The Long View

China is Too Big to Fail

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This report investigates the current slowdown of the Chinese economy in light of the existing long-term imbalances in the country. In our estimation, economic growth in China is currently probably 1.5% or more below official numbers and we believe that the widely held belief, that a Chinese slowdown can be contained due to the lack of international integration, is ill-informed.

We also try to project the future competitive relationship between China and the West and conclude that the West may face a Cold War with China. We provide guidance for investors on how to position themselves for these long-term trends.

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A word of caution

I am not a China specialist. This report is the result of several months of thought about the Chinese economy and the situation China is in, facing a trade war with the US at the same time as the economy is undergoing structural reforms. Throughout the second half of 2018, I was surprised to see how weak Chinese demand for goods and services was. This observation formed in me the suspicion that I am missing something in my assessment that China would be poised to "win" a trade war with the US, given its strong growth dynamic. So, I decided to take a fresh look at China, starting from the basics, considering the current situation and the long-term challenges the country faces over the next decade or so.

Unfortunately, I don't speak mandarin and neither does anyone in our team, which is a significant disadvantage because the information provided by government entities in English is significantly different from the information provided in Chinese for a domestic audience. Also, I do not have years of experience in analysing China, which limits my ability to make sense of the often highly smoothed and unreliable economic data released by the government.

What I do have, though, is a never-ending curiosity and the willingness to dig deep in order to unearth data sources that may be overlooked by investors, together with an ability "to torture the data until it confesses", as one of my mentors used to say. Armed with these intellectual tools, I ventured into the rabbit hole that is the Chinese economy and what I found changed my view of the country profoundly.

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In short, this report will try to show that China is literally too big to fail and that people who think the Chinese economy is going to collapse should fear what they wish for. If China fails, it will take the entire global economy with it. We must root for China's success, because its failure will be our demise.

For experienced China watchers, the data and views expressed in this report may not come as a surprise, but I think generalist investors, such as CIOs of pension funds and portfolio managers, are typically operating with a view of China that is outdated and urgently needs adjusting to mirror current realities, rather than past rules of thumb. This report tries to do just that.

China is big, really big

There are many misconceptions about the Chinese economy but one of the most dangerous is the belief that a Chinese slowdown, or even a Chinese collapse like the one Japan witnessed in the 1990s, will have a limited impact on the developed world and can be digested fairly easily by the US, the UK and the Eurozone.

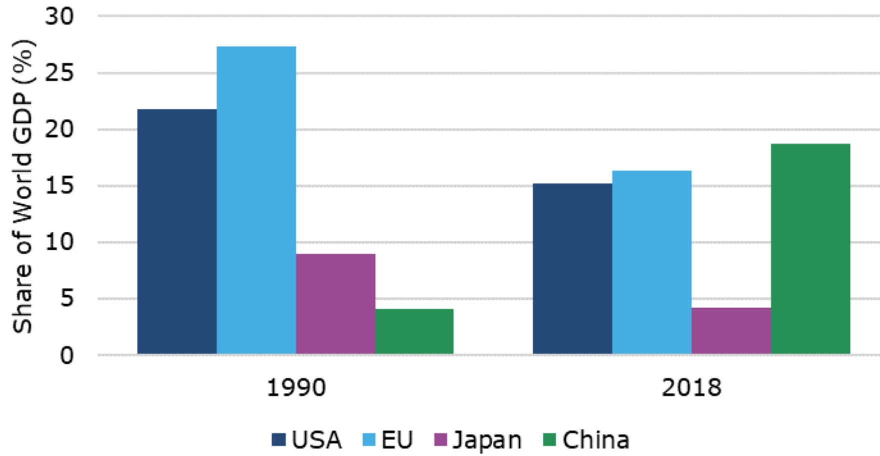
The argument is typically made along the lines that, yes, China is the biggest emerging market, but it still is an emerging market with many poor people and a generally low standard of living (Chinese GDP per capita at the end of 2017 was $8,643 according to the IMF compared to $59,792 for the US and $39,800 for the UK). If China collapses, the decline in global demand would likely be manageable except in commodity markets, and even if the decline were to be dramatic, financial linkages to the Western world through trade and finance are limited. The historic comparison most often made is with Japan in the 1990s. Back then, Japan had a housing bubble, too much debt, an overleveraged banking sector and a rapidly aging population. All these fact patterns are true for China today as we will discuss below. When the Japanese economy collapsed, the lack of international exposure to Japanese debt and real estate meant that the impact on Western economies was indeed small. The financial linkages between China and the rest of the world today are also limited and most Chinese debt is held domestically. Thus, the argument goes, a Chinese collapse is not going to be the end of the world, just like Japan's collapse was not the end of the world.

To believe that China can in any way be compared to Japan in the 1990s is a categorical error of judgement.

This argument is built on a crucial mistake. It assumes that China is somewhat similar in size to Japan in the early 1990s. Fig. 1 hopefully puts to rest the illusion that China in 2019 is comparable to Japan in 1990. It shows the size of the economies of the US, the European Union (incl. the UK), Japan and China corrected for purchasing power parity (PPP). In 1990, the Japanese economy peaked and people in the US were afraid Japan would take over the world and buy skyscrapers in Los Angeles that would then be kidnapped by German terrorists during a Christmas party before loner cop John McClane came to save the day. In that year, the Japanese economy accounted for 9% of global GDP, compared to 21.8% for the US and 27.4% for the European Union (EU). China back then really was an "also ran", with 1 billion people accounting for a mere 4% of global GDP.

But today, the Chinese economy is the world's second largest economy when measured in current exchange rates and the world's biggest economy when corrected for PPP. China's economy accounts for 18.7% of global GDP, while the US has shrunk to 15.2% and the EU to 16.3%. Today, the Japanese economy has about the same share of the global economy as China did in 1990. In short, China is big, really big. China will soon have more English speakers than the entire United States and the number of children with an IQ in the top 25% is larger than the entire number of children in the US. In other words, China has more honour students than the US has students. To believe that China can in any way be compared to Japan in the 1990s is a categorical error of judgement.

Fig 1: Share of global GDP

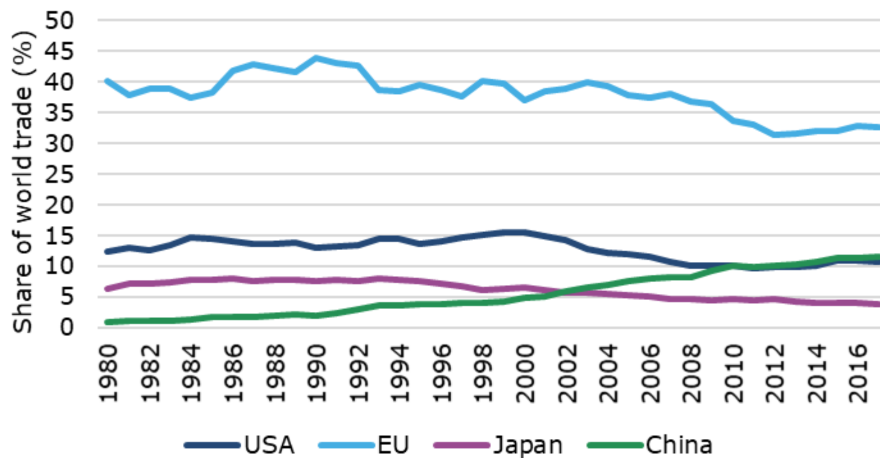


Source: IMF, Fidante Partners.

Of course, GDP is only a measure of the size of an economy, but it does not tell us anything about the international integration of the economy. This brings us to the second mistake made in the analogy to Japan in the 1990s: the assumption that China's economy is not important as a customer to the world. Indeed, China is much less integrated in the global economy than most developed markets and indeed than Japan was in the 1990s. We all know China as "the workshop of the world", where Western companies ship raw materials and intermediate products to assemble them into iPhones and other "stuff" that then is exported back to the West.

As such, China is little more than a step in the global production chain. The importance of China as a trade partner to the world is visible in Fig. 2. Today, China is involved in 11.6% of global trade. It overtook the US as the world's second largest trading nation in 2011, while the European Union is still the world's largest trade partner involved in roughly one third of global trade (note that this figure does not include trade within the EU but only trade with countries outside the EU). Japan, on the other hand, peaked in 1993 at 8.1% of global trade.

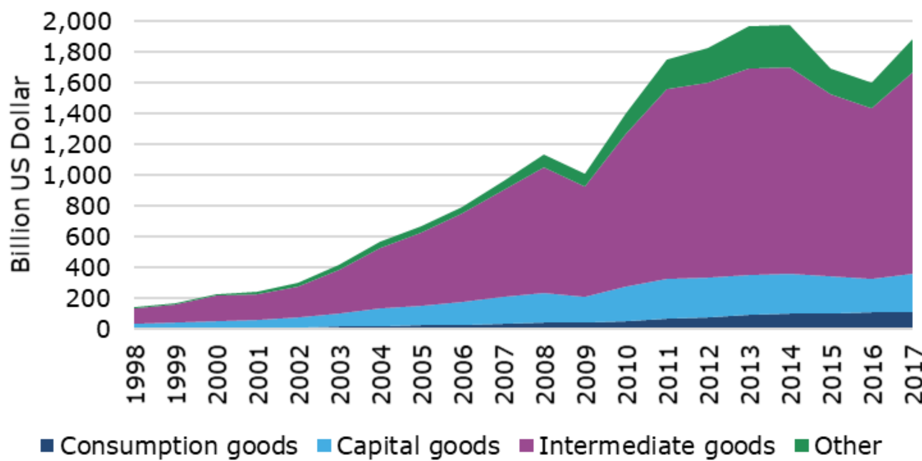
Fig 2: Share of world trade



Source: IMF, Fidante Partners.

But China is increasingly becoming an important end customer. In 2016, China imported $2tn in goods and services from the rest of the world, compared to $2.6tn for the EU and $2.7tn for the US, making it the world's third largest consumer of goods and services and creating about three times as much demand as Japan ever did. Fig. 3 shows that a large part of this demand is still for intermediate goods, but the share of capital goods and consumer goods that end up in China is growing steadily. At the onset of the Global Financial Crisis in 2007, China imported $33.6bn in consumption goods and $174.3bn in capital goods. Ten years later in 2017, China imported $105.2bn in consumption goods and $253.4bn in capital goods. That is about the same amount of capital goods as Germany and about the same amount of end products (consumption goods plus capital goods) as the UK.

Fig 3: China imports from the rest of the world



Source: United Nations Comtrade, Fidante Partners.

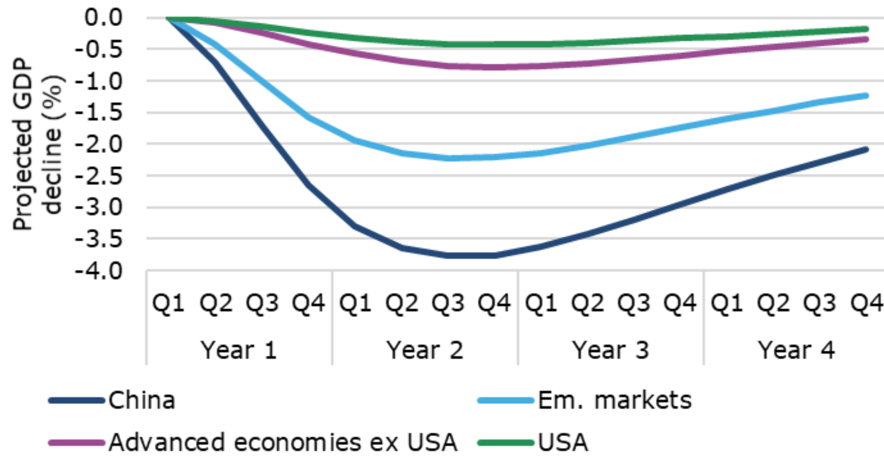
If you think that a recession in Germany can lead to recessions in its most important trading partners, like France and Italy, then a recession in China should lead to similar threats of recession to its most important trading partners. This is at least what today's global economic models predict.

> "A moderate Chinese growth slowdown has the potential to push Europe into recession, though not the US at the moment."

In Fig. 4 we show the predictions of a model used by the Federal Reserve Board in the United States. The simulation assumes a moderate Chinese growth slowdown of 3.5% within six quarters without any financial market spillovers (i.e. no market panic and no mass defaults in the banking system). As we will show in the next section, this is not an unreasonable assumption for the current economic slowdown in China.

In this case, the model predicts a 0.5% decline in US growth and a 0.75% decline in growth in advanced economies other than the US as a result of the decline in Chinese demand. Emerging markets would be harder hit and experience an estimated 2.2% growth slowdown on average. These numbers may not sound large but remember that the Eurozone economy is already growing at a mere 1.5%. A Chinese recession would thus cost major European countries about half their current growth, which in turn would cost their trading partners additional growth in second order effects. As a result, a moderate Chinese growth slowdown has the potential to push Europe into recession, though not the US at the moment.

Fig 4: Spillover from a moderate slowdown of Chinese growth



Source: Federal Reserve Board, Fidante Partners.

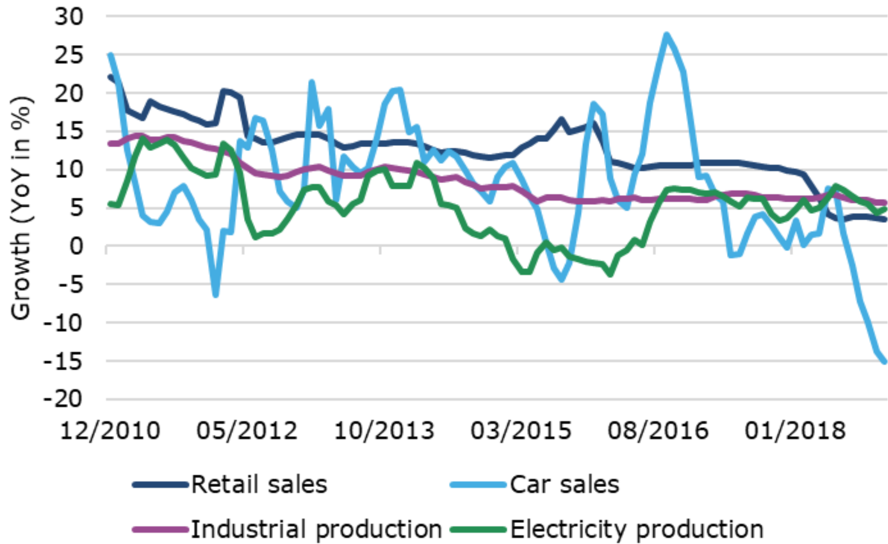
Goliath is weaker than you might think

By now, we have hopefully convinced you that China is not Japan but is in fact much bigger and more important for the global economy than Japan ever was. The economic world of a US-Europe duopoly with a challenger country Japan that was prevalent throughout the 1980s and 1990s has been replaced by a triopoly US-China-Europe, in which each of these regions is closely matched and weakness in one can bring about weakness in another. Which brings us to the point that started this entire investigation into the Chinese economy.

Chinese growth indicators have slowed down throughout 2018. Growth in industrial production declined from 6.2% at the beginning of the year to 5.6% at the end, while retail sales growth declined from 9.9% to 2.9%. But these numbers are likely not representative of the true decline in economic activity since everyone knows the Chinese administration smooths economic data to bring it in line with official government targets and projections. The "adjustment" of data is no longer as blatantly obvious as it was a few years ago, when in 2013 every single province in China reported the same or higher GDP growth than the national average, but these adjustments still occur, as will become clear when we compare headline data, like industrial production, with data that is out of the spotlight and hence less likely to be manipulated by government officials.

Fig. 5 shows retail sales together with new car sales and industrial production together with electricity consumption. New car sales have declined dramatically in China due to the import taxes imposed on cars from the US as a retaliatory measure in response to US tariffs. Yet, the 15% decline in car sales in China has seemingly no effect on the retail sales, despite car sales being a substantial component of retail sales. Similarly, industrial production growth has always been remarkably stable despite electricity production fluctuating widely over time and experiencing a decline from 6% growth to 4% growth throughout 2018. The famous Li Keqiang index created by the Economist uses electricity consumption, railway cargo volume and newly-issued bank loans as a measure for true Chinese economic activity. However, this index focuses on the old structure of the Chinese economy based on industrial growth rather than consumption growth. As we will show below, the Chinese economy today is much more driven by consumption, so we need to build our own measure of true growth in China that includes proxies for consumption.

Fig 5: Chinese economic activity



Source: Bloomberg, Fidante Partners.

We thus collected a number of indicators that are less prone to government adjustment in order to estimate the true growth of the Chinese economy. As a proxy for private consumption we use retail sales components like car sales, as well as new home sales to reflect the health of the important housing market. In order to measure growth in private investments, we use electricity consumption, foreign direct investments and other components of private investment. We complement this data with international trade statistics from Germany, South Korea and Taiwan – three countries with close trade ties to China and strong exposure to Chinese industrial growth. As Fig. 6 shows, exports from these three countries to China have also declined rapidly in 2018.

Fig 6: International exports to China

Source: Bloomberg, Fidante Partners.

These variables were then combined in a regression analysis to provide the best fit to the actual Chinese growth numbers between 2010 and 2015. We then project this shadow growth forward from 2016 onwards to today. Due to its construction, this "FrankenChina" economy matches the economic growth data from 2010 to 2015 very well, explaining about 98% of the variability in growth.

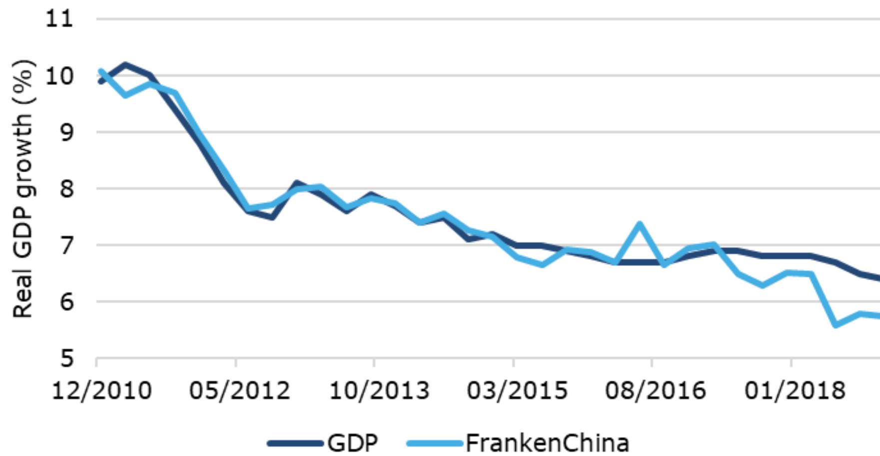
> "We estimate that true Chinese growth is at least 1.5% lower than official numbers suggest."

Assuming that the Chinese economy has not materially changed since 2016, this FrankenChina model should continue to match official Chinese growth data over time.

And indeed it did, until about late 2017, when the People's Bank of China (PBOC) tried to wean the economy off of cheap credit through higher interest rates and higher reserve ratios, and the trade war with the US started to intensify. Since then, the gap between the official Chinese growth data and our estimated true growth has persistently widened to the point where our model estimates true Chinese GDP growth to be 1.5% lower today than official numbers suggest. Of course, this model assumes that the Chinese GDP numbers were roughly correct between 2010 and 2015. If Chinese growth was systematically overstated during that time period, our model would also overstate true growth today.

Overall, we conclude that the Chinese growth slowdown has already started, and it is likely not a mere 0.5% as official data suggests but more of the order of 2% and growing. Not quite the 3.5% growth decline simulated in Fig. 4 but getting increasingly close to it.

Fig 7: Estimated true growth of China



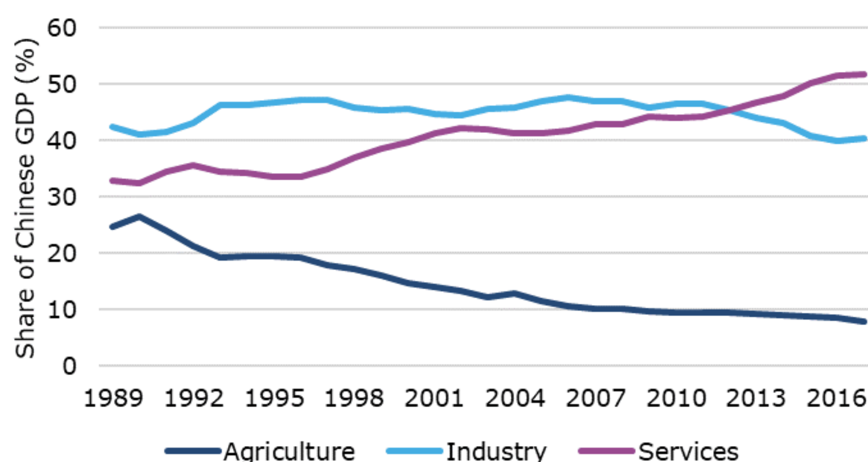
Source: Bloomberg, Fidante Partners.

The workshop of the world is evolving

As we stated in the last section, the structure of the Chinese economy is changing rapidly and the fact that China is moving away from an investment-driven economy towards a consumption-driven economy is by now well known. This shift in the "business model" of the Chinese economy is also reflected in the sector composition of Chinese growth data. Since 2013, the service sector has been the biggest contributor to growth, overtaking the industrial and construction sector (Fig. 8). Today, services account for 51.6% of Chinese GDP compared to a 39.8% contribution from industry and construction. This means that consumption- and service-driven variables like retail sales have become comparatively more important in determining Chinese growth. But as we have seen in Fig. 5, retail sales experienced a rather more pronounced slowdown in 2018 than industrial production.

The rising consumption by Chinese citizens has led to some surprising side effects. Chinese tourists have become a force to reckon with. In 2005, Chinese tourists accounted for c. 3.5% of global tourism spending. Ten years later, Chinese tourists had become the world's biggest source of tourism spending and accounted for 18.6% of global tourism spending, or c. $200bn.[1]

Fig 8: Contribution to Chinese GDP



Source: Bloomberg, Fidante Partners.

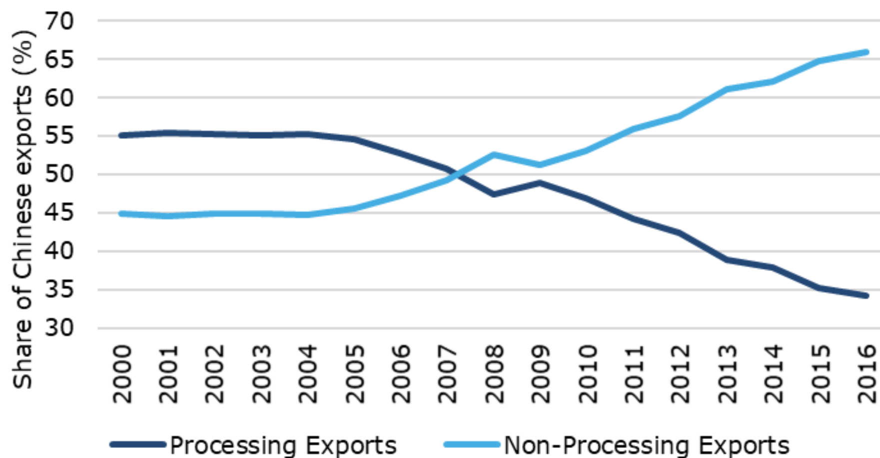
While the industrial sector is declining in importance, its composition has changed as well over the last decade or so. In the past, China has been dubbed "the workshop of the world" since Western companies would ship raw materials and intermediate goods to China where they would be assembled for export back into the West. The famous statement on the back of each iPhone "Designed by Apple in California. Assembled in China" is testament to these global value chains. But Chinese companies are catching up fast and are increasingly becoming serious global competitors in high value-add industries such as technology and finance. Brands like Huawei and Xiaomi have become household names in the West, Chinese car manufacturer Geely bought Volvo in 2010, and the world's four largest banks by balance sheet size are all Chinese and are serious international players.

Processing exports, i.e. exports of goods that were assembled in China and then are sold internationally, have declined from 52.7% in 2006 to 34% of Chinese exports in 2016. Meanwhile, non-processing exports, i.e. exports of goods that are domestically sourced and designed, rose to 66% of Chinese exports (Fig. 9). This shift towards

[1] S. Ahmed (2017). "China's Footprints on the Global Economy: Remarks delivered at the Second IMF and Federal Reserve Bank of Atlanta Research Workshop on the Chinese Economy".

higher value-add exports, in competition with other export-oriented countries like Japan, South Korea and Germany, means that the next decade will put China on collision course with developed economies – a development that is likely to create significant tensions in the years to come and something we will discuss in the last section of this report.

Fig 9: China is no longer the assembly hall of the world



Source: Federal Reserve Board, Fidante Partners.

The long-term imbalances don't suddenly disappear

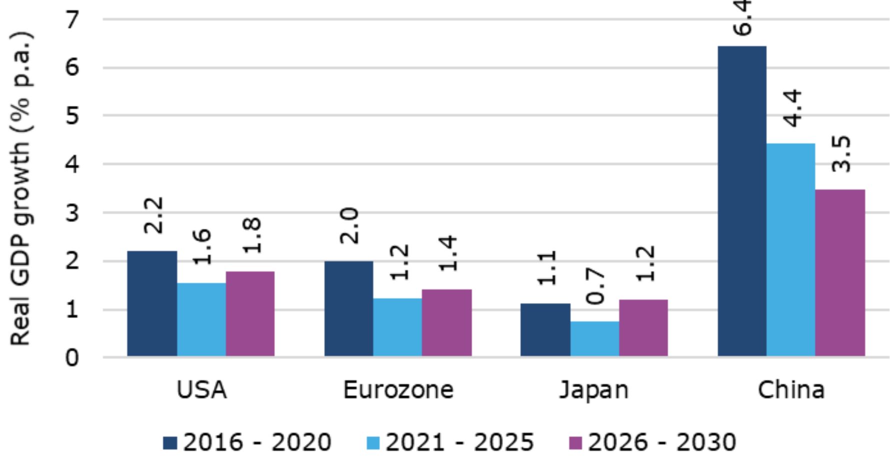
While the Chinese government tries to put the economy on a more sustainable growth path, the well-known imbalances in the Chinese economy won't simply disappear. The most prominent structural problem that China must deal with is its ageing population. Thanks to the one child policy, China has a similar demographic challenge to Japan and while the increase in the working population has added about 1% of GDP growth per year between 2000 and 2007, this contribution has since declined to zero and is expected to reduce growth going forward by about 0.1% to 0.3% per year.

> It is almost inevitable that China will become the dominant global economic power by the 2030s. But that just means that economic difficulties in China will spill over to the West.

In July 2018, the OECD published its quadrennial update of its long-term growth forecasts. Reaching as far out as 2060, the organisation expects Chinese growth to slow down fast, from 6.4% today to 4.4% on average between 2021 and 2025, and then to 3.5% between 2026 and 2030 (Fig. 10).[2] Of course, that is still much faster growth than anything that can be expected in the US, Europe and Japan, where growth rates will average below 2% per year. In fact, even in the most pessimistic scenario it is almost inevitable that China will become the dominant global economic power by the 2030s. But that just means that economic difficulties in China will spill over to the West. Again: China is big, really big.

[2] Y. Guillemette and D. Turner (2018). "The Long View: Scenarios for the World Economy to 2060". OECD Economic Policy Paper No. 22.

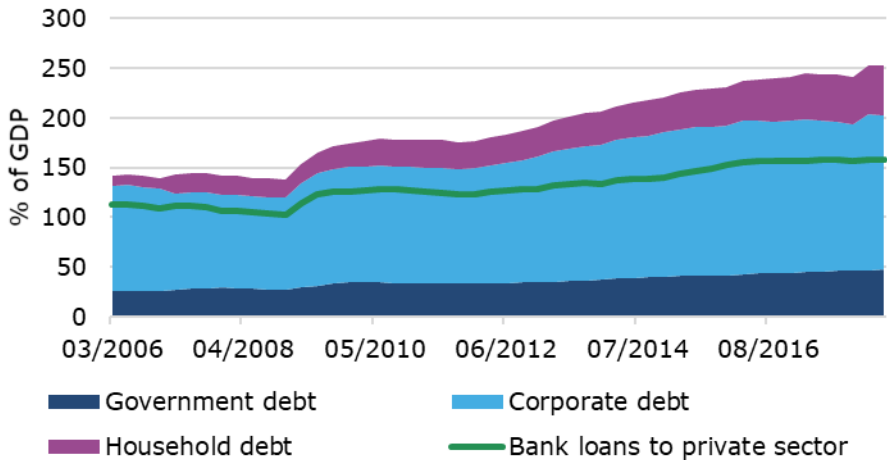
Fig 10: Long-term growth projections



Source: OECD, Fidante Partners.

The economic difficulties that could potentially derail China as well as the West are predominantly located in the debt markets and the housing market. While China's government debt-to-GDP ratio has remained rather low and is currently around 47% of GDP, corporate and household debt has expanded quickly. Since the end of the GFC in 2009, private sector corporate debt has grown from 93% of GDP to 155% of GDP, and household debt levels have grown from 18% of GDP to 50% of GDP. Bank loans to the private sector have grown from 102% of GDP to 158% of GDP.

Fig 11: China's debt



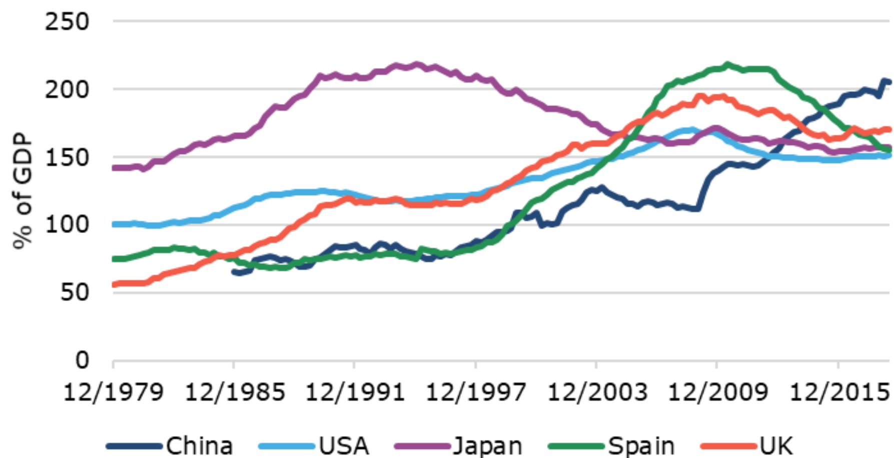
Source: BIS, Fidante Partners.

And these are just the official debt levels. The proliferation of shadow banking instruments, like wealth management products, banker's acceptances and other forms of credit that are not recorded on banks' balance sheets, may increase the total debt-to-GDP ratio of the Chinese financial system from 205% of GDP to 285% of GDP. Wealth management products, for example, are corporate loans to Chinese businesses that are repackaged as short-term debt instruments and then sold to private investors as cash enhancement. Because the underlying business loans are long-term in nature, but the wealth management products have a short maturity of typically up to 18 months, banks are exposed to rollover risk. If a wealth management product matures and the bank can't find buyers for a new product, it has to

put the underlying business loan back on its books – something that is particularly likely if the underlying loan is not performing, or if there is already stress in the credit market and investors are reluctant to provide liquidity. Similarly, in recent years, more and more owners of small and medium-sized businesses have tried to gain access to liquidity by pledging the shares of their companies as collateral for new loans. In the past, the loan-to-value ratio of these stock pledges was generally 60% but with stock prices collapsing in 2018, many brokers have reduced the loan-to-value ratio to 20% or lower. Nevertheless, existing stock pledge loans amount to more than CNY 1.2tn. These loans may quickly become doubtful if the current stock market malaise in China continues.

The links between the official banking system and the shadow banking system are tenuous, but in the event of a credit crisis it is highly likely that banks will become liable through a series of outright and implicit guarantees, since they sponsored and marketed many of these products to their clients.[3] Overall, China has seen one of the fastest credit expansions ever recorded and private sector debt-to-GDP is now at similar levels to the height of the credit bubble in Japan in 1990 and Spain in 2007 (Fig. 12). Experience tells us that when such credit bubbles pop, private debt will not remain private. Instead, the government will have to step in with guarantees or might have to nationalise banks and their loans to stabilise the market. This is even more likely in a guided market economy like China than in a free market economy.

Fig 12: Private sector credit bubbles

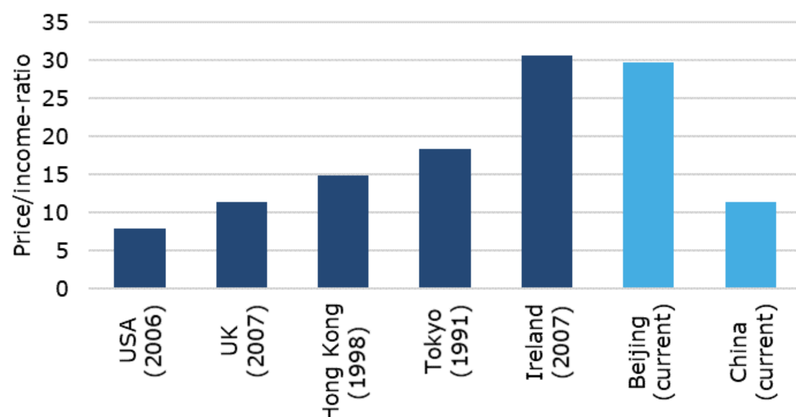


Source: BIS, Fidante Partners.

The second major vulnerability of the Chinese economy is the red-hot housing market. House prices relative to the median income in Beijing have surpassed the levels of the Tokyo bubble of 1991 and can only be compared to the Irish housing bubble of 2007. However, while prime locations like Beijing or Shanghai suffer from excessive valuations, the national average is less stretched, though similar to the UK housing market in 2007 or London's house prices today. As the construction boom continues, the PBOC and the government have tried to reign in excessive speculation with restrictions on mortgage lending and other monetary policy measures. So far, this has not led to a decline in house prices. Quite the opposite. The 70-city average new home sales price has grown by 10.3% in 2018, up from 5.5% in 2017.

[3] A. Dieppe et al. (2018). "The Transition of China to Sustainable Growth – Implications for the Global Economy and the Euro Area". ECB Occasional Paper No. 206.

Fig 13: Housing affordability in major bubbles



Source: ECB, Fidante Partners.

These vulnerabilities of the Chinese economy are well-known and have been well-publicised. The government and the PBOC have tried to address these vulnerabilities by hiking interest rates and reserve requirements, as well as legislative and regulatory measures to reduce lending activity. The challenge for the country's leadership is obviously to cool the credit and housing markets slowly without creating a sudden shock to the system that could lead to an implosion similar to the US mortgage crisis that triggered the GFC. This is easier said than done but so far, we must commend the Chinese government and the PBOC on the job it has done. The deleveraging process progressed smoothly throughout 2017, but it has left the Chinese economy more vulnerable to external shocks.

The trade war with the US may have been just such an external shock that could derail the entire deleveraging process. So far, the impact of additional tariffs has been small, but it has required a reduction in reserve ratios and fiscal stimulus measures in 2018 to dampen the impact on the Chinese economy. In short, even the small trade frictions introduced in 2018 forced the government to abandon the deleveraging process for now. A potentially bigger external shock in the future, or a significant escalation of the trade war, could derail the Chinese economy altogether.

China pessimists like to predict that such a massive deleveraging crisis is just around the corner, but investors should be cautious about such predictions. Even in a free market economy like the US or the UK, many people had warned of a housing and credit bubble for years before the chicken came home to roost in 2007. In an opaque economy like China, where the government has significantly more influence over banks and private businesses than in the US or the UK, it is anyone's guess how long an extended situation like the one currently observed can exist. It can literally go on for years, or the credit bubble could pop tomorrow.

Investors should keep these risks in mind when committing capital to China. If they position their investments for an impending crash, then they could wait for a long time and the losses in the interim could easily surpass any potential gains in the event of a Chinese downturn. If, on the other hand, they commit capital to an investment that relies on a continued boom in China (which should still be the base case scenario for every investor, in our view), they need to be aware that the market could turn sour very quickly. The ability either to hold on to these investments through a prolonged downturn, or sufficient liquidity to withdraw funds in the event of a severe market dislocation, are key ingredients to any investment made in China. Assessing the true liquidity of an investment before committing capital will become one of the main tasks for investors going forward.

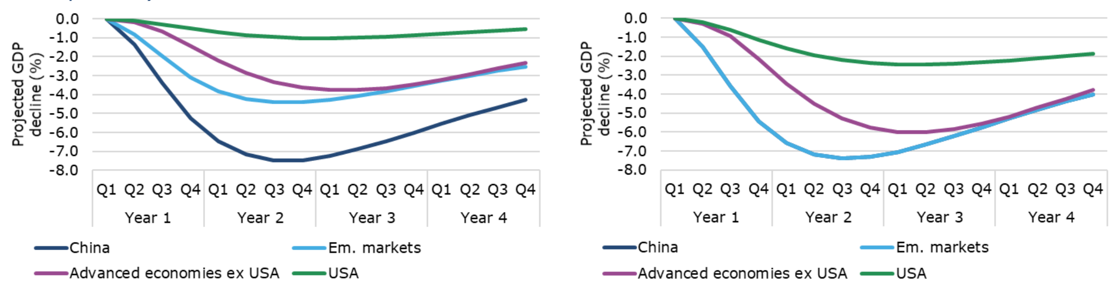
China pessimists almost gleefully wish for a collapse of the Chinese economy just to be proven right, but the consequences for the rest of the world and global financial markets in such a scenario could easily be as dramatic as the Global Financial Crisis of 2008, when there was no place to hide from the fallout. There is the saying that "if the US sneezes, the rest of the world catches a cold", indicating that the US economy is so dominant that a slowdown in US growth may trigger a recession in smaller countries around the world. Today, we can say that if China sneezes, the rest of the world catches a cold as well.

> If China sneezes, the rest of the world catches a cold.

What could happen in the case of a credit crisis in China can be seen from the simulations in Fig. 14. The charts show the simulations of the Federal Reserve Board shown in Fig. 4 above, but this time under the assumption of a severe crash in China that leads to a 7% decline in GDP vs. trend growth (essentially creating the situation of negative absolute growth in China). The left panel in Fig. 14 shows the simulation results based on the existing international trade linkages without any spillover to the financial sector. In this case, emerging market growth would decline by up to 4.5% and developed market growth outside the US would decline by up to 4%, in effect triggering a severe depression in Europe, the UK and Japan. If that does not sound like a lot, then investors should remember that in 2008, Eurozone GDP growth was -2.1% and in 2009 it was -2.4%. UK growth in 2008 was -4.2% and in 2009 it was -1.4%. The only country that in this scenario would get away almost without harm is the US, where growth is expected to decline by up to 1.0%.

Of course, if the Chinese economy declines that much it seems unlikely that the financial markets would not panic. A credit crunch similar to the GFC would be the likely result and the economic impact from financial spillovers would be considerable. Such events are notoriously hard to predict, but the right panel of Fig. 14 shows the results of the model simulations discussed here. In this China meltdown scenario, emerging market growth would decline by more than 7% against trend, and growth in advanced economies would decline by up to 6% vs. trend. Even US growth would decline by up to 2.5% vs. trend, putting practically every country in the world in a position where their economy would be shrinking. In essence, this scenario would be worse than the GFC and resemble more the Great Depression than the Great Recession.

Fig 14: Spillover from a 7% real GDP decline in China (left: without financial spillover; right: with financial spillover)



Source: Federal Reserve Board, Fidante Partners.

The coming Cold War with China

In 1909, the Nobel Peace Prize winner Norman Angell published the book "The Great Illusion". In it, he argued that due to the increasing globalisation and trade amongst nations, increased economic integration, and rapid technological advance, wars between great economic powers had become obsolete because it was against the self-interest of these economic superpowers to fight each other. A mere five years later, the economic superpowers of the world would enter the deadliest war in history that cost an estimated 9.5 million soldiers and countless civilians their lives.

As China emerges as a new economic superpower that challenges the US hegemony both economically and militarily, "Thucydides Trap" has become a fashionable scenario to describe the destructive potential of the US-China rivalry. Popularised by Harvard Professor Graham Allison in a Foreign Policy article in 2017, the phrase describes a situation where a rising power causes fear in an established power. Driven by this fear and a sense of pride, the established power escalates the conflict, which more often than not ends in war. However, in our view Thucydides Trap is a red herring.

The moment we should fear is when China's growth slows down.

The moment we should fear is not the moment when a fast-growing China asserts its influence on the world. This is a time when business opportunities are good for Chinese and Americans alike. A fast-growing China provides ample opportunities for Western companies and in turn creates wealth and jobs in Europe and the US. Similarly, a fast-growing China helps more and more people in China create wealth and escape the poverty trap. If the cake grows fast enough, the chances that there will be a fight about who gets which piece are low.

No, the moment we should fear is when China's growth slows down. When the Chinese economy isn't growing fast enough anymore to provide opportunities for everyone, foreign and domestic, is when competitive forces set in. This is when Chinese businesses will come into direct competition with businesses in the West and when conflicts will escalate, first economically, but potentially also militarily. Between 1906 and 1910, the German economy grew on average 2.9% per year in real terms and the French economy 2.5% per year. From 1910 to the outbreak of the First World War in 1914, growth was a mere 1.4% per year in Germany and -0.5% per year in France. As economic opportunity declined, Germany, France and Austro-Hungary were looking to increase their influence at the cost of their neighbours, which led to increasing political conflict and the outbreak of the war.

As we have seen in previous sections, China's economic output is changing. Chinese businesses are increasingly competing in high value-add industries like technology and finance. Chinese companies are already world-leading in robotics and applications of artificial intelligence, and the US Pentagon recently warned that the People's Liberation Army is world leading in some areas of modern military weaponry. Internet giants like Tencent and Alibaba have benefitted from a closed market of 1.3 billion customers, providing them with services in online retailing and social networking. Now they are looking for growth opportunities outside of China. They are expanding in South East Asia and India, where they are competing directly with the likes of Google and Facebook. And while Google and Facebook do not operate in China for several reasons, it will be only a matter of time before Alibaba and others venture into the US to compete on the home soil of Silicon Valley.

The advantage that Western companies have in this competition is that they are used to dealing with a changing environment and a world in which different players compete for market share and profits. Chinese companies, with their oftentimes more bureaucratic structure and a management, where jobs are not only awarded on meritocracy but also on nepotism and

personal or party connections, are at a distinct disadvantage here – especially in the case of large companies with significant connections to the governemnt. But Chinese companies have the advantage of a powerful ally – the Chinese government – and a large home market that allows them to create vast amounts of cash for investments abroad. If that home market starts to slow down, this cash cow might dry up and Chinese companies might resort to more aggressive means of competition, with the help of the Chinese government.

In the telecom industry, this direct competition between China and the West is already reality. Huawei has undermined the smartphone market shares of Apple and Samsung in Europe and Australia, and the company is the world's largest provider of telecom infrastructure. The company also has a reputation for flunking international embargoes and delivering technology to North Korea and Iran. Due to its close connections to the Chinese government, Huawei has been banned from selling 5G telecom infrastructure in Australia, New Zealand and Japan, while the UK, Canada and Germany are considering similar steps. The fear is that the Chinese government could gain access to sensitive data through Huawei's technology and that Huawei has an unfair competitive advantage due to the economic espionage activities of the Chinese government. The close links between the Chinese government and Huawei became clear again when on 12 January 2019, Poland arrested a Huawei engineer suspected of espionage and again on 29 January 2019, when the US filed criminal charges for IP theft against Huawei and demanded extradition of the company CFA arrested in Canada.

While Western countries are busy excluding Huawei from their home markets, China is pushing ahead in installing a 5G network by 2020, giving it a first-mover advantage in this next generation telecommunication technology. Western countries may have to postpone the roll-out of 5G networks because Western competitors to Huawei must first create the necessary capacity to build this infrastructure at large scale and low cost. This poses two risks. First, it reinforces China's technological advantage in this area and second it potentially creates two separate telecom infrastructure systems that may not be compatible with each other. In other words, the risk is that the world of the internet and mobile communication will increasingly be split into a sphere of Chinese influence and one influenced by the US and the companies in Silicon Valley.

In this world, other countries will have to decide which sphere of influence to join, just like countries during the Cold War were forced to join either the communist sphere of influence dominated by the USSR or the capitalist sphere of influence dominated by the USA. Mind you, not all countries were free to join one or the other and, similarly, geopolitical interests will create powerful forces to "nudge" strategically important countries in one direction or another. China's Belt and Road Initiative can be understood as a programme to prepare the ground so that the decision to join the Chinese sphere of economic influence will be easier to make for emerging markets around the globe.

None of this necessarily leads to the escalation of the Cold War between the US and China into a "Hot War". Instead, the most likely outcome is one of constant low-level competition and "hybrid warfare" between the two countries. Industrial espionage and intellectual property theft are already common practice by Chinese companies and this is likely to intensify as Chinese companies increasingly compete with US and European companies in high tech areas and services. Trade disputes and harassment of foreign companies through regulation and legal threats are likely to become a standard tool in this Cold War.

With increased economic rivalry between the West and China, the political rivalry is likely to intensify as well. China acts increasingly assertively in the South China Sea while the US and its Pacific allies try to push back against Chinese aggression. How this conflict will develop is more a topic for political scientists than for economists, but the impact on global trade and economic growth could be material if economic measures are taken by either side to advance political goals.

Implications for investors

This gloomy picture of the risks posed by the transformation of the Chinese economy may lead to despair, so it is worth repeating that the base case scenario is one where China continues to grow at a much faster pace than developed countries and is on its way to becoming the world's dominant economic power by the 2030s. China is where the growth is and this means investors are rightly looking for investment opportunities in the country. There are several types of investments that should be considered under this base case:

- Investments in publicly listed stocks of Chinese companies. Over the next ten years we expect Chinese equities to average an annual return of 13.5% in local currency, significantly outperforming developed markets. Given the transformation of the Chinese economy, we would prefer companies in the consumer and services sector over industrial and commodity-related companies.
- Indirect exposure to China can be achieved through international stocks that create a high share of their revenues in China or benefit from Chinese tourists. Traditionally, investors flock to luxury goods companies to gain this kind of exposure, but the better option in our view are companies that produce everyday consumer goods as well as service providers. Another opportunity exists in tourism-related companies with a strong exposure to Chinese tourists.
- As China's economy is transforming, it is also getting greener. Fighting the pollution from its industrial sector companies is leading to vast investments in renewable energy, clean water and recycling. These activities mostly benefit Chinese companies, but also some international businesses.
- Potentially the highest returns can be achieved with investment in private equity in China. The challenges investors face with these assets are the low liquidity and the difficulties in ensuring property rights in China when compared to legal systems in the West.

But given the changing economic and competitive landscape, investors should take precautions in their investments as well:

- As we have stated above, local investments in China should be liquid enough so that even during a credit crisis in the country, assets remain liquid or can be liquidated relatively quickly and at reasonable cost. If investments cannot be withdrawn from the country fast enough in a Chinese slowdown, then position sizes should be limited to a degree, so that investors can hold on to these investments as long as is needed to recover temporary losses.
- Investments in technology companies outside of China and other high-tech areas where Chinese competition is intensifying, will face lower top-line and earnings growth in the future as profit margins shrink and increased competition from Chinese companies limits growth opportunities. This increases the need to invest in growth assets at a reasonable price and not overpay for future growth.
- Investors need to be aware that China is in the process of allowing more international investors to invest in the country and enabling them to purchase larger shares of local businesses or eschew joint ventures with local businesses altogether. The restrictions on foreign investments in banks were removed and the caps on foreign ownership in brokerages and insurances will be removed in 2021, and in 2022 for car manufacturing. Foreign investors should ask themselves why the Chinese government is willing to let foreigners participate in these industries? It certainly isn't out of the kindness of its heart – it is probably more than just coincidence that the ownership bans are lifted on industries that are highly saturated or overleveraged. In effect, allowing foreign investors into these industries means that future losses will be exported out of the country while past profits remain in China.

- In the case of a developing credit crisis in China, a last-ditch effort by the Chinese government and the PBOC could be to devalue the Renminbi, which would act as an effective valve to export credit losses from China to foreign investors. Limiting the Renminbi exposure of an investment portfolio might become important in this extreme case.

These measures to manage risks should help investors avoid excessive losses. However, there are a few things investors should clearly avoid when it comes to investing in China:

- Investors should not actively bet on a crash in the housing market, bond market or stock market. While the imbalances in the Chinese economy are real, they can persist for years if not decades, as the examples of Japan and the US have shown in the past. As the old saying goes: "markets can stay irrational longer than you can stay solvent". This is particularly true for a managed economy like China.
- Investors should not think that what happens in China, stays in China. As we have made clear throughout this report, China is already so big and interconnected with the rest of the world that a Chinese slowdown has the potential to create a recession in Europe and other regions of the world, with harmful effects on global equity, fixed income and commodity markets.
- Investors should not hope for a Chinese collapse or a decline of China like Japan in the last 25 years. Ask yourself if a default of the entire Eurozone including Germany and France on its debt would scare you? If this scenario scares you, then a collapse of the Chinese credit bubble should scare you as well, because the effects on global financial markets would likely be in a similar order of magnitude.
- In the case of a Chinese meltdown and a sudden burst of the credit bubble, the country cannot just default like a typical emerging market or even a smaller developed country. China as an economy is literally too big to fail. And just like the global banks during the GFC, a collapse of China would take the global economy with it. Whenever one feels the urge to discount risks emanating from China, one should remember the mantra of this report: China is big, really big.

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