in all 31 of China’s provinces. The survey includes information on wages, housing conditions and location, and is grossed up to estimate national totals. In my judgement, this data is preferable to the aggregate employment data. The methodology is straightforward and transparent. Unlike the other employment data, collection is not linked to a local bureaucrat’s success indicators and the results are consistent with the 1 per cent national population sample survey conducted in 2015. These data show structural change slowing dramatically after 2010–12, presumably due to the combined effect of slower labour force growth and weaker labour demand.

![Figure 4: Non-farm Labour Force](image)

**Table 2: Change in Non-farm Workforce**

<table>
<thead>
<tr>
<th>Year</th>
<th>Out-migrant</th>
<th>Local</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4.92</td>
<td>-0.56</td>
<td>4.36</td>
</tr>
<tr>
<td>2010</td>
<td>8.02</td>
<td>4.43</td>
<td>12.45</td>
</tr>
<tr>
<td>2011</td>
<td>5.28</td>
<td>5.27</td>
<td>10.55</td>
</tr>
<tr>
<td>2012</td>
<td>4.73</td>
<td>5.10</td>
<td>9.83</td>
</tr>
<tr>
<td>2013</td>
<td>2.74</td>
<td>3.59</td>
<td>6.33</td>
</tr>
<tr>
<td>2014</td>
<td>2.11</td>
<td>2.90</td>
<td>5.01</td>
</tr>
<tr>
<td>2015</td>
<td>0.63</td>
<td>2.89</td>
<td>3.52</td>
</tr>
</tbody>
</table>

Source: National Bureau of Statistics of China

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7 Specifically, whether a collapse in exports would lead to the reverse flow of a mass of unemployed migrants back to their home villages. In the end, this did not happen.
In 2015, according to the survey data, the increase in non-farm labour could not have surpassed 3.8 million (3.52 million plus a small adjustment for migrants who engage in agriculture in locations away from their own home town) (NBS 2016b). This is a far cry from the 8.7 million said to have left agriculture in the employment data. In short, the pace of change suggested by aggregate employment data is simply not supported by other, superior, survey data. Of course, we should not expect data coming from very different collection channels to be completely consistent. But in this case, the household survey data seems to be preferable. The alternative view, in which a very large increase in services sector jobs is ‘explained’ by very large reductions in agricultural and secondary sector jobs, plus a big increase in labour force participation, seems implausible. This suggests the possibility that the number for services sector jobs is just wrong.

At present, the most that can be said about employment growth is that labour force conditions are fairly stable in most parts of the country. Other than troubled rust belt and coal mining towns, there is no evidence of widespread distress in labour markets. Job vacancies are substantial, and by some measures more numerous than job seekers. However, we should keep in mind that labour markets provide lagging indicators. If labour demand flags below shrinking labour supply, this will occur after problems are already apparent in other indicators.

2.3 Data summary

Both the national accounts and employment data describing growth in China have notable deficiencies. Some of these indicators of structural change are simply spurious, while others do not stand up to closer scrutiny. Of course, it cannot be said that the available data prove the absence of structural change. The data currently available are probably not robust enough to do this in any case. However, none of the available data demonstrate robust structural change. This should be quite surprising. The Chinese economy is very dynamic and relative costs are changing quickly, yet structural change at the macro level is almost imperceptible.

The next sections look at both the macroeconomic and microeconomic policy environments for corroboration of the picture of limited structural change suggested by the data considered above.

3. The Macroeconomic Policy Environment

The macroeconomic policy environment in China is consistent with the picture of limited structural change sketched in the previous section. Despite enormous attention paid to the reform agenda and the adaptation of policy to the ‘new normal’, the actual macroeconomic policy environment has been relatively slack. Of itself, this would not be sufficient to drive major changes in behaviour. But, as is discussed in subsequent sections, neither have the microeconomic reforms.

Figure 5 shows some of the main macroeconomic variables: credit growth, nominal GDP growth and consumer price inflation. The credit stimulus of 2009 succeeded in pulling up nominal GDP growth (approximated using quarterly real GDP growth grossed up with the annual GDP deflator). Policy became moderately tight during 2011, as the People’s Bank of China (PBC) sought to drain excess liquidity from the system and inflation looked worrisome.\(^8\) Credit growth

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\(^8\) Growth of bank credit is not the only component of credit or monetary policy, to be sure, but the intent here is to establish a macroeconomic policy baseline for the discussion of economic reform.
fell below nominal GDP growth for the only time this decade. However, since 2011, nominal GDP growth has fallen steadily, while credit growth has remained roughly constant around 15 per cent in year-ended terms, even accelerating somewhat from its low point in mid 2014. The result is that credit growth was about 5 percentage points above nominal GDP growth in 2014, and the gap increased in 2015. Considered alone, credit policy has been broadly accommodative, and arguably is becoming more so. If credit growth remains high in 2016, even the modest restructuring pressures evident in 2015 may be rolled back.

**Figure 5: Credit, Nominal GDP and CPI**

Year-ended growth

Sources: National Bureau of Statistics of China; The People’s Bank of China

4. **Reform Policy**

If the macroeconomic policy environment has not been sufficient to induce structural change, we must look at the microeconomic policy environment for the necessary forces. It is to that task that the next two sections turn.

It is now more than two years since a broad program to revitalise market-oriented economic reforms was laid out at the Third Plenum in November 2013. Important steps have been taken in many areas. Nevertheless, I argue that, generally speaking, the implementation of reforms has been disappointing. In many cases, reform outcomes have been modified during the implementation process in a way that reduces or eliminates the pressure that reforms could potentially have created for more thorough restructuring. That means that reforms are not driving the kind of productivity improvement and creation of new growth drivers that we would like to

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9 I would highlight steps to simplify the registration and oversight of private companies; and steps toward liberalisation of capital markets as broadly successful. However, missteps in implementation of the liberalisation of capital markets mean that important aspects of the reforms have been suspended, so our ultimate judgement will depend on the speed with which reforms are reinstated.
see. To be sure, firms and local governments are under pressure anyway from the rapid slowdown of growth and changing prices. However, the actual outcome of these reforms, so far, has been to buffer local governments and firms, especially state-owned firms, against the restructuring pressures created by rapid economic change.

4.1 State enterprise reforms

The November 2013 Third Plenum document laid out a number of important, challenging, but vague, principles for economic reform. To the surprise of many, it included a large section on state enterprise reforms that addressed fundamental issues of state enterprise governance in fresh ways that potentially had real significance. The document suggested shifting to a form of capital management, perhaps exercised through investment or wealth funds, combined with an emphasis on mixed ownership. There were tensions, imprecisions, perhaps even contradictions between some of the ideas floated in the Third Plenum document, but they at least suggested the possibility of a new opening in state-owned enterprise (SOE) reform, and generated some real excitement.

It took almost two years for the ideas in the Third Plenum document to be expressed in an official document called a ‘guiding opinion,’ which outlines broad principles to guide implementation (CPC and State Council 2015). Since then, more than 10 implementing regulations have been issued. This pattern has been dubbed ‘1 + N’ because there are several more implementation regulations still in the pipeline, and no one is sure what the ultimate ‘N’ will be. The implementing regulations are necessary, because the guiding opinion is vague and contradictory, even by the standards of this type of document. Nevertheless, it is sufficiently concrete that we can now evaluate the overall program of SOE reform.

It makes sense to think of SOE reform, as expressed in the guiding opinion, as consisting of two broad parts. The first part of it is essentially the resumption of a program to normalise the management of state enterprises. It calls for dividing SOEs into commercial and public service classes; transforming nearly all SOEs into corporations; clarifying relations between the government, the agency that exercises the powers of ownership, investment companies, and firms; strengthening Boards of Directors and Communist Party control; and inviting in non-state investors under certain conditions. These are mostly sensible things to do. In fact, many of these were on the government’s agenda from 2003 until approximately 2005 or 2006 and then faded away. In my opinion, this is an advantage of a relatively fluid policy environment that good ideas from the past can be resurrected.

The second part of the document consists of an effort to remake the hierarchical structure of management and incentives in which SOEs are embedded. These efforts are newer, harder to evaluate and embed more compromises that have not yet been fully worked out. However, when we examine the provisions incorporated in this part, we find a highly problematic set of

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10 For example, the document calls for organising ‘virtually all’ SOEs as corporations under the company law and piloting listing some top-level conglomerate companies and strengthening Boards of Directors. The reorganisation of SOEs under the company law has been policy for 23 years since the Company Law was passed in 1993, and both listing top-level conglomerates and strengthening Boards of Directors were pilots in 2005–06, notably with Baoshan Iron & Steel. For example, October 2005, the State Asset Supervision and Administration Commission announced 11 state wholly owned corporations, with outside directors on the Board of Directors, led by BaoSteel.
initiatives that add up to a major disappointment of the hopes that were raised in the wake of the Third Plenum of 2013. To understand the new measures, we can simplify the complex program and isolate three crucial steps in the new management system: first, the division of firms into competitive and non-competitive; second, the creation of investment companies with ‘missions’ to manage, especially, the non-competitive firms; and third, a proliferation of missions, both in number and in assigned policy importance. These have the potential to create a state enterprise management system that is much worse than the existing system.

4.1.1 Enterprise classification

The classification of enterprises begins with a straightforward differentiation between commercial and public services enterprises, which are to have different management and incentive systems. Among commercial enterprises, however, there is a further distinction that is much less straightforward. One sub-group of commercial enterprises consists of those whose main business is in fully competitive sectors: these firms should accelerate corporatisation, they may take in outside investors even to the extent of allowing state ownership to become a minority ownership position; and they should list on stock markets (SASAC, MoF and NDRC 2015). This is a step forward, and it may be combined with measures to separate stages of the production chain where competition can be introduced (such as electricity generation). However, many firms do not fall in this sub-group: any firm whose main business is in sectors that relate to national security, the commanding heights of the national economy, or important sectors are excluded. These firms should be provided with incentives to ‘better serve important national strategies and macroeconomic control’ and specifically develop forward-looking strategic sectors as well as any specially assigned responsibilities’ (trans by author) (SASAC et al 2015). In other words, pretty much any firm can be placed in an ill-defined and ill-demarcated ‘other’ sub-group. Moreover, the big national SOEs, the ones run by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) are massive, multidivisional firms with thousands of subsidiaries (17 000 subsidiaries for the 110 central SASAC firms). Firms that are designated competitive will only be a few carve-outs within the complex hierarchical firms that, almost by definition, must remain non-competitive.

The extremely elastic and decentralised definition of this ‘other than competitive’ class of enterprises is of real practical importance. First, the government is supposed to maintain a controlling stake in any firm in this category (CCP and State Council 2015). Second, the incentive structure for this category is supposed to contain a substantial element reflecting the special tasks and social responsibilities the firm has, in contrast to firms in the ‘competitive’ category, for whom the incentive structure is supposed to be based predominantly on profitability and increased asset value (SASAC et al 2015). That is, the SOE reform agenda specifically carves out a category of SOEs that will stay state controlled and will increase the attention they give to political objectives and reduce the importance of profitability in their objectives.

Who makes this important discretionary decision? The answer is clear: the ‘owner’ makes the decision, meaning initially the asset supervision agency. The designation should be ‘relatively

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11 This selection of features reflects my own biases and subjective judgements. This is a complex program that is changing with the process of implementation. Many different perspectives will be possible over the next few years.
stable’, but should be ‘dynamically adjusted’ to accord with changing conditions, including changes in economic development, national strategies, and enterprise capabilities (SASAC et al 2015). When they are ready, this decision can be delegated to a new body, the investment company.

### 4.1.2 Investment companies

The reforms introduce a new – and newly important – layer of management into the state enterprise sector, the state capital investment and/or operations companies (SCIOs) (State Council 2015). When this type of investment company was first suggested in the Third Plenum document, there was speculation that it would refer to a relatively passive, investment-return-oriented entity like a sovereign wealth fund. The explicit incorporation of the word ‘operation’ in their titles, however, shows that these investment companies are expected to take on an activist role, rather than a passive investment-oriented role. In fact, everything in this 1 + N package is designed to allow an active role for ‘investment and operation’ companies. The SCIO is to be set up beneath the asset management agency (i.e. below SASAC or the regional SASAC-type agencies). In addition, pilot projects will test eliminating ‘asset supervision agencies’ altogether and delegating ownership powers directly to the SCIOs.

If the SCIOs are not to become sovereign wealth funds, what will they do? SCIOs are expected to play an active role, but the way the role of other-than-competitive firms is described in official documents is incredibly elastic. In truth, an SCIO can clearly define any SOE that it wants to as other than competitive, because there will always be some important or emerging role it can play.

### 4.1.3 Mission proliferation

The fact that SCIOs have missions is particularly important right now because China is engaged in an extraordinary effort to promote innovation and high technology enterprises as the key to the growth transition. Everyone knows that China has invested enormous, perhaps unrealistic, hopes in the development of new technology: this is the part of restructuring that the government can engage directly in. The policy emphasis, already strong, has been ramped up in the Thirteenth Five-Year Plan. This means that every local government will be under a certain amount of pressure to show they are contributing to the technology effort by establishing an SCIO company and having it be actively engaged in concentrating state capital in key sectors. For example, Gansu province – not generally regarded as a hotbed of the start-up economy – has outlined the following in its SOE reform program: increasing the amount of state capital in one of five named development zones, supporting the provincial industrial policy and developing five strategic emerging industries (information technology, biopharmaceuticals, smart manufacturing, new energy and new materials). More than 80 per cent of the increase in state capital should be in ‘strategic emerging industries, infrastructure, public services, and the externally oriented economy’ (trans by author). Clearly, the SCIOs are expected to be the instruments of this policy.

In general, SCIOs are supposed to be under trial implementation in 2016. SASAC is ready: they have designated two existing SASAC top level firms as state capital operation companies.

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12 The document even gives aspirational targets for the number of provincial firms reaching specific thresholds of internationalisation (GPPC and Government 2016).
(note that SASAC choose to call its designated instruments ‘capital operation’ companies and not ‘investment’ companies). These are the China Chengtong Holdings Group and the Guoxin Tendering Group. Both of these firms have been in existence for a while. China Chengtong was formed in 1992 out of the subordinate companies of the old Ministry of Material Supply. When SASAC was formed in 2004, Chengtong was made into a pilot asset management company. SASAC favoured it as an instrument for restructuring SOEs, using it to purchase and restructure ailing subsidiaries of other central SOEs. It had a flurry of activity in the mid 2000s, but then became much less active, and concentrated on its ongoing logistics and packaging businesses. Guoxin was set up by SASAC in 2010, and was supposed to clean up the assets and liabilities left over as the big SASAC firms were listed on the stock market. Again, after initial activity, Guoxin subsided into a status quo place-holder. Both China Chengtong and Guoxin have an odd mix of subordinate companies that include firms that sell goods and services as well as an asset management business. Both were favoured instruments of SASAC in the past, who gained experience in restructuring distressed assets, but never played the larger roles that had been expected of them. Now they have returned.\(^{13}\)

The restructuring of the state enterprise system needs to be put in the context of initiatives emerging from other parts of the policy apparatus to foster technological innovation. Numerous new state-owned ‘private equity’ funds are being set up to foster dynamic industries. In the most advanced and highest priority case, integrated circuits, these government private equity firms are expect to total about US$150 billion, including some contributions from private investors. Already, Beijing Municipality has put up US$10 billion and the national government has advanced US$30 billion for two different investment company buyout funds. These buyout funds are expected to be flexible, to be willing to take risks and bear losses, but also to emerge with (state-owned) stakes in the successful firms. They are conceived as playing a similar role to the SCIOs, but arriving there by a different route. Moreover, as we will see in the following section, ‘Supply-side Structural Reforms’ were launched in late 2015 and are a primary policy emphasis in 2016. Again, SOEs will play an important role leading the capacity restructuring that is at the heart of supply-side reforms.

4.1.4 Evaluation

The envisioned role of the SCIOs as proactive drivers of change is deeply problematic. Government is to withdraw from all operational decision-making, but those decisions will be delegated to the SCIOs, which are intended to act as developmental institutions, internalising the developmental objectives of the government.\(^{14}\) SCIOs set the evaluation and reward functions for their subordinate enterprises, but who sets the evaluation and reward functions for the SCIOs? Implicitly, the superior asset supervision agency does so, but the process and principles of this are not addressed in any of the documents. In the initial 2013 Third Plenum document, there was some hope that the SCIOs might function as a type of sovereign wealth fund, with multiple funds benchmarked by total returns. As the reform has evolved, it is quite clear that this will not happen. On the contrary, as SCIOs proliferate, so will their missions and evaluation benchmarks.

\(^{13}\) This is one of many signs that the fully elaborated state enterprise reform strongly reflects the positions and interests of SASAC.

\(^{14}\) In the first step, this delegation is to the asset supervision agency, which in turn delegates to the SCIO. But pilot programs will explore removing the asset supervision agency from the equation.
We should anticipate the emergence of (literally) thousands of well-resourced SCIOs, seeking to rationalise the distribution of state capital by developing a broadly defined array of priority sectors and industries. Oversight is likely to be weak. Just as insider control is now a problem in state enterprises, insider control will become a major problem for SCIOs.

In addition, the implementation process very much privileges the existing government departments that exercise ownership rights over state firms. All the key decisions about classifying firms and sectors are made in-house. This is particularly clear from the case of SASAC, since the identity of the first two SCIOs is so intertwined with SASAC’s past and personnel. It is clear that this is an approach that conserves and utilises existing expertise, but also that it is a reform that entrenches existing interests. There will be no radical shake-ups, and nobody will be under great pressure to change existing behaviours.

For firms judged to be in competitive industries, the current wave of reforms will likely improve transparency, clarify accountability and contribute to the development of equity markets. In essence, China is finally getting around to completing the SOE reforms initiated between 1996 and 2006, and this will have productivity benefits. However, there simply are not that many state firms left in the really competitive sectors, since they have already been out-competed by private firms, so the total efficiency gains may be limited. Moreover, the new regulations may actually encourage the extension of SOEs into competitive markets where they do not currently have a presence. The document interprets ‘mixed ownership’ as encouraging state capital to expand its investment in, and control of, private firms. Ownership stakes in private firms are encouraged, and multiple forms are permitted (CCP and State Council 2015; GPPC and Government 2016). So long as a sector can be designated ‘strategically important’ or unusually dynamic, SOEs can ‘support’ (by buying into) dynamic firms. SCIOs in this vision will serve as platforms for buyouts, taking strategic stakes, forming incubators, co-investment, strategic partnerships, and generally ‘compensating for market failures’. SCIOs with preferential access to capital will expand into the private economy. At the same time, local government decision-makers will perceive that the ‘action’ is in displaying dynamic commitment to national goals, foremost among which is the promotion of high technology emerging industries. They are likely to devote far more of their time and energy to encouraging plausible interventions in those ‘new’ sectors than they are to restructuring or liberalising existing sectors.

### 4.2 Local government debt restructuring

Local government debt restructuring was an ambitious program drafted by the Ministry of Finance in 2014. It had three interrelated objectives: to stabilise and lower the debt burden on local governments; to credibly signal to local governments that they would henceforth have harder budget constraints; and to contribute to the development of capital markets by jump-starting a market for municipal bonds. Local government debt restructuring began in earnest in October 2014, when the Ministry of Finance issued substantive policies requiring local governments to update debt figures to the end of 2014, cap their total debt, and then receive

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15 To be sure, in some localities where policymakers are more reform-minded, the program may give them the go-ahead to initiate more rapid restructuring. The broad framework of the SOE reforms, combined with delegation of operational decision-making to localities, may provide a window for some regional policymakers, if they decide to move aggressively ahead with the restructuring of the competitive sector.
quotas to swap existing debt for municipal bonds. The ministry was seeking to update and improve the accuracy of the figure for local government debt calculated by the National Audit Office as of the end of June 2013 (CNY10.89 trillion, or just over 19 per cent of GDP). Provinces were instructed to self-report and update the debt figure to end 2014. However, provinces had an incentive to maximise reported debt (since this might maximise their access to bailout funds). As a result, the total debt reported by localities jumped 47 per cent to CNY16 trillion (or 25 per cent of GDP) (Du 2015b; Sina Finance 2015). There was never agreement on the final number, but in the meantime, at least CNY1.85 trillion in debt was coming due in 2015, and had to be dealt with.

The original program called for the distribution of CNY1 trillion in municipal bond quota among the provinces, based on their debts coming due. The quota was progressively expanded throughout 2015 and, ultimately, the quota was set at CNY3.2 trillion by the end of the year. Provinces would then prepare debt offerings and sell them in the market, with customers including investment banks and mutual funds, and even the National Social Security Fund. Beyond these municipal bond sales, local government debt was to be capped, with additional borrowing quotas to be distributed (carefully) by the national government. However, in April 2015, the very first municipal bond offering failed, when Jiangsu offered CNY64.8 billion and found no takers. Local governments wanted low interest rates to reduce their funding costs, while the market wanted to be compensated for the risk and uncertainty of these new products with high interest rates. After all, why should anybody buy low-interest bonds when there were still plenty of medium-to-high yielding ‘urban construction’ bonds with implicit guarantees?

The program was dramatically revised after this setback. Within two weeks, cooperating with the PBC and China Banking Regulation Commission, the Ministry of Finance rolled out a revised and very different version of a debt swap. Instead of debt being offered on the open marketplace, the new debt was allocated to those who held the existing bank loans. The principle was ‘whoever cooked it, eats it’. Existing debtholders, overwhelmingly banks, were responsible for taking the bonds that replaced the loans they had originally extended and hold them on their books for an unspecified period. Regulations specified benchmarks for the range of acceptable interest rates: the new debt was to be priced with interest rates between central government bonds and China Development Bank bonds, that is, at interest rates consistent with low risk levels. The government threw in some important sweeteners: government deposits were placed at banks that participated, and the PBC declared that the new bonds would be accepted as collateral in any future relending or repo operations.

Under these conditions, the debt swap proceeded rapidly. By year-end, a total of CNY3.2 trillion in new municipal debt had been issued. Moreover, figures floated at the National People’s Congress confirmed that another CNY5 trillion in municipal debt would be placed in 2016. The program as revised has a much bigger bailout component. Local governments receive much lower interest rates and longer repayment periods, without having to worry about packaging and disclosing their debts and making them attractive to the market. Banks, on the other hand, surrender high

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16 Details of the process are described in Naughton (2015a, 2015b).
17 There are CNY3.4 trillion in circulating ‘urban construction’, so-called chengtou, bonds. These are the most important subset of local government financing vehicles (LGFVs) fixed-income securities. Their average interest rate in April 2015 was 5.63 per cent.
18 There is already a large literature on this policy. The account here draws mainly from Du (2015a), MoF (2015) and Xu (2015).
interest short-term debt for an illiquid low interest asset. To be sure, there are some upsides for the banks: the new local government debt has only a 25 per cent weighting in risk-adjusted asset classifications, so the banks can hold less capital and still satisfy capital requirements.

As realised, the debt swap did nothing to differentiate between prudent and reckless local governments. The debt is issued by the local governments themselves (rather than the corporate LGFVs that in many cases initiated the debt). China is not a federal system: local governments are subdivisions of the central government. Moreover, the whole process of issuing the bonds had been set up by the central government and structured from the top down. All local government bonds clearly have the implicit backing of the central government. For instance, Moody’s rated the bonds AAA, the highest investment grade, explicitly because of the central government backing, rather than the fiscal soundness of the individual provinces (Yi 2015). To be sure, the Ministry of Finance will attempt to institute procedures to prevent additional debt, but the implementation of the program does not subject local governments to significant restraint or oversight (Shang 2015).

The program tends to undermine the financial standing of the banking system. In principle, there should be no aggregate effect on the size of the bank’s assets, only a reduction in the rate of return. In practice, however, the program seems also to have expanded the banks’ balance sheets. Bank holdings of fixed income securities increased by CNY5.27 trillion in 2015, increasing from 11 per cent to 12.8 per cent of bank assets; more than CNY2 trillion of this would be new municipal bonds. In theory, this CNY2 trillion should have been exchanged for CNY2 trillion in bank lending that would be retired, which would have been 2.5 per cent of loans outstanding at year-end 2014. Credit growth at the end of 2014 was running at 13.6 per cent in year-ended terms; if CNY2 trillion in bank debt had been swapped for bonds in 2015, then credit growth for 2015 would have dropped to 11.1 per cent all else being equal; instead, it accelerated to 15 per cent.

It’s not clear exactly what happened with these municipal bond offerings. There is anecdotal evidence that, in some provinces, cash-strapped local governments simply did not turn all the money they received from the bond sales over to the banks. However, this is unlikely to account for the bulk of the expansion of credit. Also unclear is what will happen in 2016: will the sale of CNY5 trillion of municipal bonds end up injecting an equivalent amount of liquidity into the economy?

5. Supply-side Structural Reforms

Following on from the reforms initiated at the Third Plenum discussed above, supply-side reforms have been given a great deal of attention, particularly since November 2015. They figured prominently in the March 2016 National People’s Congress meeting. Supply-side reforms may prove to have an important effect on the Chinese economy and it is difficult to predict how the bundle of interrelated programs will evolve in the face of serious economic challenges. What should be apparent is that supply-side reforms have no roots in the Third Plenum reform program. They are an innovation, a change of policy course. It is reasonable to conclude that supply-side reforms are a response to frustration with the existing policy mix: ineffective demand-side policies and bogged-down institutional reforms have not produced the structural changes desired.
5.1 Main components of supply-side structural reform

Supply-side reforms have been given the highest policy priority for 2016 and, as such, are a new bundle of policies that will evolve in the process of implementation. Formally, supply-side reforms include five elements:

1. Eliminating excess industrial capacity
2. Reducing the stock of unsold housing
3. Deleveraging
4. Reducing costs
5. Strengthening weak points.

The first four points are closely related: the fifth point seems included as a compromise, legitimising proactive interventions in emerging sectors, as discussed in the section above. Each of the first four elements is straightforward conceptually, but practically full of challenges and difficulties.

5.1.1 Excess capacity

As the Chinese economy has slowed, heavy industrial capacity has continued to grow, and the result has been massive overcapacity in many sectors. Reductions in excess capacity have been given clear priority over the other elements of supply-side reform. Coal and steel production have been earmarked as the first targets for reduction in capacity. The State Council on 1 February 2016 promulgated two documents on steel and coal industry restructuring (State Council 2016b, 2016a). The steel industry document stresses that the reduction of capacity is to be driven by five regulatory standards: pollution, energy consumption, output quality, occupational safety and technology (effectively a minimum size requirement). The coal program lacks the strong emphasis on regulatory standards, and presents a much more differentiated program of different local governments improvising programs.

The proposed approach involves the central government providing modest subsidies to facilitate the closing down of capacity. With this funding as a sweetener, local governments are being pressed hard to (a) fulfil quotas for closing down capacity; (b) stop subsidising money-losing firms; and (c) concentrate on assisting laid-off workers through welfare and job-switching programs. A particular focus of this approach is on closing down ‘zombie firms’; that is, companies with debts and no profits that are kept alive by local government support.¹⁹

In the case of steel, the government has established an ‘industrial structure adjustment fund’ and a target of 100 to 150 million tonnes of capacity reduction.²⁰ This will provide about CNY20 billion in subsidies to close down 40–50 million tonnes of capacity annually for about three years. For coal, problems are much more regionally differentiated. The provinces of Henan, Shandong and Anhui are taking the lead, but their problems are less severe; later Inner Mongolia, and eventually Shanxi and Shaanxi will tackle the most intractable problems. It is expected that a special national policy will be enacted for them (Li Huiyong quoted in Securities Times (2016)). After steel and

¹⁹ The concept of zombie firms was initially popularised by the economist Takeo Hoshi, who demonstrated their harmful effect on the Japanese economy in the 1990s.

²⁰ Capacity is about 1 050 million tonnes, so this would amount to approximately 14 per cent reduction in capacity (Golden State Policy United Industry 2016).
coal, overcapacity is to be tackled in cement, electric power and non-ferrous metals, with other sectors, such as petroleum refining and petrochemicals, and even export sectors like garments, cued up for a later round.

5.1.2 Reducing stockpiles

Reducing stockpiles conceptually covers getting rid of any kind of surplus but, in practice, is centred on reducing stocks of unsold housing in second- and third-tier cities. While housing markets in top-tier cities like Beijing, Shanghai and Shenzhen are relatively healthy, smaller cities still have an enormous backlog of housing. Policies under this rubric have not yet been fleshed out, but they include efforts to make them affordable to rural–urban migrants. An interesting approach is to create local housing authorities and fund them to purchase housing in order to rent to low-income residents (including, but not limited to, migrants) (Yang 2016).

5.1.3 Deleveraging

Deleveraging means restructuring debt. It is an enormous task. Not only is China’s debt burden huge and worrisome, nobody is entirely sure where in the economy this debt is held and by whom. The banking system is certainly at the centre of the debt problem, but many other financial markets are also involved. Shutting down zombie firms means writing off their debts, including debts to banks, to local governments, and other obligations in other capital markets. Exactly how this is to be achieved as part of supply-side reform is far from clear.

5.1.4 Lowering costs

Closing redundant capacity and restructuring debt would allow firms to reduce their costs. This additional element refers to further policy measures that would help firms reduce costs and increase competitiveness. These could include tax reductions, reductions in burdensome regulation and reductions in social security contributions.

5.2 Evaluation

Despite the priority given to closing excess capacity, the supply-side reform program is consistently presented as a comprehensive, coherent program. Moreover, supply-side reforms are consistently presented as a justification for a moderate relaxation of monetary policy because supply-side reform is expected to have a somewhat contractionary effect and because funds are necessary to finance restructuring and labour reallocation. Most obviously, supply-side reforms are predicated on the notion that there is an overhang of capacity as well as an overhang of debt, and both need to be addressed together.

However, while the different strands and objectives of supply-side structural reforms are related conceptually, they are not at all related in terms of the institutions, procedures and policies needed to implement them. This is most obvious by looking at the relationship between two key planks, closing excess capacity and ‘deleveraging’ or restructuring debt. Closing down excess capacity is a traditional activity of the Chinese state. Since 1978, there have been several rounds of excess capacity consolidation, some predominantly market-driven, some predominantly administrative. In either case, there are bureaucratic instruments to hand that are accustomed to
the operation. In essence, two things are done: the planners (today, the National Development and Reform Commission (NDRC)) target specific low-quality, polluting or backward capacity for closure; and the governmental hierarchy is used to pressure local governments not to subsidise or otherwise protect loss-making firms under their jurisdiction. Both of these policies are familiar and have clear institutional channels to make them happen. Indeed, the NDRC has been engaged in significant rounds of capacity reduction for the past three years at least.

By contrast, deleveraging is fraught with difficulties and uncertainties. Writing off debt means assigning permanent losses to one party or another. There is resistance and opposition. Only an authoritative body entrusted with significant power over creditors and debtors can carry out such a deleveraging. It is true that China did this once before, between 2003 and 2005, when a massive write-off of bad SOE bank loans occurred (Naughton 2006). That restructuring was a massive undertaking, beginning years earlier with the creation of asset management companies, and proceeding through to the listing on the stock market of the state-owned banks. It involved nothing less than the mobilisation of all the best economic minds of the Chinese administration across ministries and departments. Moreover, at that time, virtually all the bad debt was concentrated within the traditional banking industry, and a top-down initiative affecting the entire industry was appropriate and feasible. Today, there is no one institution capable of leading or coordinating policies like this in the current environment. Perhaps one can be established, but it would be a prolonged process of institutional creation. The difficulty may be exemplified by the sensitivity of the role of laid-off workers. Both the steel and coal industry programs contain an identical sentence: ‘No plan for reassigning workers can be implemented if it is incomplete; if the funding for worker reassignment is not in place; or if the plan has not been approved by the Worker Congress or a discussion by all workers’ (trans by author). As in the late 1990s, when lay-offs were large, substantial programs are being rolled out to provide for retaining workers within the corporation (with new jobs), or for channelling them to new jobs or early retirement. Instructed to be highly sensitive to these issues, local governments will doubtless feel themselves squeezed between competing objectives: how seriously are they supposed to get rid of zombie firms?

Thus, while supply-side reform makes some sense as an economic concept, it lacks any coherent implementation structure or framework. Supply-side structural reforms are an important policy initiative. To a certain extent, their adoption reflects the fact that the reform program laid out at the Third Plenum in November 2013 has been failing. Policymakers needed to come up with another approach, and supply-side reform is such an approach. Still, supply-side reform itself has a number of obstacles it needs to surmount. It lacks clear implementation paths for many of its crucial components. There are built-in tensions between the way closing excess capacity (for example) depends on stronger regulation and more powerful market forces, on the one hand, and the fact that its implementation is pushed down onto local governments and Party secretaries through the Party apparatus, on the other. Moreover, the scope of supply-side reform is undefined and open to change as conditions change. It will undoubtedly go through many changes and different versions as implementation proceeds.
6. Conclusion

In the preceding, I have presented a coherent narrative about the fate of economic reforms in
China over the past two years, selectively emphasising state enterprise reform, local government
debt reform and supply-side reform. I have not discussed other financial reforms, or the equity
market, but they could easily be woven into this narrative. In this narrative, economic reforms
that were proposed in 2013 with considerable fanfare have failed to generate pressure on
economic actors to restructure and adopt new forms of behaviour required to produce sustained
medium-high growth in the ‘new normal’. Indeed, fears about the growth rate have blocked
effective implementation of critical reforms. In state enterprise reform, the desire to maintain
state firms as catalytic economic agents (as well as elements of a supportive political system) was
fundamental in determining the policy outcome. In local government debt restructuring, the
desire to reduce debt burdens on local governments and get them investing again was similarly
decisive. Stalled reform is plausibly related to slow progress in restructuring.

The analysis here points to heightened risks ahead for the Chinese economy. In essence, we see
a picture emerging in which currently promoted government initiatives now seek to achieve:

1. investment in new high-tech sectors funded by government money;
2. the shutting down of capacity in traditional industrial sectors; and
3. the maintenance of annual GDP growth rates at 6.5 per cent or above.

This configuration of policy objectives points to increased risk ahead. In the first place, financial
instruments are increasingly devoted to these objectives, leaving fewer degrees of freedom for
responding to crisis, defending exchange rates or other objectives. Moreover, three ambitious
initiatives inevitably add up to a government that is increasing its direct intervention in the
economy. Rhetoric about letting the market play a definitive role and redefining the boundary
between government and market is all to the good, but it simply does not correspond to this
new reality.

Of course, restructuring will occur anyway, but given the lack of progress it is much more likely
to occur under the pressure of events, rather than initiated by foresighted policy. To be sure,
supply-side reform still has the potential to morph into many different variants. Much more
aggressive debt restructuring programs are still feasible. Fiscal policy has unexploited potential,
including initiatives as simple as expanding the deficit in order to increase outlays for medical
services and other public health measures. The Chinese Government has impressive resources
of material, finance and human talent. However, they will need to change habits to bring these
resources into play. In addition to overhangs of debt and industrial capacity, China today has
an overhang of rigid and dysfunctional systemic elements. If these are not taken care of, the
challenge of effective restructuring will not be met.
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