China's Gordian policy knot

Dr Robert Gay | Fenwick Advisers | 16 October 2014

After years of allowing the Chinese currency to appreciate steadily, the People's Bank of China (PBOC) deliberately intervened earlier this year in order to weaken the renminbi and did so coincident with a widening of the central bank's intervention bands. At its low ebb in late April, the renminbi had weakened 3.4% against the US dollar from the peak of 6.02 in February to 6.25 in late April. This episode marks the first significant fall in many years as Chinese authorities succeeded in maintaining currency stability despite the global recession – just as they had a decade earlier during the Asian currency crisis.

Many people mistakenly thought this latest episode signaled a policy shift in favor of beleaguered Chinese manufacturers whose margins had come under pressure from rising wage costs and tighter credit conditions. At the time, the notion of a policy change toward depreciation might have seemed plausible, especially in light of the PBOC's history of using a combination of currency intervention and capital controls to promote the Party's goal of developing an export-led economy with an undervalued currency. With the astonishing success of that strategy, however, circumstances and China's agenda have changed dramatically – and so has the policy framework of its central bank. Currency intervention, in particular, is becoming increasingly unsustainable and inconsistent with the Party's longer run policy agenda set forth at the Third Plenum in late 2013. Not surprisingly, the PBOC ended its campaign to induce some volatility into the renminbi in June and since then the currency has retraced about half of its earlier decline.

This brief interlude of intervention, along with the subsequent recovery of the renminbi, offers insight into the conundrum facing China's central bank. As a creditor country with a large current account surplus, capital inflows dominate the financial landscape. Normally such unidirectional investment flows would bid up the currency but, of course, the export strategy also depended importantly on keeping the exchange rate competitively undervalued. As long as the flows were reasonably small, the PBOC could manage to control both the foreign exchange value of the currency and the amount of the foreign direct investment that found its way into domestic credit expansion through restrictions on other capital flows and heavy-handed use of reserve requirements on deposited funds. Now that China has grown to become the world's biggest exporter and second largest economy, however, the rising costs of intervention have outstripped the benefits.

1. CIRCUMSTANCES HAVE CHANGED

For the past 20 years, China has pursued a somewhat standard monetary framework for a developing nation that wanted to build a modern industrial economy from a largely agrarian base. Namely, the goal was to entice foreigners to build new factories with the latest technology by offering the lure of an undervalued currency, an oversupply of hard-working yet inexpensive workers and some semblance of property rights. To this end, the currency was devalued dramatically in 1994 and then fixed against the US dollar whose markets were the target for new exports. The strategy proved hugely successful during the boom years up to 2007, but then circumstances began to change – both at home and abroad – in ways that have forced Party leaders and the PBOC to shift gears.

1.1 Global demand

The first and perhaps most sweeping change has been the downshift in growth of global demand. During that heyday of globalisation and trade liberalisation, global demand expanded in excess of 6% annually, compared with less than half that today. It is much easier, and less contentious, to grab market share when the size of the pie is growing than when it is shrinking. Moreover, Western economies now have poor prospects for rejuvenating spending as the traditional tools are either constrained, in the case of fiscal stimulus by heavy debt burdens and unfunded future liabilities, or ineffectual, in the case of monetary policy by the lower bound on interest rates and the potential risks associated with ballooning balance sheets of central banks. To compound the growth dilemma, a combination of aging populations, financial deleveraging, slowing productivity, rising inequality and trade sanctions are conspiring to reduce potential growth nearly everywhere. Global trade transactions, once heralded as a great benefactor for emerging countries, have slowed to a crawl with growth this year of only 2%.

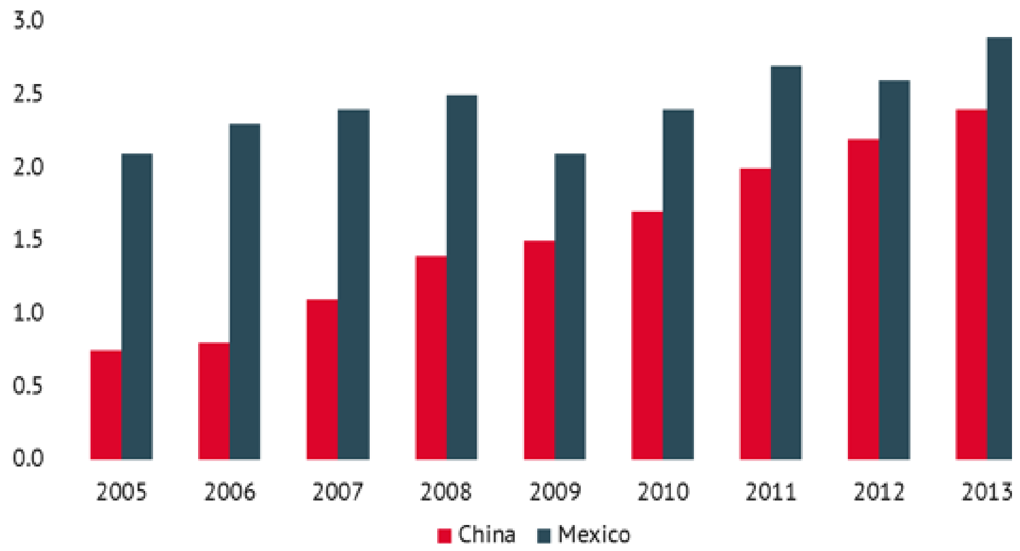
The causes of secular stagnation are many and varied, yet it seems clear that the phenomenal rise in Chinese manufacturing in itself has contributed to the hollowing out of middle-class blue-collar jobs in Western economies. Japan lost roughly one-fourth of its manufacturing jobs to outsourcing within just two years in the late 1990s. The US followed suit during the 2000s as one-third of factory jobs moved offshore or were displaced by technology. Such rapid globalisation constitutes one of the largest supply shocks in modern history, on a par with the industrial revolution of the 19th and 20th centuries that at least was spread over a century. Such a massive reconfiguration of global supply is likely to have long-lasting effects that are not easily remedied with traditional macroeconomic policy tools.

1.2 Competitiveness

In contrast with the early years of currency intervention, China no longer enjoys such a huge cost advantage over other emerging countries. Real wages have risen dramatically in China in recent years, often at double-digit rates, as shortages of skilled workers especially in construction trades have become increasingly pervasive. For less skilled workers, the lure of higher paying urban jobs is losing its appeal as housing is inadequate or too expensive and the Hukou system of registering households in their home towns precludes rural residents from gaining access to urban schools and health services for themselves and their families. In short, metropolises are losing their allure for rural workers and employers are forced to raise the ante.

Chinese manufacturing wages now are roughly 80% of those in Mexico, for example, compared with one-half just five years ago and are rising twice as fast (Figure 1). When the costs of shipping and delivery time are included, the decision on where to locate a new production facility is much less obvious than it was in the past, especially for businesses that are targeting the US or European markets. Information technology, which made globalisation of production and distribution possible on a grand scale, no longer can overcome traditional factors in decisions on plant location as they once did. Indeed, the march of technology may soon work in the direction of de-globalisation as the costs of robotics and the potential of 3-D printing are opening possibilities that may displace factory workers in distant locales.

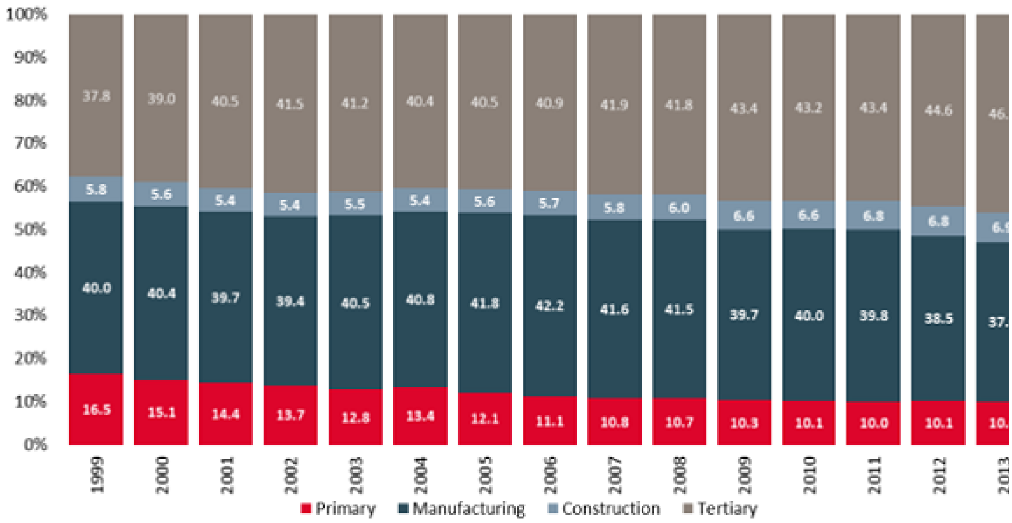
Figure 1: Average Manufacturing Wages (US$ per hour)



Source: TACNA

Even China's imperfect GDP figures, which probably more accurately quantify the volume of inputs rather than output, show an unmistakable trend toward services. The value of manufacturing in nominal GDP, although still an exceptionally large proportion for a large economy at 37%, nonetheless has declined steadily from the peak of 42% in 2006 (Figure 2). The bottom line is that China cannot depend on manufacturing industries as the primary engine of future growth or as the generator of new jobs. Indeed, the onward march of technology promises the opposite.

Figure 2: China's Nominal GDP, by Sector (%of total)



Source: Bloomberg

1.3 The Third Plenum

The initial framework for China's transformation to a high-income society was formulated in a report entitled China 2030 published in February 2012 by a joint team of experts from the World Bank and the Development Research Center of the State Council (DRC). The two-year collaborative study was sanctioned by Party officials who had become well aware that a redirection of resources was necessary and inevitable for both economic and social reasons. Since then, this document, along with subsequent DRC recommendations for its implementation, has been regarded as the roadmap for China's economic agenda.

The Third Plenum of Party officials highlighted the reforms that are underway or in the works. As has become the norm in recent years, the DRC released their reform proposals prior to the Plenum so they can serve as the basis for deliberations on specific priorities for the coming year. The overall agenda itself is not a subject of serious political debate, although any particular reform might be. Eight strategic areas are covered in the DRC proposals including governance, market competition, property, financial sector, public finances, state-owned assets, innovation and green business, and international cooperation. Reforms in four areas – financial sector, governance, property and public finances – have moved forward with surprising speed this year. Note that these four reforms are interrelated and will require profound changes in the country's monetary framework.

Financial reforms lie at the heart of the reform package. The renminbi already has climbed to the seventh most traded currency in international transactions and numerous financial centers are vying for favor as trading centers. The next phase of reform will shift emphasis to making financial institutions more competitive so the central government can further reduce its role in allocating credit and providing subsidies to state banks. To these ends, the DRC recommends a reduction in State shareholding and marketisation of interest rates and exchange rates. To do so, the private sector will need to gain direct access to credit – including a full range of local debt instruments (ranging from a sovereign yield curve and corporate debt to a municipal bond market) – as opposed to loans being channeled through local governments by state banks. Although the DRC proposal still defines full internationalisation of the renminbi as a 10-year goal, we are skeptical that China can wait that long given the soaring costs of sterilisation of capital inflows. In particular, development of interest rate markets and lending rate mechanisms clearly are on a fast track, as are new quotas (RQFII) for foreign sales of China's debt securities.

2. THE URBANISATION PLAN: AN EXPENSIVE PRIORITY

China also has moved forward on the other long-awaited piece of its reform agenda: the revised urbanisation plan. The coincident timing with the latest steps of financial liberalisation has significance since the two agendas are linked at the hip. Without wholesale changes in the way that local governments finance development projects and social services, China will not escape its dependence on the increasingly sketchy financial structures originated outside the regulated banking sector. Likewise, without broader bank lending to rural areas and small businesses as well as a wider range of transparent financial instruments based on market pricing, domestic savers have few alternatives to the vagaries of shadow banking products. Both the ambitious urbanisation plan and the inexorable march to a market-based liberalisation of China's repressive financial system run considerable risks, but the current financial status quo is not a viable option.

China's urbanisation over the past two decades marks one of the largest mass migrations in history as almost 400 million subsistence farmers were relocated to urban jobs. Currently, almost 54% of China's 1.4 billion people live in cities, although only 36% are registered as urban residents who are eligible for public services. The latest incarnation of the urbanisation plan, which officials announced recently, envisions relocation of 100 million more rural residents to cities and to integrate another 100 million of the unregistered urban dwellers into urban life so they can use subsidised hospitals and their children can attend local schools. The plan aims to enable 60% of the populus to live in urban areas by 2020 with 45% enjoying full urban status and attendant social services.

Officials view the plan as an integral part of China's future. It states that "urbanisation is modernisation" and "urbanisation is an inevitable requirement for promoting social progress". Needless to say, this ambitious plan will require an enormous amount of resources and money. More infrastructure – roads, housing, schools, hospitals, etc – will need to be built, public services will need to expanded and the plague of pollution will need to be cleaned up if citizens are expected to live in China's sprawling urban areas. Until now, much of that financing burden has been offloaded to local governments that expropriated land from farmers and sold it at a huge profit to developers with financing from the shadow banking sector.

That option is no longer a viable strategy for many reasons. For one thing, the cost of China's urbanisation plan is likely to run into trillions of US dollars[1]. Although the country's huge saving pool seems sufficient to meet the need, domestic banks lack credit expertise and local capital markets are in their infancy. Moreover, the People's Bank of China no longer is willing to let the shadow banking sector fill the void as the quality of the assets underlying securitised wealth management products has deteriorated in recent years. Revenues from real estate transactions simply are not a reliable source of municipal revenue, especially now when the tightening of monetary conditions appear to be pricking the property price bubble.

3. THE HIGH COST OF STERILISED INTERVENTION

Even if China had not shifted its economic strategy toward domestic needs, there are limits to sterilised currency intervention. The PBOC already has a much larger balance sheet than any of its western counterparts including the Federal Reserve despite their aggressive quantitative easing and large scale asset purchases of recent years. As shown in Figure 3, the PBOC's assets and liabilities total US$5.3 trillion as of June 2014, or roughly 25% more than those of the Federal Reserve. Much ado has been made over China's vast accumulation of international reserves of US$4.4 trillion and counting, much of which are US Treasury securities. Far more problematic for the central bank, however, are the liabilities that bear interest and would be readily spendable were it not for the PBOC's tight management of reserve ratios. The PBOC is paying about US$130 billion to state banks for their deposit reserves and bonds held at the PBOC which in effect constitutes a subsidy that increases with interest rates and ongoing current account surpluses[2]. The subsidy is the main reason why Chinese banks accounted for one-third of the profits earned by all major banks during Q2 of 2014.

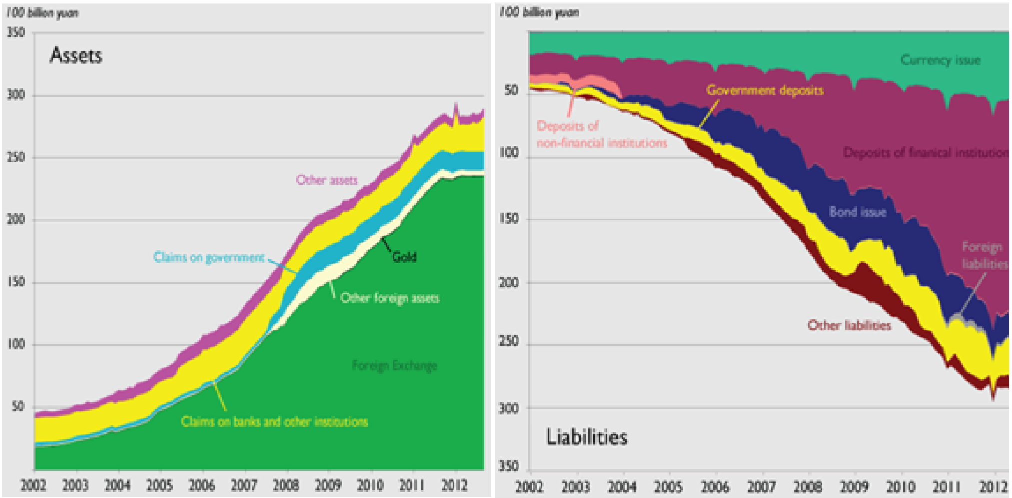
Figure 3: Balance Sheets of PBOC and Fed (in US$ trillions)

People's Bank of China				Federal Reserve			
	Assets US$ trillions		Liabilities US$ trillions		Assets US$ trillions		Liabilitie US$ trillion
Total of which:	5.3		5.3	**Total** of which:	4.4		4.4
International reserves	4.4	Deposit reserves	3.2	UST	2.4	Reserve balances	2.8
Non-gold reserves	4.0	PBoC bonds	0.7	Mortgages	1.7	FRB notes	1.2
		Currency	1.1				

Sources: People's Bank and Federal Reserve. Data are from 2014:Q2.

Just as financial repression and negative real deposit rates amounted to huge transfers from savers to corporate borrowers in the past, interest on reserve deposits now represent a huge transfer of income to state banks. Moreover, small changes in reserve ratios now free large amounts of cash into the economy. Much more so than in the past, the PBOC must be very judicious in using reserve ratios as the primary tool for monetary control. There is no wonder why the central bank has selectively relaxed only those ratios for rural banks and loans to small businesses, which are targeted for stimulus under the reform agenda anyway and also is in a big hurry to move to market-based interest rates as an alternative monetary tool.

Figure 4: The PBOC Balance Sheet (in 100 billion yuan)



Source: People's Bank of China

4. THE IMPOSSIBLE TRINITY

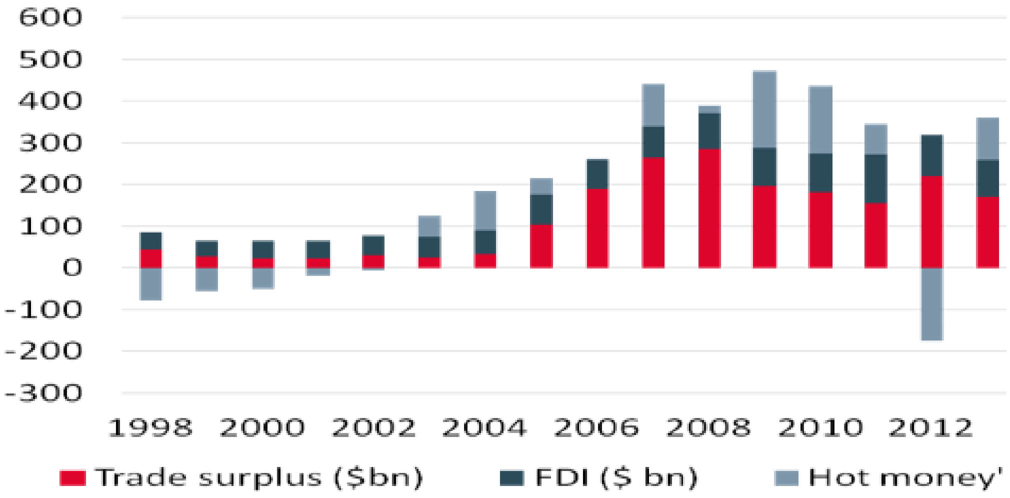
All these changing circumstances – weak global growth, waning competitive advantage, a comprehensive reform agenda, the high-priority urbanisation plan and the high cost of currency intervention – lead to the same conclusion. Namely, a fixed exchange rate no longer serves China's ultimate ambition of becoming a high-income country. To meet this end, the PBOC by necessity must change its monetary framework. The fundamental axiom of monetary theory for an open economy – the so-called Impossible Trinity – dictates the central bank's choices. Specifically, a monetary authority of a country with an open trading regime can achieve only two of the following three basic macroeconomic objectives:

1. A fixed exchange rate
2. Control of domestic interest rates (or monetary aggregates)
3. Open cross-border capital flows

Any two of these conditions ultimately will dictate the third.

After the 1994 devaluation, China chose (1) an exchange rate fixed to the US dollar and (2) monetary control through administrative caps on credit and strict reserve requirements for banks. By necessity, the capital account (3) was closed to all but direct investments by foreign companies. By 2004, however, China's current account surplus had ballooned to almost US$200 billion and speculative capital inflows were finding ways to evade controls (see Figure 5).

Figure 5: China's Capital Flows (in billions of US$)

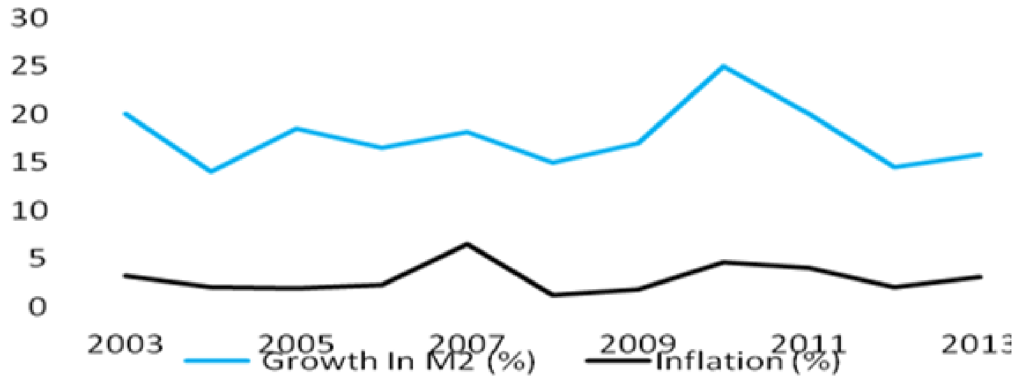


Source: People's Bank of China, Trading Economics

As a result, the PBOC was forced to abandon the fixed peg to the US dollar and to adopt a crawling peg that included other major currencies. Since then, the renminbi has appreciated about 3% to 5% per annum against the US$, yet pressure on the currency to appreciate continued to build as current account surpluses climbed above US$400 billion annually even as the rest of the global economy sank into a deep recession.

China's response to the world's recession was a large dose of monetary and fiscal stimulus. While seemingly appropriate at the time, in retrospect the stimulus package probably was overkill for a rapidly growing economy that already was straining resources. Money and credit growth, which were an ongoing problem for the PBOC before the stimulus package, soared to 25% in 2010 and jumped another 20% in 2011 (see Figure 6). That episode set the stage for the PBOC's current dilemma. M2 now exceeds 200% of GDP, so rapid growth in money and credit no longer is sustainable, especially as the real economy slows. Monetary control (#2 in the Impossible Trinity) has become the PBOC's top priority and in the spring of 2013 the central bank began to raise short term interest rates.

Figure 6: China's Money Growth and Inflation (annual % change)



Source: People's Bank of China, Trading Economics

The combination of tight monetary policy and an appreciating currency always has been an irresistible lure for carry traders. In China's case, the challenge of course is how to circumvent the controls on speculative capital flows. China's currency is freely convertible for foreign trade and other current account transactions, so only importers and exporters have ready access to renminbi. For that reason, they became the vehicle for speculative, albeit fraudulent, currency trades through the use of fake or inflated invoices. Speculators would exaggerate the value of their exports, usually on items that were hard to discern true value for such as electronic circuits, which allowed them to disguise speculative capital as income from the sales of goods and services. Likewise, they used re-exporting as a tool for speculation and even for illicit flows of hot money by exporting an inflated shipment from one port and then re-importing it to a nearby port at lower value with the difference constituting a speculative forex trade.

The State Administration of Foreign Exchange (SAFE) periodically has cracked down on these practices over the past 10 years and launched a formal investigation in April 2013 in hopes of staunching hot money flows. These enforcement efforts appear to have curtailed the fraudulent invoicing in recent months. Nonetheless, as long as Chinese interest rates exceed those abroad and the currency is perceived as relatively stable, speculators are likely to find new and creative ways to evade capital controls and hence to undermine the PBOC's ability to control monetary aggregates and credit expansion. Indeed, the cat and mouse game between forex regulators and illicit arbitrageurs is likely to be a never-ending battle, especially now that the size of the potential flows is so huge.

In short, China's transformation to an urbanised high-income society means the PBOC must abandon a (quasi) fixed exchange (#1 of Impossible Trinity) and ultimately to embrace more open capital flows (#3). Clearly, the PBOC would like this transition to proceed as a gradual evolution from reserve requirements and credit caps to market-based tools with well-founded domestic capital markets that are capable of channeling China's huge saving pool into domestic investments. Unfortunately, this transition from an inefficient system of state-directed credit to one based on market dynamics is a formidable task and, given the accelerated pace of financial reforms, the PBOC apparently is feeling considerable pressure to speed up the process.

5. FINANCIAL LIBERALIZATION AND MONETARY TIGHTENING: ONE THING LEADS TO ANOTHER

The only effective way to staunch hot money inflows is for the central bank to impose losses on speculators. Thus, the volatility in the renminbi early this year can be seen as a prelude to opening the band around a central fixing from +/- 1% to +/- 2% (Figure 7). The PBOC aggressively bought US dollars and other foreign currency until the renminbi fell to the weak side of the band and held it there long enough for the speculators' currency options to expire at a loss. Note that the same pattern held in 2012 when the bands were widened from +/- 0.5% to +/- 1%. The unavoidable consequence of that intervention was to increase deposit reserves at the central bank by US$155 billion during the second quarter alone. At that rate of accumulation, the central bank's balance sheet would surpass US$8 trillion within five years and M2 would equal 300% of GDP. Clearly, those levels are uncomfortably high and would run considerable risks to China's long-term goals.

Figure 7: China's Currency Bands

Source: Bloomberg

6. WHAT HAPPENS NEXT?

In my opinion, China has about five years to lay the groundwork for the transition to a new monetary policy framework with a currency that is sufficiently flexible to preclude further expansion of the PBOC's already bloated balance sheet. No other course is viable. China is heavily invested in an open trade regime for its exporting industries, including the provision of trade settlement and financing in renminbi. Capital controls in themselves cannot be sufficiently effective to contain hot money inflows without large-scale currency intervention. And currency intervention is rapidly approaching its limits, or at least the adverse impact on the PBOC's balance sheet are beginning to outweigh the benefits, as evidenced by the consequences of the recent bout of induced volatility.

To cut the Gordian policy knot of the Impossible Trinity, the PBOC inexorably must move away from sterilised intervention toward market-based instruments and greater efficiency in the state banking sector. The key is what happens during these critical years of transition. Most likely, the PBOC will continue to experiment with pilot programs with market vehicles and pricing while retaining vestiges of the administrative practices and official interest rates that have provided subsidies to state enterprises in the past. As a classic current example, China already is loosening the reins on the official deposit market that feeds through the state banks and is lent to state companies by allowing market-driven vehicles, including Alibaba's money market funds and short term lending funds, to flourish. Open market rates in these funds have been as high as 2% to 3% a month for short term financings in times of liquidity squeezes. This bi-modal approach to the deposit market allows a continuation of subsidies to state companies during their transformation via official deposit rates even while the market-based money funds are beginning to break the barriers as they have been paying 6% for deposits and then lending to China's private sector and even the state banks in times of stress in China. Such 'trial solutions' are typical of the PBOC's out of the box experiments in market-based reforms.

In that context, one can expect the PBOC to allow the currency to appreciate significantly in the months ahead while speculators are on the sidelines and are being prosecuted by SAFE.

- The CNY fixing now at 6.13/USD should reach 6.06 by year end and then appreciating 2% to 3% per year on average over the next five years. A stronger currency is the only way to limit the high cost of forex sterilisation.
- The PBOC will widen the bands whenever hot money flows reappear. With each widening, the CNY will move to the weak side of the band as the PBOC intervenes but will recover after four to six months after the central bank steps back. The bands eventually will widen until they are +/-5%. Apart from temporary periods of PBOC intervention, the currency will tend to trade at the strong side of the band.
- The principal drivers of the currency during this phase of band widening will the China's current account surplus, which still amounts to US$160 to US$200 billion per year, and China's status as one of the world's largest creditors. The IMF estimates China's net foreign assets at more than US$4 trillion.
- Greater renminbi flexibility will be accompanied by continued strides to develop local debt instruments. The objective is to create an alternative source of funding and a better pricing mechanism to China's inefficient state banks. One should expect local

capital markets to provide 20% of China's debt financing by 2020. Foreign participation in those markets through the RFQII quota allocations is a prerequisite to more accurate pricing of risk.

- The PBOC will use short-term interest rates to help to manage liquidity at state banks and to signal overall monetary conditions, but cannot rely on interest rates to control aggregate credit anytime soon. Strict reserve requirements and loan limits will be the main fixtures in the PBOC tool box as long as its balance sheet remains oversized.
- In contrast with other interest rates, deposit rates will not be deregulated anytime soon. Bank saving deposits have been the principal source of funding for local governments and state enterprises. Financial repression provided huge subsidies to those entities and, of course, fostered corruption. Reforms for those sectors are especially complex, including a complete overhaul of local government finances and development of commercial and retail mortgage markets, and will take much longer to complete. In the interim, the PBOC will have to manage ceilings on official deposit rates with care, so as to balance savers' demands for a reasonable return against political demands for subsidized funding. The high cost of the urbanisation plan means that the PBOC will have to err on the side of positive real deposit rates and monetary restraint in order to keep China's huge saving pool at home.
- The ongoing internationalisation of the renminbi should be viewed as means for lowering the cost of trade transactions rather than a driver of the currency, per se. Similarly, a freely traded currency merely is the first step in achieving reserve currency status, which also requires that the currency is freely investable. The latter condition will be met only as local capital markets develop and their instruments become widely traded in international markets.
- The final phase of China's financial evolution will lead to substantial overvaluation - perhaps by as much as 25% to 30% as often is the case with high-yielding currencies - with the renminbi ultimately reaching 4 to 4.5 per US$. This view rests on the conviction that the PBOC cannot afford to relent on aggregate credit control as long as its balance sheet is outsized. Indeed, even in the context of a significant slowing in actual and potential GDP, the PBOC's massive reserve deposits are a tinderbox for liquidity and debt accumulation. The first signs of deleveraging the PBOC's balance sheet are not likely to appear for five to 10 years. Meanwhile, the prospects of deflation and slow growth are likely to plague western central banks for at least that long and their interest rates are not likely to reach Chinese levels. The persistence of those asynchronous monetary policies is a classic prescription for currency appreciation. China's creditor status simply will accentuate the trend.
- Complete convertibility including financial flows will be among the last of the financial reforms and will coincide with the end of currency intervention as a policy target.

ENDNOTES

1. The China Development Bank estimated the cost of the scaled-down urbanisation plan presented to the Third Plenum at US$4 trillion by 2020.

2. The subsidy to state banks can be approximated as the interest on deposit reserves and PBOC bonds, or about 3.6% of $3.9 trillion plus $0.7 trillion (=$140 billion). The net cost of PBOC sterilisation is the interest cost on deposit reserves LESS the return on non-gold international reserves of about 1.5% is estimated at US$80 billion or about 1% of GDP (= 3.5% of $3.9 - 1.5% of $4.0tr).

Dr Robert Gay is managing partner of Fenwick Advisers, a financial consultancy serving global investment banks, hedge funds, and other fund managers and financial institutions including fixed income manager, Stratton Street Capital. Prior to forming Fenwick Advisers, Dr Gay served as international economist and global strategist Morgan Stanley, Bankers Trust and Commerzbank AG. He spent eight years as Senior Economist with the Board of Governors of the Federal Reserve System in Washington, DC, primarily during the chairmanship of Paul Volcker.
