
5. Adjusting to the New Domestic Normal and the New International Normal: Supply-side Structural Reform 2.0

Wing Thye Woo¹

On the eve of the 19th party congress

The past year has been one of conflicting signals for China's economy. Real estate prices in the largest cities (e.g. Beijing and Shenzhen) and in most second-tier cities (e.g. Xiamen and Qingdao) have continued to soar, but the phenomenon of 'ghost cities' continues to haunt many inland and smaller cities. Excess capacity still plagues heavy industry (e.g. iron and cement). Together with the large inventory of unsold houses in ghost cities, this has, however, not caused the proportion of non-performing bank loans to rise much.

How should one interpret the fact that the number of bank loans in the 'special-mention' category (i.e. loans that have potential weakness) has increased significantly in the past two years? Is this caused by temporary difficulties in debt servicing that will disappear after cost-cutting measures by firms? Or is this development the outcome of the special-mention category being the hiding place for non-performing loans (NPLs) and a prelude to a jump in the NPL rate?

China's trade surplus remains large and has fallen little in the past three years. The stock of foreign exchange reserves of the People's Bank of China has, however, continued to decline. This implies that the deficit of the non-central bank component of the Financial Account² is larger than the trade surplus. These symptoms suggest that the renminbi (RMB) has been overvalued for at least the past three years—a suspicion that is reinforced by the steady tightening of capital controls on outflows.

Is this massive capital outflow the result of a similarly massive loss of confidence in China's future economic prospects? Or is this the result of massive flight of ill-gotten wealth induced by the widening of investigations in the campaign

1 I am most grateful to Lauren Johnston for excellent editing and insightful critical review that improved this chapter tremendously.

2 The Financial Account is known as the Capital Account in the old terminology in balance of payments accounts.

against corruption? Or is this a speculative bet against the current value of the renminbi? The first interpretation signals a dim economic future for China, while the second means a brighter economic future. The third interpretation signals a temporary state of affairs that could be reversed at any time by the government, but the economic implications (good or bad) would depend on how the government reduced capital outflow.

At the same time, conflicting signals are also seen at the international level, and China's geopolitical positioning is changing amid broader global shifts. The unexpected election of Donald Trump has resulted in the United States withdrawing from the Trans-Pacific Partnership (TPP) and demanding renegotiations of the North American Free Trade Agreement (NAFTA). In parallel, the United Kingdom (UK) has voted to leave the European Union (EU), threatening the process of further European integration and, potentially, existing European unity. Partly in response to these developments, China is moving more decisively than ever into the role of a responsible global stakeholder. At the January 2017 meeting of the World Economic Forum in Davos, Chinese President Xi Jinping pledged his country's leadership in the fight to prevent deglobalisation:

We should commit ourselves to growing an open global economy to share opportunities and interests through opening-up and achieve win-win outcomes. One should not just retreat to the harbor when encountering a storm, for this will never get us to the other shore of the ocean. We must redouble efforts to develop global connectivity to enable all countries to achieve inter-connected growth and share prosperity. (Xi 2017)

The Wall Street Journal reported that at the 'One Belt, One Road' summit in Beijing on 14–15 May 2017:

Mr Xi portrayed China as a committed free trader and pledged more than \$100 billion in new financing and assistance for projects and countries involved in an updated revival of ancient Silk Road trading ... Mr Xi said over the last three years China has invested more than \$50 billion in Silk Road countries, and Chinese officials have branded the venture as a new form of globalization, one that is more inclusive and fairer than previous tides of world commerce. (Wong 2017)

It is therefore jarring that *The Wall Street Journal* also carried on its website at the same time a video recording of Charlene Barshefsky, the former US trade negotiator for China's World Trade Organization (WTO) accession, claiming that President Xi had 'stopped the process of economic reform and opening' in China (Barshefsky 2017). In her opinion, China has been retreating from economic liberalisation since 2007 and President Xi has accelerated the introduction of mercantilist policies with programs such as those relating to 'pillar industries', 'strategic emerging industries' and 'Made in China 2025'. Barshefsky described President Xi's economic strategy as a 'techno-nationalist push across-the-board'—that is, 'an import-substitution

strategy' à la Brazil of many years ago—to 'Sinicize the Chinese economy' with homemade replacements (e.g. cloud computing, integrated circuits, new materials) unleashed by 'indigenous innovations'.³ Barshefsky also described China's globalisation strategy as 'a zero-sum game' because it is focused on making sure that 'everyone else's market is open'.

How could Barshefsky have described the 'One Belt, One Road' initiative—the key mechanism of China's globalisation strategy—as a zero-sum game? While the construction of bridges, dams and railroads in Pakistan and South-East Asia would certainly help alleviate the excess capacity problems in China's heavy industries, it cannot be denied that the additional infrastructure will also enrich these neighbouring countries. Similarly, the greatly improved rail link between the Central Asian republics and Europe will enrich the economies of both Central Asia and Europe—not just China.

The above conflicting interpretations of various Chinese economic features show clearly that there are some deep misunderstandings about China's economy and the government's policy choices, and deep suspicions about the motives of China's economic policymakers. It must be recognised that at the heart of the Xi–Barshefsky disagreement is the fact that the US-dominated post–World War II world order is no longer viable, and there is now a tussle to shape the architecture of the new framework within which countries conduct their affairs internally and internationally.

This chapter is an effort to clarify understanding on three issues relating to the Chinese economy: the current trajectory of the economy, the policy options to influence that trajectory and possible additional elements to be incorporated into international economic relations. Our view is that for China to embark on dynamic sustainable development that will put the country in the ranks of the most advanced countries in the medium term, China must comprehensively scale up its program of supply-side structural reform by broadening it to include not only policy realignments in other domestic spheres (e.g. the socioeconomic rights of the rural population), but also an ambitious revamping of the institutional arrangements of international governance (e.g. the nature of collective global leadership). Bold implementation of the revised reform program, which we call 'supply-side structural reform 2.0', will hopefully begin on conclusion of the 19th Communist Party Congress in late 2017.

3 A low-key summary of Charlene Barshefsky's speech is reported in Cheng (2017).

The current trajectory of China's economy

The average annual growth rate of China's gross domestic product (GDP) in the period 1979–2010 was 10 per cent. After economic growth came in at 7.9 per cent in 2012 and 7.8 per cent in 2013, the government announced, in 2014, that the Chinese economy had reached a different development stage, called the 'new normal'. Many analysts at that time took this to mean an implicit growth target of 7 per cent. Growth shrank to 7.3 per cent in 2014 and remained sluggish in mid-2015, so the government announced in late 2015 that the target growth rate for the next Five-Year Plan (2016–20) would be in the range of 6.5–7 per cent. Growth was 6.9 per cent in 2015 and 6.7 per cent in 2016.

The diagnoses by leading China experts of the cause of the steady decline in the growth rate since 2010 are all over the map. Naturally, their advice to China's policymakers is also all over the map. Broadly speaking, the identified causes for the post-2010 slowdown range from temporarily insufficient aggregate demand created by cyclical factors to inescapable productivity collapses created by deep-seated structural flaws. In other words, the first key differentiating factor in competing diagnoses of China's economy is the degree of optimism about the sustainability of the three-decade-long high growth rates up to 2010.

Justin Lin (2016) typifies the optimistic faction of analysts when he identifies 'external and cyclical factors, not some natural limit' as the primary causes of the growth slowdown. He therefore urges boosting domestic demand—through 'improvements in infrastructure, urbanization efforts, environmental management, and high-tech industries' (Lin 2016)—to reach the official growth targets. The underlying basis for Lin's optimism is his observation that the Sino–US ratio of GDP per capita (in purchasing power parity (PPP) dollars) was 20 per cent in 2008, which was the level of the Japanese–US ratio in 1951 and the South Korean–US ratio in 1977. Japan and South Korea went on to grow 9.2 per cent and 7.6 per cent annually, respectively, for the next 20 years. Lin (2015) concludes that 'in the 20 years after 2008, China should have a potential growth rate of roughly 8%'.

Other notable members of the optimistic faction are Michael Spence and Fred Hu (2016). They feel that, despite challenges such as significant industrial overcapacity and excessive credit expansion, 'the reality is that China's transition to a more innovative, consumer-driven economy is well underway. This suggests that the economy is experiencing a bumpy deceleration, not a meltdown.' Importantly, 'bumpy' refers to a temporary deviation from the norm. Because Spence and Hu choose to focus on how to moderate the bump rather than how to raise the level of the norm, they advise the Chinese Government to increase the transparency of its decision-making and to communicate its policy decisions more effectively. The defining characteristic of these optimists is that they do not mention (or emphasise) in their articles any specific structural or institutional reform.

Keyu Jin (2016a), on the other hand, is pessimistic about sustaining the high growth of the past because she sees the state-owned enterprise (SOE) sector ‘as choking the private sector’ through unfair competition resulting from the preferential treatment given to SOEs (such as cheap land and cheap capital). Jin calls for root-and-branch reform of the entire social system: ‘The economic reforms China needs now presuppose political reform ... it will have to overhaul its governance system—and the philosophy that underpins it’ (Jin 2016a).

Like Jin, Zhang Jun (2016b) identifies ‘a far-reaching restructuring of large SOEs [involving the] sale or transfer of state-owned assets’ as the most effective remedy for the biggest threats to China’s economy. Private firms must be allowed to enter the ‘SOE-dominated, capital-intensive, and high-end service industries’, zombie SOEs should be shut down and the rollback of the SOE reforms undertaken earlier by Zhu Rongji should be reversed. Optimally, ‘the role of SOEs needs to be once again limited to a few relevant sectors’ (Zhang 2016b).

Unlike Jin, however, Zhang makes no mention of sociopolitical changes as the required complement to economic reform. This omission highlights the fact that the second key differentiating factor among China analysts (besides the optimist–pessimist divide) is the degree to which they see complementary linkages between political reform and economic reform.

To some segments of the Western media, the recent political developments in China re-concentrating power from the periphery to the centre (specifically from other members of the Standing Committee to President Xi), strengthening censorship of the domestic media and beefing up the ‘Great Firewall’ to reduce access to foreign websites are usually regarded as setbacks to sociopolitical progress (possibly also resulting in setbacks for economic progress later on). Keyu Jin (2016b), however, disagrees with this interpretation.

According to Jin (2016a), the reason the Chinese Government has not implemented necessary economic reform is because of its concern about ‘the potential for mass protest and civil unrest’. Jin (2016b) hails the ongoing process of amassing power in the hands of Xi Jinping on the grounds that the President needs greatly enhanced political power to be able ‘to strengthen China’. According to Jin, the situation is that ‘over three decades of lax governance, some local authorities have formed political cliques that work together to protect their illicit gains and economic interests’, thereby producing the present sociopolitical and economic malaise.

It must therefore be emphasised that optimism about China’s future economic performance is not a minority opinion. As noted, even Keyu Jin, who calls for sweeping sociopolitical reforms to remove deeply embedded barriers to socioeconomic progress, is pessimistic only about the economy at present and in

the short run. She is very optimistic about the inevitability of radical reforms that will be enacted to entrench dynamism into China's economy (perhaps after the 19th party congress in late 2017?).

Another analyst embodying Lin's optimism about the present and Jin's optimism about the future is Stephan Roach (2016), who is convinced that 'China has the strategy, wherewithal, and commitment to achieve a dramatic structural transformation into a services-based consumer society while successfully dodging daunting cyclical headwinds'.

On the question of whether the post-2010 growth slowdown was caused by cyclical factors or by a decline in the potential growth rate, one could hedge by stating that the slowdown was caused by both factors. While this cautious answer is likely true, it is not useful unless it also specifies the relative contribution of each set of causes to the decline in the growth rate.

Yu Yongding (2016b) states that 'China faces two separate challenges: the long-term issue of a declining potential growth rate and the immediate problem of below-potential actual growth'. Yu (2016a) therefore points out that 'another stimulus package that increases aggregate demand through infrastructure investment is needed'. Yu adds that the 'key will be to finance projects mainly with government bonds, instead of bank credit'. While this suggestion would help to prevent a future banking crisis created by NPLs, this additional debt servicing could contribute to a future fiscal crisis.⁴

Moreover, financial soundness is not sufficient to justify Lin's and Yu's enthusiastic endorsements for another round of macro-stimulus because policymakers should also consider whether there is a trade-off between short-term macroeconomic stability and long-term economic dynamism. Experience shows that the usual types of macro-stimulus (e.g. generalised monetary loosening and more investments chosen at the discretion of local governments) generally keep zombie firms alive, support disproportionate growth of the SOE sector and result in the eventual appearance of large excess production capacity in heavy industry (see Tan et al. 2016).

In other words, the usual macro-stimulus in China enables more of the wasteful behaviour associated with the soft-budget constraint hypothesis. But, as China's surplus labour diminishes and the demographic dividend fades, this type of macro-stimulus reduces the potential growth rate of the economy, and hence accelerates the decline in the actual growth rate. The more frequent is the use of the usual

⁴ An infrastructure project that does not generate a private rate of return high enough to cover the loan rate will create an NPL for the bank. An infrastructure project that does create enough (direct and indirect) revenue to the government to cover the servicing of the infrastructure bonds will create a fiscal crisis if it increases the government budget deficit substantially, necessitating large cuts in important government programs.

type of Chinese stimulus to keep zombie firms alive, the higher is the probability that China will fall into the middle-income trap, where its growth rate is not high enough to close the development gap between it and the advanced economies.⁵

The exit of most zombie firms is a necessary condition for the long-term dynamism of the Chinese economy, and the key is to reduce the pain of shutting them down through targeted assistance to displaced workers. The right kinds of fiscal stimulus to accompany the tightening of the soft-budget constraint would have as their key components the enlargement of unemployment insurance and the expansion of job retraining programs.

To avoid unemployment, China must stop using the usual types of macro-stimulus that maintain the status quo of output composition—for example, choosing infrastructure investment to reduce excess capacity in specific heavy industries and dispensing subsidies and loans to firms that cannot sell all the goods they produce. These traditional types of stimulus actually encourage such heavy industries to expand their production capacity. The existence of this trade-off between short-term macroeconomic stability and long-term economic dynamism is the reason official commentary on economic policies since November 2015 has overwhelmingly emphasised supply-side structural reform.

It is reasonable to assume that Xi Jinping has concluded that the primary cause of the growth slowdown is the decline in the potential growth rate. This reading of Xi's assessment is consistent with the comment of the mysterious 'authoritative official' featured on the front page of the *People's Daily* on 9 May 2016, that 'boosting growth by increasing leverage was like "growing a tree in the air" and that a high leverage ratio could lead to a financial crisis' (Zhou 2016). The Sino-US ratio of GDP per capita (in PPP dollars) is about 30 per cent today, showing that there are still significant possibilities for large increases in China's productivity through technological catch-up. So why are China's policymakers pessimistic about the sustainability of high growth?

There are two good reasons to be wary of the sustainability of the pre-2010 growth rate. First, there is no reason to believe that technological catch-up is an automatic process or even the dominant outcome. Taking the five largest Latin American countries as a group, their GDP per capita (in PPP dollars) was about 30 per cent of the US level in 1955, and it is still roughly that level today. The absolute standard of living has improved in Latin America, but the size of the development gap between it and the United States has not changed for more than 60 years. This failure to catch-up is what is meant by the term 'middle-income trap'.

5 Woo (2012) defines a catch-up index (CUI) as the ratio of the Chinese living standard to the US living standard (both measured in PPP dollars). The size of the development gap is 100 minus the country's CUI value. A middle-income trap is the phenomenon where CUI is stuck in the 25–50 per cent range.

The economic stagnation of Latin America is not unique. Malaysia reached 30 per cent of the US standard of living in 1994 and about 35 per cent in 2016, reducing the development gap by only 5 percentage points after 22 years. Thailand reached 27 per cent of the US standard living in 1994 and has been stuck there since. The significant growth slowdown in these two South-East Asian countries has resulted in people dressed in different-coloured clothes (Red Shirts versus Yellow Shirts) fighting each other in the streets. Such confrontations hark back to the political disruptions of the Brown Shirts, Black Shirts and Blue Shirts in Europe in the 1930s.

Japan, Taiwan and South Korea are the only Asian economies of significant size to have rapidly narrowed their development gaps with the United States. China cannot simply count on the economic exceptionalism of these economies to relieve it of worry about losing its shirt in the middle-income trap, especially as many of its problems are much larger in scale and more varied and complex in nature.

The second reason for China to be cautious about the sustainability of past growth rates is that it is rapidly becoming an ageing society. An ageing population will have fewer savings (and hence will undertake less investment) and will accumulate human capital more slowly. An ageing society will also become one with a declining population, and this reduces the efficiency gains from economies of scale in production and from synergy-induced innovation.

It must be pointed out that some economists anticipated the post-2010 growth slowdown. Cai Fang (2011) pointed out that China—unlike Japan and South Korea—was ageing before becoming affluent, and warned that this demographic factor could cause China to fall into the middle-income trap.⁶ The abrupt drop in Japanese growth rates occurred in the early 1990s when the Japanese dependency ratio (the proportion of the population younger than 15 and older than 60 years) started rising sharply, after increasing very slowly in the period 1970–90. Similarly, South Korea's growth rates slowed significantly after its dependency ratio bottomed out in 2010 and started climbing rapidly.

China's dependency ratio bottomed out in 2010, and its subsequent rise has been quite rapid although still a little slower than in Japan after 1995 and in South Korea after 2010. Cai Fang called for the relaxation of the one-child policy and the household registration (*hukou*) system to retard the rise of the dependency ratio via a higher fertility rate and to increase the labour participation rate via more rapid urbanisation.

6 See Johnston et al. (2016) for a sceptical assessment of Cai's hypothesis.

In 2013, before the present slowdown in China's trend growth rate was recognised by most analysts, Cai Fang and Lu Yang (2013) used demographically adjusted growth accounting to determine that the average annual potential growth rate would be 7.19 per cent in the period 2011–15 and 6.08 per cent in 2016–20. This prediction might have become reality earlier but for two reasons—the first of which was the frequent monetary and fiscal stimulus to keep zombie SOEs alive, enlarge the inventory of unoccupied housing in some regions and increase the demand for goods made by firms with excess capacity. The second reason is the implementation of some fundamental reforms such as cancellation of the one-child policy and further relaxation of *hukou* restrictions.

Cai Fang's work alerts us to a general methodological issue. Justin Lin had looked at the Japanese–US and South Korean–US ratios of GDP per capita and predicted continued high growth (8 per cent) for China in the next 20 years. Cai Fang studied the relationship between the dependency ratio and the GDP growth rate in Japan and South Korea and predicted a drop in China's annual growth rate. Which is the right variable to pick for comparison across countries to project the trajectory of another variable?

The answer is that cross-country comparison is useful only when the analyst is well informed about the specific conditions in each country and the relative importance of these specific conditions to the trajectory of the variable of interest in that country. In short, cross-country institutional knowledge is needed to supplement standard economic theory to assess the relative importance of the economic mechanisms listed in textbooks.

Country-specific knowledge is absolutely essential because the same observed outcome could be produced by different factors. China might be caught in the middle-income trap because of the accelerated ageing of its population and the unusually slow process of rural–urban migration. Malaysia is in the middle-income trap for an entirely different set of reasons: a comprehensive ethnic preferential system that has spawned rampant rent-seeking, promoted massive capital flight and created a continuing and large brain drain; and an overly centralised administrative structure that suppresses local development initiatives. Thailand has also been forced into the middle-income trap because of the intense political conflict caused by the refusal of the traditional elite to accommodate new social forces.

Andrew Sheng and Xiao Geng (2016) warn that 'the success of the structural rebalancing that China needs to ensure sustainable long-term growth is far from certain'. They believe the origin of China's economic problems lies in the interaction between imperfect markets and an imperfect bureaucracy. While they do not identify whether the greater severity of such problems is due to increased imperfections in the

markets or increased imperfections in the bureaucracy, they are confident that the solution to today's more difficult problems requires the government to go beyond structural reform to 'institutional reform'.

The one institutional reform that Sheng and Xiao chose to mention is:

the central and local authorities must clearly delineate property rights with regard to land, capital, and natural resources, and establish industrial standards and best practices. Such clarity is critical to curtail a surge in disputes over rights, which block productivity-enhancing market-oriented adjustments. (Sheng and Xiao 2016)

It would have been helpful if Sheng and Xiao had indicated how to operationalise their advice.

The most common way to clearly delineate property rights is to privatise state-controlled assets; and the most common way to establish industrial standards and best practice in a country is to adopt standards and practices from abroad and carefully adapt them to ensure their effectiveness under local conditions. China's approach to economic reform should continue to be based on the adage that there is no need to reinvent the wheel for most issues (Woo 2001). There is only the need to have adequate knowledge of how local conditions differ from the conditions in the country from which standards are borrowed so that appropriate modifications can be made.

What is to be done?

Framework for classifying policy challenges

At the China Update 2010 conference, Woo (2010) compared the performance of China's economy during the past three decades to a speeding car. He classified what could cause the car to crash (or stop) under three headings: hardware failure, software failure and power supply failure.

Using the Marxist distinction between base structure and superstructure, Woo (2010) called the breakdown of an *economic mechanism* a crisis in the base structure, which he termed a *hardware failure*. Probable hardware failures include a banking crisis, a budget crisis and a productivity crisis. He called a crisis in the superstructure a *software failure* because it refers to a flaw in *governance* that creates frequent, widespread social disorder that disrupts economy-wide production and discourages private investment. Software failures usually result from not having the right institutional incentives to guarantee good governance—for example, technocratic competence in economic management and effective administrative responses to social concerns over severe inequality, serious corruption and political repression.

Woo (2010) inserted cyber-terminology into the Marxist dichotomy to create a comprehensive framework to capture the phenomenon of a *power supply failure*, where the economy stalls after reaching either *a natural limit* or *an externally imposed limit*. Examples of power supply failures are an environmental collapse, a nuclear war (not necessarily involving China) and a trade war.

We will make the case that there is now a ‘new international normal’ (of which the election of Donald Trump is a manifestation) in which enlightened self-interest requires China to become a responsible stakeholder and help supply global public goods to meet existential global threats—that is, threats of power supply failures at the global level. China must help to build effective collective global leadership to mobilise the global community to achieve the 17 Sustainable Development Goals adopted by the United Nations General Assembly in 2015. Global progress under the new international normal necessitates collective action to prevent power supply failures such as climate change, nuclear proliferation, technological stagnation and military confrontation.

The hardware reform agenda

At the China Update 2016 conference, Woo (2016) identified the two most likely types of hardware failure under the present policy regime as: 1) fiscal stress from having to bail out the state banks by taking over the NPLs generated by the soft-budget constraint of SOEs; and 2) low productivity growth from the disproportionate expansion of the SOE sector. These two hardware failures have been mainly unintentional outcomes of China’s use of SOEs as instruments of macro-stimulus. The stimulus-through-SOEs mechanism creates a trade-off between maintenance of full capacity utilisation in the short run and sustaining a high rate of capacity expansion in the long run.

Chinese policymakers should now replace the stimulus-through-SOEs mechanism with three new interrelated market-friendly macro-stabilisation tools and growth drivers. First, they should foster new private entrepreneurs; second, they should promote urbanisation according to the principles of future homeownership and consumer location choice; and third, they should develop a modern financial system in which the private sector has a greatly enhanced role.

Foster new private entrepreneurs

In section two, we identified the taming of SOEs as the most common element in the policy advice that is offered to China to raise its potential growth rate. This common element does not reflect ideological bias but rather the reality that SOEs constitute a growing burden on the economy. There should be rationalisation of the sector by privatising some, but not all, SOEs. There is no need to privatise most of the largest SOEs provided the government allows free entry into their industries

(with exceptions such as armaments), imposes the hard-budget constraint on both SOEs and private firms (no SOE bias and no crony capitalism) and practices free trade (with exceptions such as opium).

The state can partly offset the contractionary effects of the shrinking state sector by mobilising the laid-off workers to form an entrepreneurial force. Many of these workers could start their own factory workshops to take advantage of the increased cost competitiveness in China's inland provinces created by the explosive extension of the national transportation network since the 2008 Global Financial Crisis (GFC). Because the primary barrier to the emergence of this group of owner-operators is the availability of credit, the government should legalise small and medium-sized private banks as they have comparative advantage over the four large state banks in catering to the needs of these new entrepreneurs.

Promote urbanisation

The second new growth-oriented macro-stabilisation instrument is urbanisation based on the principles of affordable future homeownership and consumer location choice. The prolonged rapid growth of the real estate sector and the large increases in housing prices reflect not just speculative demand but also genuine pent-up demand for housing and genuine accommodation of the rapid rate of the joint industrialisation–urbanisation process. The bulk of new arrivals from the countryside, however, do not qualify for bank mortgages, so many investors have been buying multiple housing units to rent to new arrivals with the intention of raising the rents over time in line with the income growth of the renters. In this sense, much of the recent housing demand has been speculative.

As financial sector development is a protracted process, efficient markets for mortgage loans are a long time coming. Meanwhile, China should significantly scale up its low-cost housing program by allowing new arrivals to the cities to rent for seven years and then have the first right to buy these units at a price based on the cost of construction. This 'future ownership' form of urbanisation would prevent the problem of empty housing being held for speculative reasons and escalating into NPLs. China can afford a massive public housing program because the expensive part of such programs in other countries is the cost of land and not the cost of the structures, and land in China is mostly owned by the state.

To prevent the very real possibility of any massive low-cost housing scheme turning into a ghost town, the government must abandon its present practice of forcing real estate development to follow a preconceived (bureaucratically determined) distribution of city size (that is, the preconceived notion of what the proportions of large, medium and small cities ought to be) and a preconceived notion about what the absolute size of a large city should be.

The interaction of these two preconceived notions of urbanisation and the *hukou* system⁷ has produced an urbanisation strategy that favours the growth of small cities at the expense of the growth of large cities. Lu and Wan (2014: 674) point out that this anti-big cities strategy has created many abnormalities such as:

urbanization lagging behind development and industrialization status; urban land expanding much faster than urban population growth; open discrimination against migrants; a significant proportion of urban residents being excluded from urban society; and serious distortions in the urban system with too many small cities and too few big cities.

Since 2003, the central government has increased the share of land-use quotas allocated to the country's central and western regions to support their development. Liang et al. (2016: 70) found that this 'relative decline in land supply in the eastern regions' caused rapid growth of housing prices that were then accommodated by higher wages. The result of China's pro-small cities land policy is a reduction in the economic competitiveness of the eastern regions. Since the eastern regions are advantageously located for international trade, the land policy has decreased China's overall economic efficiency.

Furthermore, because 'the large cities are not large enough' (Lu and Wan 2014: 671), China's economic growth has insufficiently benefited from agglomeration effects. The primary agglomeration effect is human capital externality, the primary manifestation of which is multidimensional creativity, which, when appropriately harnessed, translates into efficiency gains across the board.

Gao and Lu (2015: 126) use probit models of employment determination to investigate the influence of city scale on employment levels. They find:

A 1 percent increase in city scale increases one's employment probability by between 0.044 and 0.050 percentage points. Moreover, the scale advantage of big cities is heterogeneous among individuals with different levels of human capital, with the least-skilled workers benefiting the most.

The first reform that is necessary to support urbanisation as a driver of growth is to let the locational preferences of Chinese residents determine both the size distribution and the absolute size of cities. The state should limit its role to linking cities with adequate infrastructure and to treating all cities on an equitable basis. For example, one way to make housing more affordable in the most desired cities is to allow these cities to expand in land area according to demand.

⁷ The *hukou* system prevents mobility across locations and not just between urban and rural areas.

The second reform to maximise the growth effects of urbanisation is to phase out the *hukou* system to allow the size and composition of the urban population to reach their optimum values. We will have more to say about this correction in our discussion of the superstructure (software) reforms below.

Develop a modern financial system

Our third, interrelated new growth-oriented macro-tool is the true legalisation of privately owned financial institutions. First, the legalisation of private banks is fundamental to allowing the smooth working of the first two new growth drivers: the emergence of new dynamic entrepreneurs, and the emergence of an efficient mortgage market and thus a more rational pattern of urbanisation. Second, the legalisation of private banks is also an independent driver of growth in its own right.

The healthy development of new private banks would of course require that the system of prudential supervision be strengthened and that interest rates be deregulated.

The emergence of a strong small–medium banking sector will reduce the dominance of the state-controlled banks and hence make the economy less vulnerable to their collapse from potential NPLs. The entry of private banks (domestic and foreign) will reduce the probability of any one of the big four state banks remaining too big to fail, and hence reduce the soft-budget protection enjoyed by the monopoly state banking system. The development of a modern banking system with a major role for the private sector will therefore increase the quality and the quantity of bank loans. The replacement of the usual macro-stimulus of SOE-led investments with market-directed investments will reduce the generation of NPLs.

The software reform agenda

Former president Hu Jintao made the establishment of a ‘harmonious society’ the overarching objective of his administration. This emphasis reveals his judgement that the probability of a software failure is higher than the probability of a hardware failure because fixing the former is much more difficult.⁸ There are two reasons for the greater difficulty. First, popular expectations of administrative performance have risen dramatically with income growth and, more importantly, with increasing knowledge of the outside world. Second, successful reconfiguration of the administrative software requires not just highly developed political skills, but also favourable circumstances in the domestic political arena and a benign international environment—both of which are beyond the reach of most politicians.

8 Judging from China's passive stance at the WTO negotiations in Potsdam in 2007 and its uncooperative position at the climate change conference in Copenhagen in 2009, power supply failure was not something that was on the radar screens of Hu Jintao or Wen Jiabao.

The satisfactory functioning of a market economy requires a wide array of regulatory institutions, ranging from straightforward administration of law and order to complicated legal adjudication. The lack of accountability (because of the absence of a mechanism for popular political competition) and the lack of transparency (the absence of a free press) have resulted in inefficient governance on many fronts. The ongoing anticorruption campaign that China has enforced since 2012 represents a serious attempt to improve governance.

Other important institutional reforms that should be started to enhance economic dynamism are reform of the *hukou* system and reform of rural landownership. These two reforms are really complementary and mutually reinforcing. The *hukou* system has created great disparities in access to public services (such as education, health care, public housing and social security) between cities and between urban and rural residents. For example, until recently, admission into almost all universities required lower academic scores for students who were legal residents in the towns in which the universities were located. This is particularly unfair to students who attend rural schools that are less well funded and less well staffed.

Many rural people are working in cities as residents with no *hukou* in these cities, leaving their rural residences mostly unoccupied and their rural farms untended. ‘Permanent nonlocal labor without local *Hukou* has already exceeded a third of the total urban population in the big cities of the eastern region, and is over 50% in Guangdong’, according to Lu and Wan (2014: 678). Because these migrant workers are usually not entitled to any public services, their children normally stay in the rural area with aged relatives, resulting in widespread underinvestment in the human capital of rural children.

The *hukou* system is grossly unfair as well as economically inefficient. We agree with the suggestion of Lu Ming and Wan Guanghua (2014: 678) that:

Hukou reforms should be simultaneously advanced on two fronts. First, the thresholds for nonlocal residents to obtain local urban Hukou should be gradually lowered. Second, steady, moderate equalization in urban–rural and interregional basic public services should be promoted through central fiscal transfers.

... Who should be granted local urban Hukou? The key is to give priority to those pursuing employment over those pursuing public services. Therefore, the criteria should mainly be employment and social security contribution records. One could use years of work and unbroken residence in one area as conditions for conferring Hukou. At the same time, educational level and professional qualifications should be removed from the list of requirements. For university graduates, their actual employment status, not their educational qualifications, should be used as conditions for entry.

... [There should be] a series of parallel reforms in social security and public services. Portability of social security benefits is urgently needed, and the link between local Hukou and social security benefits needs to be weakened. The gap in social services between permanent residents with and without local Hukou should be narrowed through central fiscal transfers.

Presently, rural land is collectively owned, but the right to use the land is assigned to individuals, usually for 30 years. When the legal status of a rural resident changes to 'urban resident', this person loses their claim to the use of the piece of rural land assigned to them. Because of the large-scale privatisation of collectively owned assets in urban areas in the 1990s, many rural residents have the expectation that rural land will also one day be privatised. This expectation has therefore rendered many rural residents reluctant to accept legal urban resident status when offered.

Land in rural areas is divided between that for residential use and that for farming use, and the state decides the amount of land set aside for each. The administrative land area of a Chinese city contains land for urban construction and rural land (divided into residential use and farming use), and the amount of each type of land is set by the state.

There are many good reasons rural land should be privatised to existing leaseholders. One common objection to rural land privatisation is that it will increase inequality because rural land in poor provinces is worth a fraction of the rural land within the limits of big cities in the rich provinces. This objection is facetious because privatisation would mean formal recognition of existing inequalities in access to high-value land rather than the creation of more inequality. Privatisation of urban housing to the existing occupants and privatisation of small state enterprises to their staff occurred more than 20 years ago; it is hard to find economic or moral reasons to continue discriminating against rural residents.

If rural land cannot be privatised, China should adopt the 'mechanism to enable the trading of land usage rights' suggested by Lu and Wan (2014: 680):

The core of our proposal is to enable long-term migrants to convert their rural residential land into construction-use land quotas which are then transferred to the city of their employment for urban expansion. The residential land at the origin is then restored into farmland. The migrants win as they obtain urban Hukou and associated benefits. The native urbanites also win because some of the gains from the appreciation of suburban land (as it becomes construction-use land) can be used to fund public services and social security for themselves as well as for new migrants. In fact, all parties involved will win ...

The population-inflow region's government represents local residents in obtaining a portion of the land appreciation gains while the population-outflow region's government also shares part of the gains as they restore abandoned residential land to farmland for productive use, which in turn provides revenues for funding

local public services to be enjoyed by those staying behind. To make this win-win proposal a reality, a nation-wide construction-use land quota trading system could be established, to maximize the gains from construction-use land usage rights while preserving sufficient land for farming or food security.

The policy agenda to avert power supply failures

At the China Update 2010 conference, Woo (2010) emphasised the importance of environmental protection in China and of harmonious international relations in enabling the rate of China's economic catch-up to remain high. China's severe air pollution shortens lifespans at home and in neighbouring countries, and China's management of water from the Tibetan Plateau affects the economic development in northern versus southern China and in its southern neighbours such as India, Thailand and Vietnam. The win-win solutions for most types of power supply failures will involve both technological breakthroughs and creative international diplomacy. In both cases, the probability of success is greatly increased when there is cooperation with foreign partners.

The global situation in 2017 requires that China doubles down on its cooperation with foreign actors because globalisation is now under threat and China is (arguably) the biggest beneficiary of globalisation. Popular dissatisfaction with different aspects of globalisation played an important part in the unexpected victories of the Brexit movement in the United Kingdom and the election of Donald Trump in the United States.

The British public could accept the free movement of goods and capital but could not countenance the free movement of people because of its threat to ethnic identity. The American white working class and white middle class in the rust belt had a lot to be resentful about: the loss of their manufacturing jobs to foreign imports and to relocation of production plants abroad, the potential dilution of their cultural identity by the inflow of immigrants, the venality of the US financial industry that caused many workers to lose their homes and savings, the unresponsiveness of the conservative political class to their need for assistance, the contemptuousness of the liberal political class towards their values relating to guns and religion and the blow to their national pride from the decline in the international standing of the United States.

Globalisation was seen as the process that brought many of these ills to American shores and also as the process that strengthened many of America's enemies. The deepening and widening of US interaction with China were perceived to be responsible for a significant part of the United States' problems. After all, even the ever-reasonable Ben Bernanke, former chairman of the US Federal Reserve, had identified surplus savings from China as one of the key factors in the meltdown of US financial markets in 2008.

Furthermore, China was also seen as the quiet ally of the seemingly mad North Korean regime and of the highly antagonistic Iranian theocracy, both of which constantly threaten the destruction of US allies. Seeking advantage from the growing Sino-phobia, candidate Trump promised to impose a 40 per cent tariff on Chinese imports and embraced the 'America first' economic agenda of US economist Peter Navarro (2015), who penned the conspiratorial tract *Crouching Tiger: What China's militarism means for the world*.

US President Donald Trump has stayed true to many of his key campaign promises so far—albeit in sometimes inscrutable ways. He confronted China at the beginning of his term by speaking with the Taiwanese President, but he then also ended former president Barack Obama's pivot to Asia by pulling the United States out of the TPP. Trump's gutting of the TPP is unfortunate because it denies the Association of Southeast Asian Nations (ASEAN) and Australia the option of adopting the formally neutral position of being in both the US-led TPP and the China-led Regional Comprehensive Economic Partnership (RCEP), effectively pushing them into de facto alliance with China.

For good measure, Trump also declared the withdrawal of the United States from the Paris Climate Treaty, expressed strong approval for Brexit, proposed rollbacks of prudential supervision of financial institutions and removed regulations on fossil fuel industries. Trump's eagerness to play the 'Ugly American'—for example, slamming down the phone on Australian Prime Minister Malcolm Turnbull and building the 'Great Wall' that Mexico would somehow be made to pay for—has left the world lacking adult leadership on the provision of global public goods. This vacuum in global leadership is threatening to unravel globalisation.

Even though it is true that the governance of globalisation by the major powers and international agencies has often been incompetent and unfair in many ways, we urge that the rollback of globalisation be resisted because we know that globalisation-induced socioeconomic problems can be solved without deglobalisation. Deepening globalisation does not require the less developed countries to fall even further under the thumb of the International Monetary Fund (IMF) (which acted as the collector of Latin American debt on behalf of the US banks in the 1980s and mishandled the Asian Financial Crisis in the 1990s)⁹ nor does it require the strengthening of the two-decade trend in international trade agreements that favours multinational corporations at the expense of less developed countries (e.g. the removal of the adjudication of commercial disputes involving foreign investors from domestic courts to external private arbitration bodies).¹⁰

9 To be fair, the IMF has learned from its mistakes and improved its performance.

10 The Investor-State Dispute Settlement Mechanism reduces the regulatory space of the host country.

In the face of the US withdrawal from global roles, major countries in the G20, including China, should step up to the plate and change the governance of the international economy for the better, to prevent deglobalisation. We must keep in mind the conclusion of Charles Kindleberger in his magisterial book *The World in Depression, 1929–1939* that the mechanism responsible for the depth and length of the 1929 Great Depression was deglobalisation: ‘When every country turned to protect its national private interest, the world public interest went down the drain, and with it the private interests of all’ (Kindleberger 1973: 291).

The fundamental insight in Kindleberger’s book is the hegemonic stability thesis. The ultimate reason the world experienced the Great Depression rather than a great recession, according to Kindleberger, was the absence of a benevolent hegemon during the period 1929–39—the absence of:

a dominant economic power able and willing to take the interests of smaller powers and the operation of the larger international system into account by stabilising the flow of spending through the global or at least the North Atlantic economy, and doing so by acting as a lender and consumer of last resort. (DeLong and Eichengreen 2012)

The essence of the hegemonic stability thesis is that whenever the global economy is hit by sizeable shocks, it becomes unstable unless some country intervenes to stabilise it. The United Kingdom played that stabilising role in the nineteenth century and up to 1913, but, by 1929, it had declined to middle-power status and no longer had the overwhelming economic power to hold back collapsing global demand and to mobilise others to join countervailing actions. The United States in 1929 was not yet big enough to be the global hegemon, but, even if it had been, it was not mentally willing to take on that role. It was only after World War II that the United States became the unchallenged global hegemon and developed the mindset to play that role.

A global hegemon no longer exists in 2017 because the size of the Chinese economy measured in PPP dollars is now as large as the US economy. Will China emerge as the global hegemon in 2060 if it succeeds in catching up to the US standard of living by that time? The answer is no. If India maintains its present pace of economic catch-up, its economy in 2060 will be at least as big as China’s. In 2060, the standard of living in India might still be lower than in China, but the Indian population will be significantly larger, making India’s GDP as large as China’s.

In brief, the world from this point would no longer have a monopoly economic power that could act as the global hegemon. An oligopolistic distribution of economic power would henceforth be the norm: China–United States–European Union in 2017 and India–China–United States–European Union in 2060.¹¹

11 The bold prediction here is that the European Union will have achieved total political integration by 2060.

The new international normal is a multipolar world. From the lens of the hegemonic stability thesis, this is a terrible development because a leaderless world is prone to adopting self-defeating protectionism. The world is now facing the challenge of Karl Marx's (1852) observation that 'History repeats itself, first as tragedy and then as farce'.

The most common outcome in a situation of oligopolistic distribution of power is the division of the world into spheres of influence because of the security concerns of each major power. The present squabbles in Ukraine and the South China Sea could be the beginning of this process. However, it could be a mistake to see the future as a replay of the past; it would certainly signal a lack of imagination if we were to do so.

With the right regional arrangements and interregional agreements in place to address the security concerns of each major power, a new form of benign globalisation could emerge. The sphere of influence of each major power could become a geographical cluster for economic development and not a geographical cluster for economic exploitation (as between Africa and Europe in the first half of the twentieth century) or a geographical cluster for political domination (as between Eastern Europe and the Soviet Union in the second half of the twentieth century). Given the existence of economies of scale in production, every geographical cluster must practise open regionalism to maximise economic prosperity. Existing global institutions such as the United Nations and its agencies, the World Bank, the IMF and the G20 will have the additional task of regional coordination to ensure global economic integration.

Each major power would be the chief funder of economic institutions in its own cluster—for example, the European Stabilisation Fund, the Asian Infrastructure Investment Bank (AIIB) and the Inter-American Development Bank. The existence of competing/complementary regional institutions means there are multiple independent analytical centres in the world instead of a monopoly international financial institution and a monopoly international development bank. This outcome would minimise the possibility of wrong diagnoses and/or the wrong prescriptions, avoiding a repeat of the mistakes made by the IMF and the World Bank in the past.

As China will continue to grow in relative size, it can play an important role in making collective leadership for global governance successful and in fostering the creation of these clusters for economic development. China's engagement with its neighbours through the 'One Belt, One Road' initiative, the AIIB and the RCEP is very much in line with a multipolar world in which each development-oriented cluster practises open regionalism.¹² However, for globalisation to deepen and widen, China must take greater leadership in the supply of global public goods such as fighting climate change and species extinction, stopping nuclear proliferation

12 For a good recent discussion of the foreign aid practices of China, see Johnston and Rudyak (2016).

and international terrorism, stabilising the international monetary system by internationalising the RMB to broaden the choice of reserve currencies to reduce currency risks from globalisation, and getting the world to agree to a worldwide minimum tax rate on capital to prevent a race to the bottom in financing social safety nets.

The new international normal of a multipolar world would necessarily mean the political and economic fragmentation of the post-World War II global order. There is, however, good fragmentation as well as bad fragmentation. Good fragmentation protects globalisation in a setting of effective collective leadership and bad fragmentation is the situation in which Kindleberger's hegemonic stability thesis applies and Marx's dictum on repetitive history rules.

Final remarks

China has now achieved middle-income status through the marketisation and internationalisation of its economy. The internal economic conditions in China have also changed: the supply of surplus labour is exhausted, the demographic dividend is ending, and the natural environment is under severe stress. This outcome creates a new domestic normal that requires the creation of reform dividends to drive growth. Specifically, China must undertake: 1) structural reform of economic mechanisms such as rationalising the SOE sector and deregulating the markets for capital, labour and land; 2) structural reform of governance institutions such as administrative accountability, the *hukou* system and rural landownership; and 3) structural reform of institutional incentives to protect the environment. These three sets of reform measures in response to the new domestic normal comprise what we call 'supply-side structural reform 1.0'.

At the same time, the global picture that China faces has changed, and this change is part of China's making. The architecture of global governance that rested on the hegemonic stability provided by the United States is crumbling because China's rise has ended the days when the US had such overwhelming economic power that it could impose order on economic dwarfs. The inevitable emergence of India as a global superpower guarantees that hegemonic stability will stay in the garbage bin of history. A multipolar world is now the new international normal.

Having helped bury hegemonic stability, China must now help make collective global leadership work by expanding Hu Jintao's concept of a harmonious society to the concept of a harmonious world. Out of enlightened self-interest, China must help mobilise the world to work together to protect the global environmental commons, the global trading system and global security; and to promote continued globalisation to maximise the synergy for global progress created by interaction.

Finally, the 1992 *nansun*-inspired¹³ economic strategy that has so impressively transformed China for the better is no longer adequate because China today faces a new set of domestic conditions (the new domestic normal) and a new set of international challenges (the new international normal). For China to avoid the middle-income trap, it must now take a path of dynamic sustainable development to continue the process of economic catch-up. In this chapter, we have provided a sketch of such a strategy under the new domestic normal and the new international normal, which we call supply-side structural reform 2.0.

Chinese and world socioeconomic progress, as well as the necessity for environmental protection, require decisive reforms in both the structure of domestic incentives¹⁴ that determines domestic production, and in the structure of international governance¹⁵ that determines the provision of global public goods.¹⁶

In a multipolar world, the business-as-usual outcome is the partition of the world into competing spheres of influence where deglobalisation is the by-product. However, if enlightened self-interests prevail in the major countries, the outcome will instead be geographical clusters for sustainable economic development based on the principle of open regionalism. The world is likely to be now at the critical point where each of the major powers is choosing either to be enlightened enough to act according to its long-term interests or to be cynical and continue to play the usual zero-sum *realpolitik* game. The outcome of benign globalisation in a multipolar world need not be a dream.

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13 *Nansun* refers to the tour of Southern China by Deng Xiaoping in 1992, in which he re-ignited the process of economic reform and opening by rejecting absolutely the applicability of Soviet-style central planning to the Chinese economy.

14 For example, rural land and urbanisation policies.

15 For example, regional financial institutions, international maritime resources oversight bodies, and global climate agencies.

16 We hope over the coming year to make progress on research that will flesh out more of the Supply-Side Structural Reform 2.0 program, and that will, hopefully, be worthy of inclusion in the China Update 2018 meeting of the China Economy Program of the Crawford School at The Australian National University in Canberra.

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