IeC Experience and Insight on Demand

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China Bank Lending: from $1tn to $10tn and Back Again?

Executive Summary

China's impressive growth between 2009 – 2013 was fuelled by a ten-fold rise in lending, from $1tn to $10tn. Now the new leadership has to deal with the economic and political consequences, which parallel those that emerged in 1977 and 1993. Yet there seems an alarming complacency over the risks this creates. Worryingly, this reminds us of 2006 - 2008 in the West, when we tried to warn of the subprime risk facing the economy.

One critical difference between China today, and the US then, is that China's new leadership appear to understand the scale of the problems they face. They clearly worry that the $10tn of lending since 2009 may not generate a sufficient economic return. And they recognise the major political challenge created as a by-product of this 'dash for growth' in terms of corruption, and widespread pollution of China's land, water and air.

Thus for the past 2 years they have been following the playbook developed by Deng Xiaoping in 1977, and Jiang Zemin in 1993, which enabled China to successfully overcome its difficulties and laid the basis for recovery. This involved developing a detailed action plan with the help of the World Bank, and then being bold in terms of implementation.

This Research Note is therefore written in the belief that today's developments in China need to be much better understood by anyone with an interest in the stability of the global economy. It aims to provide the essential historical background to explain the decisions now being implemented, and highlight their likely impact on the outside world.

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1. Introduction

"It's about cutting power, it's a self-imposed revolution. It will be very painful and even feel like cutting one's wrist."

Premier Li Keqiang at his first press conference, 17 March 2013

Premier Li chose his words carefully at his first press conference in March 2013. He knew only too well from his work with the World Bank over the past year that time was not on the side of the new leadership. They faced economic and political challenges on the scale of those that confronted Deng Xiaoping in 1977 and Jiang Zemin in 1993.

In many ways, the crisis facing China's new leaders was even worse, as it was more multi-faceted than before. It was also barely understood outside China. Indeed, many casual observers viewed China's debt-fuelled growth under the former leadership as a model of effective policy, and failed to appreciate that it had instead resulted in a "lost decade".

Li therefore looked back, echoing the words of President Xi Jinping's father, Xi Zhongxun, when sent by Deng in 1979 to rescue Guangdong's economy after the trauma of the Cultural Revolution and the Gang of Four. Returning to active politics after 16 years in jail, he had told his team, "*To develop, we have to change. We have to do it, even if we lose our lives*".

Since March 2013, Xi and Li have lost no time in preparing to tackle the economic and political challenges they have inherited. They are now moving rapidly into implementation mode. Yet we fear many outside China have missed the criticality of the changes underway.

This means that commentators often fail to make the link between the new policies and the abrupt economic downturn now underway in emerging economies - which had become over-dependent on China for growth either directly or indirectly in recent years. Instead, they assume it is due to concerns about minor shifts in US Federal Reserve policy.

This note is therefore written to address this gap in understanding. It argues that China is now grappling with the end of the second post-Mao cycle of 'Boom and Bust':

- The first cycle began with Deng in 1977, and his decision to call on the World Bank for help in 1980. Early success was then dissipated after Deng's semi-retirement after 1985. The political crisis at Tiananmen Square in 1989 was followed by overheating in the economy, which led many informed observers to fear China was headed for Latin American-style hyperinflation
- The second cycle began with Deng's return and his famous Southern Tour of 1992. This provided the essential support for Jiang to launch a new World Bank-inspired programme aiming at stabilising the situation. In turn, this led to dramatic gains in living standards for the Chinese population. Sadly, however, Jiang's retirement in 2003 led to another debt-fuelled boom, not consolidation of his previous successes
- Today we have therefore arrived at the end of the second cycle, where boom is again in the process of turning to bust. However, as we describe in this Note, Xi has

detailed plans in place to overcome the challenges that China now faces. His strategy is also clear as it follows that implemented successfully by Deng and Jiang

The 7 key areas and what they mean for the outside world

The years after 1977 and 1993 were stormy periods in China's history. This history therefore suggests that the period to 2020 will be similar. And there are, of course, no guarantees that the new leadership's policies will succeed. But one year into President Xi's leadership, it is already possible to identify the likely major impacts on the global economy:

- **Domino effect.** US-centric observers have understandably but wrongly assumed that concern over the Federal Reserve's taper is solely responsible for destabilising emerging economies in a wide arc from Argentina through India and Indonesia to Turkey. Historians, however, will almost certainly recognise these economic tremors as also being an early warning of the policy shift now underway in China
- **Double-digit growth**. The leadership have already made clear they intend to bulldoze polluting factories, and to devote major resource to cleaning up the one-sixth of China's farmland currently contaminated with toxic waste. Therefore the days of double-digit economic growth are unlikely to ever return
- **Deflation**. Premier Li confirmed in October that maintaining employment was his key priority. China's producer price index has already been negative for 22 months, and it seems likely that exports will be a key focus for policy during the transition. This will effectively export deflation – as volume rather than profit will be the priority
- **Export Demand**. China's main export focus will no longer be the cheap textiles and plastic products of the past. Instead it will create jobs via an aggressive drive to sell affordable cars, smartphones and relatively high-value chemicals into emerging and Western markets, based on the major new capacity installed in recent years
- **Dollar strength.** China's economic crisis will come as a shock to most of the financial community, as did the US subprime crisis. We can therefore expect China's currency to begin to fall in value, and the US$ to rise, all other things being equal. This, of course, will also help to boost China's exports
- **Domestic Demand**. Similarly, the focus of China's domestic demand will change. Sales of high-end western luxury goods will continue to decline as the corruption campaigns continue. Instead, the focus will be on affordable necessities such as $50 refrigerators for the 90% of the population who earn less than $20/day
- **Debt**. China's record $1.3tn holding of US debt was built up as a form of vendor finance, to support US purchases of China's products. But this strategy is no longer relevant, so we may well see China slowly reduce its holdings for use at home – potentially putting upward pressure on Western interest rates

Nobody would ever want to go back to the pre-1977 days of the Great Leap Forward and the Cultural Revolution. It is therefore essential that Xi and Li succeed in establishing a more sustainable future for the country. In turn, the scale of China's economy, and of the policy changes underway, means that an understanding of the background to their policies is critical for anyone with an interest in global economic development.

2. You can't print babies to create new demand

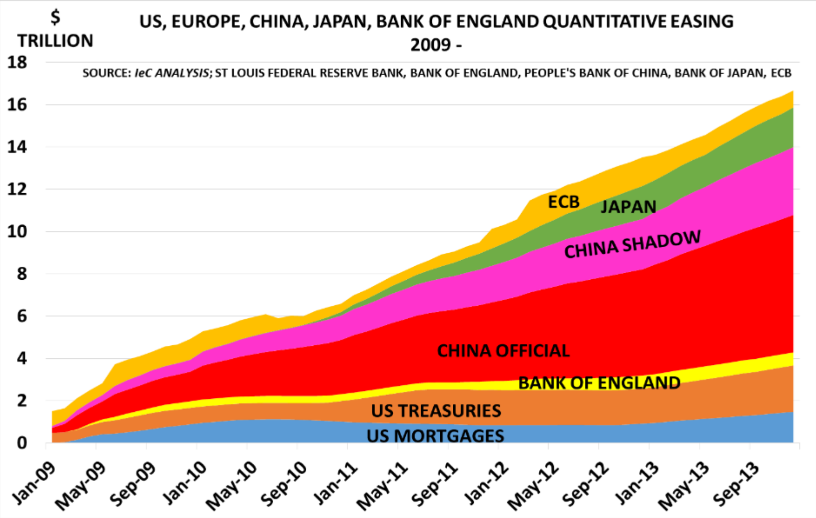

Chart 1: The liquidity programmes of the world's major central banks since 2009

Over the past 5 years, policymakers have focused on creating liquidity in the global financial system, following the arrival of the financial Crisis that erupted in 2008. To date, as chart 1 shows, the world's major central banks have printed $16tn via quantitative easing and similar measures, whilst lowering interest rates to near-zero levels.

One key aim has been the creation of a 'wealth effect' via a boost to financial, property and other asset markets, in the belief this will restore consumer confidence and help promote job creation. Thus US Federal Reserve chairman Ben Bernanke highlighted in January 2011 the success of the QE2 policy by arguing that "*I do think that our policies have contributed to a stronger stock market, just as they did in March of 2009.*"

- ❖ In the USA, the Federal Reserve has thus spent $2tn on Treasury bonds (brown) and $1.5tn on mortgage bonds (blue).
- ❖ In Europe, the European Central Bank has spent $0.8tn on its Long Term Refinancing Operation (orange); the Bank of England's Quantitative Easing is worth $0.6tn (yellow)
- ❖ Japan has increased its activity more recently with $1.9tn of spending (green)

In addition, governments have used direct stimulus such as 'cash for clunker' support for car sales, and major support for housing markets. BoA Merrill Lynch calculated total spend by the world's central banks and governments was $33tn by mid-2013, almost half global GDP.

Yet almost unnoticed, China has been the biggest spender at a total of $10tn.

Its official lending has totalled $6.5tn (red). In addition, it has allowed an unregulated shadow banking system to develop – paralleling US sub-prime before 2008. And like subprime, nobody today knows the true size of this sector. The chart thus uses the $3.2tn estimate of a recent report by China Academy of Social Sciences (pink). Western analysts such as JP Morgan suggest it could be $5.7tn (69% of GDP). Whilst Fitch suggests China's total official/shadow debt could be as much as $16.3tn (double GDP), as there have also been a myriad of subsidy schemes, starting with the $586bn November 2008 spend to boost consumption of autos and electrical products.

Yet despite this global lending boom, a sustained economic recovery has remained elusive. Many hope that a return to SuperCycle growth levels might now be underway in some major economies. But similar hopes have appeared every New Year since for the last five years, before disappointment set in.

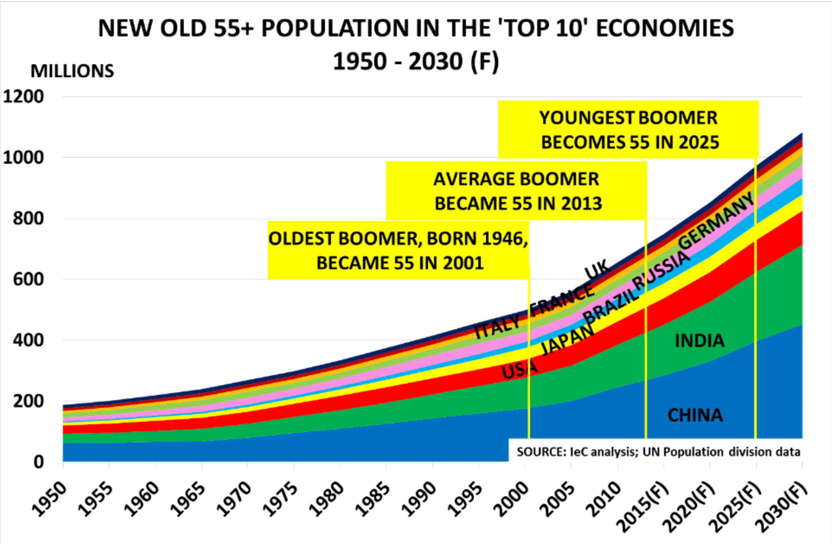

Chart 2: The global population is becoming elderly as the BabyBoomers age

We thus question the underlying assumption of current policy, namely that financial policy can create demand. We would instead argue that demographics drive demand, and that you can't print babies. Policy today is surely ignoring a super-critical factor, namely that global fertility rates have halved to just 2.5 babies per woman since 1950.

Equally important for us is that a totally new generation, the New Old 55+, has come into existence for the first time in history, as a result of life expectancy increasing by 50% to around 70 years over the same period. This also has far-reaching implications for growth:

- **Older people are a replacement economy, already owning most of what they need**
- **Equally, their incomes drop quite sharply as they enter retirement**

We fail to understand why policymakers continue to ignore the impact of these demographic change on the economy. Common sense, as well as national statistics, would suggest that this ageing BabyBoomer generation is most unlikely to generate the same level of demand as when it was in prime consumption mode in the Wealth Creator 25 – 54 age group. And consumption is, after all, 60% of Western GDP.

We fear that today's stratospheric levels of debt have thus created additional headwinds for the economy. The economic slowdown created by today's ageing populations also means there is little likelihood of inflation reducing the real value of this debt, as in the 1970s.

Instead there is a clear risk that we are now moving inexorably to a tipping point where deflation replaces inflation. As and when this moment occurs, demand will then be further reduced as consumers adapt to this new normal. It will, after all, then become entirely rational to postpone purchases, on the basis that prices will be lower tomorrow, whilst the cost of debt will be rising in real terms.

It is not surprising that Eastern Asia is the key focus today. Its fertility rates are currently the lowest in the world. UN Population Division data shows that the average woman in the region has just 1.6 babies today versus 5.6 babies in 1950. This also explains why China's new leadership are now acting on their mandate from November's 3rd plenum.

We would argue that awareness of the potential impact of these new policies has been building since March 2013, particularly in those emerging economies that had become over-dependent on trade with China. It seems strange to us that US-centric observers have instead argued that the Fed's indication of a possible, and minor move, to reduce its lending was responsible for the initial tremors seen in Asian markets during Quarter 2, 2013.

Our view is that these tremors were an initial response to the perceived policy shift being pursued in China after the confirmation of the new leadership team at the 18th Party Conference in March. Today's increased volatility also seems far more likely to be due to the announcement of the detailed policy objectives at the 3rd plenum in November.

This focus on US developments has also blinded many commentators to the critical parallels between today and China's two earlier economic/political crises of the post-Mao era. This Research Note thus sets out to explain their key elements, as they provide us with excellent insight on how President Xi and premier Li will move forward:

- We start by reviewing Deng Xiaoping's economic recovery programme in the post-Mao period from 1976.
- We then analyse how Jiang Zemin tackled the crisis that had developed between 1985-1992
- This leads us into analysis of how the roots of today's crisis developed during what became the 'lost decade' of 2003-2012 under Hu/Wen
- We then summarise the common themes from Deng and Jiang's recovery programmes, as guidance for what we should expect under Xi and Li

China's success or failure will be pivotal for the rest of the world. It is thus no exaggeration to say that today's under-appreciation of its policy shift is probably THE most important risk to the future health of the global economy.

3. Deng's economic policy in China's post-Mao period

China's economic policy is now coming to the end of its second complete cycle since Chairman Mao's death in 1976. If this transition follows the previous pattern of the period after 1977 and 1993, it will have major implications for the global economy, as well as for anyone doing business with China, either directly or indirectly.

As discussed above, China's total lending programme since 2009 has been the largest in the world, at least $9.7tn – more than twice the US Federal Reserve's. It now has to be substantially reduced, to avoid economic and political crisis. No country has ever been in this position before. But we do know what happened in China's 2 previous economic and political crises, and these provide clear insight into how the new leadership will operate.

This section analyses the first cycle, which ended with similar problems to today's.

1977 – 1992, Deng Xiaoping's return, and its aftermath

Deng returned after the death of Chairman Mao in 1976, following his 3rd purging. His first task was to deal with the chaos caused by the failed bid for power by Mao's widow and the Gang of Four. As the photo shows, Beijing was then a very backward city.

Deng, who had not travelled outside China since the 1920s, was astonished to find on visiting Japan, Europe and the USA that China was decades behind them in technology and living standards. He moved quickly to improve the position, but faced entrenched resistance from those who believed that 'combating bourgeois liberalism' via political correctness, not ability, should remain the main criteria for official appointments.

Deng set about opening up the economy during his time as paramount leader – with President Xi's father, Xi Zhongxun, playing a leading role in the transformation of Guangdong's economy by introducing Special Economic Zones at Shenzhen and elsewhere. Equally, Deng developed a remarkably close working relationship with the World Bank under Robert McNamara.

This led in 1980 to the despatch of a 30-strong team of Bank experts to undertake a 3 month study period, whilst Deng appointed Zhao as premier to implement their detailed recommendations for rebuilding China's economy. This was the first time the Bank had ever undertaken such a programme. Deng told McNamara its purpose was clear:

"*We are very poor. We have lost touch with the world. We need the World Bank to catch up. We can do it without you, but we can do it quicker and better with you*."

Major reform followed as Deng set out what became known as the philosophy of the 'socialist market economy', or 'socialism with Chinese characteristics'. At the same time, Deng took bold steps in relation to the army, cutting its budget and manpower dramatically so as to free up cash to invest in the broader economy and boost living standards. As a former army general, he knew that the prospect of invasion, so feared by Mao, had become most unlikely, and he was able to push through his changes despite strong opposition.

Deng then began to set his retirement in motion around 1985, introducing the important reform of maximum 10-year terms of office for the senior leadership – a policy which still continues. But his semi-retirement led to a period of considerable uncertainty over the future direction of economic policy, during which corruption became endemic.

However, the Tiananmen Square protests in 1989 and the collapse of the Soviet Union, brought him back into a more active role. Hardliners in the government saw a chance to reverse his economic reforms whilst clamping down on political protest. This prompted Deng to argue instead that the Russian Communist Party had lost power due to *'too much glasnost (openness) and not enough perestroika (economic reform)".*

It was clear that the World Bank programme had led to major gains in living standards. But the privileges of Special Economic Zones such as Shenzhen were being increasingly abused by corrupt leaders able to buy products and services at advantageous prices for their own personal profit. Equally, economic turmoil, with inflation out of control and corruption rampant, was leading Party hardliners to demand a return to the 'old ways'.

This stand-off then led to the final act of Deng's career, the Southern Tour of 1992, when he summarised his views on economic development in two famous phrases:

- *"To get rich is glorious"*
- *"It doesn't matter if the cat is black or white, as long as it catches mice'*

The tour was at first unreported in official media, but Deng's enduring influence soon ensured that his policies returned to centre stage. In turn, this enabled new President Jiang Zemin to consolidate his position on the basis of reviving Deng's economic reforms. Jiang also followed Deng in keeping a tight lid on political protests, which he felt risked destabilising Communist Party rule.

The political turmoil of 1989 had provided the perfect excuse for those who had never supported reform. Zhao had been dismissed, and there were increasing demands for economic reforms to be reversed on the grounds that they were threatening Communist Party rule. As the World Bank noted afterwards:

"China could have lost economic control and landed in a Latin American-style inflationary spiral. If that had happened, the reform process would have halted and China might not have been able to avoid a financial crisis."

We now need to look at how Jiang adopted Deng's strategies from 1977, and managed to create the springboard for China to embark on double-digit economic growth.

4. From Jiang to Hu, and the "lost decade"

President Jiang Zemin inherited a difficult economic and political situation on taking power in 1993, as did Deng in 1977 and current President Xi last year. Jiang had to set in motion China's second economic cycle of the post-Mao era, or risk seeing the country fall back into poverty and the political turmoil of another Cultural Revolution. Similarly today, as the Financial Times warns:

"Former President Hu Jintao and Premier Wen Jiabao ruled China from 2002 until late 2012 …and have been accused by powerful Party figures of overseeing a "lost decade" of missed opportunities to put the country on a more sustainable path. Time is running out for the old Chinese model, based as it is on credit-fuelled property and infrastructure investment, and highly polluting low-cost manufacturing."

If Xi does not move today, he will lose all the momentum that he has painstakingly built up over the past year. Essentially, it is 'now or never' for Xi and Li to act. The playbook they have followed till now is clearly modelled on that developed earlier by Deng and Jiang, suggesting they understand what they have to do.

1993 – 2012, Jiang Zemin's era, and its aftermath

Jiang took over as President from Yang Shangkun in 1993, having been General Secretary of the Chinese Communist Party since 1989. Like Deng, he was not impressed by ideas of democracy or political liberalisation.

His first move, after appointing Deng's protégé Zhu Rongji as central bank governor, was to follow Deng's 1980 policy initiative and call in the World Bank for advice. The reason was simple, as Zhu said when welcoming the World Bank team:

"Foreign monks know more than local monks"

This Dalian conference of June 1993 set out the economic programme to be adopted, with the aim of bringing China back from the abyss, and formalising Deng's earlier dictum of the 'socialist market economy'. The objective was simple – to keep the Communist Party in power by providing the population with increasing living standards.

Jiang inherited a number of major economic problems, as the opening up of the economy had provided wonderful opportunities for corruption to flourish. The privileges of the Special Economic Zones had been increasingly abused by corrupt leaders. Economic and political turmoil was also leading Party hardliners to demand a return to the 'old ways'.

Zhu's first objective was to resolve the problem of the enormous debts built up by the powerful State Owned Enterprises (SOEs) as a side effect of economic liberalisation. At the same time, he implemented extremely tight policies to bring China's chaotic financial markets back under control.

The similarities with today's problems are thus quite striking:

- Asset prices had been allowed to rise out of control whilst corruption had flourished
- There were major problems of bad loans in the banking system
- The SOEs were dominating the economy and stifling individual enterprise

These policies created the basis for a decade of double-digit economic growth, as the power of the SOEs was reduced via large-scale privatisations.

Jiang continued Deng's core policies, including his control over the army and his focus on raising living standards and personal consumption. The policy of opening-up to the outside world was also maintained. This encouraged the emergence of a strong export sector, which helped to support the economy through the Asian financial crisis and led finally to China's entry into the World Trade Organisation in 2001.

The "Lost Decade" under Hu and Wen from 2003-2013

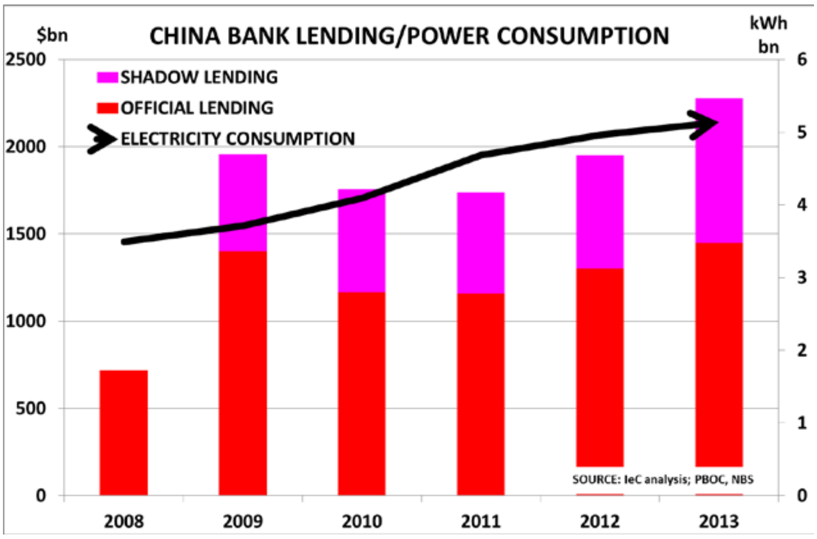

Chart 3: China's wasteful lending and power consumption surge after 2008

However, just as after Deng's semi-retirement, these early successes were not maintained once Jiang and Zhu left power in 2003. Rather than consolidating, new President Hu and premier Wen instead focused on the seemingly easier option of developing China's role, post-WTO entry, of being the 'manufacturing capital of the world'. The SOEs were able to regain powerful positions in major industry sectors, whilst corruption again flourished.

Then in 2008, just as in 1989, crisis intervened. Once again, it was both economic and political in nature. The global financial Crisis sharply exposed China's economic dependence on export orders, as personal consumption had actually declined in the country after 2000 as a proportion of the economy. And so when export orders disappeared in Q4 2008, 26 million people lost their jobs. Rather than changing course, Hu and Wen instead decided to replace this lost growth with a massive lending stimulus, as shown in chart 3.

It is fair to say that no country in history has ever undertaken such a policy on such a scale:

- Official lending doubled from $719bn/year (Rmb 4.9tn) in 2008 to $1.5tn/year in 2013 (red column), for a 2009-13 total of $6.5tn. In addition, an estimated $3.2tn of loans (pink) were made though the unregulated shadow banking system, according to China's Academy of Social Sciences. This has now become the centre of a network of financially risky products such as trust funds, whose weakness has recently been exposed with the near-default of the $500m fund issued by China Credit Trust Co
- Unsurprisingly, this provided a powerful if temporary boost to economic growth. Electricity consumption (black line) jumped 50% between 2009 and 2013. But the price was a massive increase in air, land and water pollution. Whilst the doubling of auto sales increased toxic emissions as well as adding risk to the financial system
- The lending also stimulated another asset price boom, particularly in the urban property market. This had only been fully removed from state control in 1998 as part of the reform process, so there was little understanding of valuation metrics. Major speculation developed, with prices rising exponentially as buyers panicked over being left behind

Now, as in 1977 and 1993, the new leadership has to pick up the pieces. It has been clear since the key Party meeting in November 2012 that Jiang's return to a more active role is the key driver of the changes now underway. The attack on corruption is a carbon copy of his earlier policy, as was the decision to bring in the World Bank for policy advice. Equally, the trial of such a prominent figure as Bo Xilai was only possible with his support.

We can therefore now move to identify the key parallels between the policies being pursued today, and those implemented by Deng and Jiang. They provide us with valuable insight into the policies that we can expect the new leadership to implement with speed.

5. Conclusion: Xi follows the Deng/Jiang model for economic growth

SOURCE: WALL STREET JOURNAL

Major change is underway in China, with enormous implications for the rest of the world.

- Corruption is being stamped out via a policy of 'shock and awe'
- Wasteful lending is under attack in the official and 'shadow banking' sectors
- Pollution is being tackled by sending in bulldozers to destroy polluting factories, and by introducing quotas on car sales in the major cities

It is impossible to underestimate the scale of the changes now underway. Just as under Deng and Jiang, they are being led from the top by a new leadership group headed by Xi himself. Its key focus is on "**the economy and ecology**", in response to the economic and political crisis that developed during the "lost decade".

These challenges clearly mirror those faced by Deng and Zhao in the post-Mao period after 1977, and by Jiang and Zhu in 1993:

Financial. Bankruptcy was the key economic challenge facing Deng in 1977. Whilst as the World Bank noted, the risk in 1993 was that "China could have lost economic control and landed in a Latin American-style inflationary spiral". Today, as a major World Bank report produced with China's National Reform and Development Commission has warned:

"China's growth is in danger of decelerating rapidly and without much warning. That is what has occurred with other highflying developing countries, such as Brazil and Mexico, once they reached a certain income level, a phenomenon that economists call the 'middle-income trap'."

Politics. Today's challenge is not to restore order after the chaos of the Gang of Four, or after Tiananmen Square. Instead it is to head off an existential crisis, highlighted by the Party's main think-tank, China's Academy of Social Sciences, which has headlined the "*shrinking demographic dividend*" and "*choking pollution*" as key threats to be tackled.

This comprehensive World Bank Report (click here for copy) was issued to coincide with the 5-yearly Party conference in March 2012 and highlighted 5 key risks:

"The end of export market growth; wasteful infrastructure investment; the need to boost personal consumption via higher wages (which has the downside of reducing profit margins and job creation); managing the transition to a new economic model; and the threat of hitting 'the middle income trap' described by Nobel Prize winner Sir Arthur Lewis"

The 5 key strategies

Thus it is clear that the new leadership is closely following the successful strategies developed by Deng and Jiang in response to similar crises:

- **The return of 'the man who knows what to do'.** Deng was brought back in 1977, having been purged 3 times, because he was the only person who could manage the situation. Similarly he returned a second time with his Southern Tour in Q4 1992 to build Jiang's powerbase. This time Jiang has returned. He ensured the removal of the corrupt Bo Xilai, and forced through the leadership changes in November 2012 that meant 6 of the 7 current Politburo members are his men
- **Immediate assumption of control over the military**. The Bo Xilai affair highlighted the risk of military unrest, with the BBC reporting rumours of tanks moving in Beijing in March 2012. Xi has therefore followed Deng and Jiang in immediately taking control of the Central Military Commission by becoming its chairman
- **Use of the World Bank to develop a policy framework**. Again, Xi has followed Deng and Jiang's strategy. In fact, the Bank began work even before Xi formally took power - highlighting his early awareness of the depth of the crisis that China faces
- **Immediate focus on the economic challenge**. Deng's premier Zhao Ziyang, and Jiang's premier Zhu Rongji, were both entirely focused on the economic issues. Today, Li Keqiang is taking the same role. Equally important is that Xi has followed Deng and Jiang in taking personal leadership of the issue via chairmanship of the new "Leading Group for Overall Reform". Without his active involvement, reform will inevitably be blocked by those who would lose out
- **Willingness to take tough measures.** China's new leadership have 10 years of power ahead of them. Thus they are already sending in the bulldozers to destroy polluting factories over the heads of local government officials. Whilst Xi's appointee at the central bank, Zhou Xiaochuan, is taking power back from the regulators who have failed to control the shadow banking sector.

These strategies are clearly also in line with Deng and Jiang's 'no nonsense approach', and their appreciation that a sense of urgency is critical for success.

In summary, therefore, it is clear that major change is underway in China, and that the policy shifts involved are already impacting the global economy, directly or indirectly. We cannot know if the leadership will succeed in rebalancing China's economy towards a more sustainable future. But we hope this Research Note will help readers to better understand the scale of what is being proposed, and to prepare themselves accordingly.

IeC Experience and Insight on Demand

About IeC: IeC is a London-based strategy consultancy advising Fortune 500 and FTSE 100 companies, investment banks and fund managers.

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