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To cite this article: Myung-koo Kang (2018) The Confidence Trap: Japan's Past Bubble and China's Recent Bubble, *New Political Economy*, 23:1, 1-26, DOI: [10.1080/13563467.2017.1321626](https://doi.org/10.1080/13563467.2017.1321626)

To link to this article: <https://doi.org/10.1080/13563467.2017.1321626>



Published online: 09 May 2017.



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The Confidence Trap: Japan's Past Bubble and China's Recent Bubble

Myung-koo Kang

Department of Political Science, Baruch College, CUNY, New York, NY, USA

ABSTRACT

This paper explores the origin of China's recent credit and asset boom by comparing it with the Japanese bubble economy in the late 1980s by focusing on the asymmetric pattern of financial liberalisation under high savings. It argues that (1) both cases show a 'confidence trap' in that policy-makers of the government shared a complacent mindset that they can achieve the optimal mix of market liberalisation and repression, while believing that their political economic system is fundamentally different from others; (2) Such complacent confidence precipitated the supply-side driven financial reforms, in which both governments tried to diversify the credit channels of bank deposits by promoting non-bank financial intermediaries; (3) Exogenous shocks played a pivotal role in enforcing the government to take aggressive monetary easing and fiscal expansionary measures. But the Chinese case is different from the Japanese case in that (1) local politics has promoted a 'too secure to fail' situation in which rent-seeking activities are difficult to be detected, thus aggravating the hidden systemic risks; (2) China needs to liberalise its capital account with the more strengthened macroprudential regulatory governance, as the global foreign exchange markets have drastically changed from the period of the 1980s.

ARTICLE HISTORY

Received 14 September 2016
Accepted 26 March 2017

KEYWORDS

Bubble economy; financial crisis; asset and credit bubble; financial liberalisation; macro-prudential regulation; shadow banking

Introduction

China has achieved remarkable economic success over the past three decades based on an export-oriented and investment-driven model, coupled with high domestic savings and extensive government intervention in the economy (Naughton 2007). However, such a development strategy has produced an extremely unbalanced economic structure – high savings, high investment, and high trade dependence – which cannot be sustained permanently (Pettis 2013). Under the circumstances, the Chinese government has launched aggressive monetary easing and expansionary fiscal measures, in response to the exogenous shock resulting from the global financial crisis of 2008–2010. Consequently, both public and private debts have exploded (Dobbs *et al.* 2015).

According to Bank for International Settlements (BIS) data, China's total debt in the government, corporate, and household sectors increased more than five times, rising from \$5.3 trillion (145 per cent of GDP) at the end of 2007 to \$27.2 trillion (255 per cent of GDP) by the second quarter of 2016 (BIS *n.d.*). Its credit gap¹ – the difference between a country's increase in borrowing (credit-to-GDP) and its long-term trend – is exceptionally higher than other emerging economies.² It is estimated that about half the debt of households, non-financial corporations, and government is related to real estate, either directly or indirectly, causing skyrocketing property prices in certain urban areas

(Dobbs *et al.* 2015: 75–6). This debt-fuelled economic boost has created a boom-bust gyration in the stock market while increasing property prices in certain metropolitan cities at an alarming level (Carpenter *et al.* 2015, Dobbs *et al.* 2015). It is yet to be seen how China's recent asset and credit boom will turn out to be, but it is a critical issue for not only the Chinese economy but also the global economy (Cheung and de Haan 2013, IMF 2016).

Regarding China's recent debt explosion, two contrasting views have been suggested by many pundits and experts on China: one is a 'China-meltdown' thesis, and the other is a 'China-is-different' thesis. The 'China-meltdown' thesis, which gained popularity in mass media³, claims that China is facing an unavoidable financial crisis and collapse. The meltdown thesis highlights the speed of debt increase and inflated property prices, while pointing to the frequent plunges in the stock market. This meltdown scenario is often referred as the 'Minsky moment' in China (Qi *et al.* 2015). It is always precarious to predict the future, but it seems clear that the meltdown view underestimates some critically unique institutional features of China's economic system.

In this context, we should carefully examine the 'China-is-different' thesis. This thesis claims (1) that the chances of a hard crash are very low; (2) that even if a crash occurs, the Chinese government has enough fiscal and monetary tools to handle the crisis and will not be a global contagion; and (3) that sudden capital reversals, which often precede currency or banking crises, are not likely to occur (Ahuja *et al.* 2010, Wu *et al.* 2012, Chen and Funke 2013). They have pointed out that the ownership of banks and land still belongs to the Chinese government (Ren *et al.* 2012, Dreger and Zhang 2013); domestic savings are exceptionally high (Hung and Qian 2013, Ma and Yi 2013); the level of capital account liberalisation remains low (He *et al.* 2012, Roache and Maziad 2013, Carpenter *et al.* 2015, Kawai and Eichengreen 2015); and China's asset markets are less securitised with various mortgage-backed financial derivatives than those in advanced economies (FSB 2015).

Certainly, the Chinese political economy system has various unique features, and with government's proactive measures, China's recent debt explosion will not result in a full-blown banking or systemic financial crisis (Das *et al.* 2013, Maliszewski *et al.* 2016). In particular, the autocratic party-state unity (Dickson 2003) and state ownership of banks and land will be helpful to enable the Chinese government to take unconventional and decisive measures, which are not usually plausible in liberal democratic countries in the event of a crash. For example, Chinese government officials have often emphasised that 'the macro framework in a socialist market economy is superior to the Western economy', as 'the Chinese government has significant power in terms of both monetary and fiscal policy and is able to seek the optimal combination'. The chair of the China Banking Regulatory Commission reminded bank leaders in September 2016 that they 'are primarily party members and party secretaries and secondarily bank chairmen and presidents' (Turner 2016). However, this unique feature also promotes rent-seeking activities among the state, state-owned banks, and state-owned enterprises (SOEs), and their collusive relations are difficult to detect and control, thus aggravating the hidden systemic risks.

It is yet to be seen how China's asset and credit bubble will evolve. We cannot exactly estimate the unrealised systemic risks resulting from various interconnected hidden factors and sectors, including unpredictable market psychology. It is nevertheless clear that the Chinese government needs to cope with the recent debt growth in a more proactive way. What then should be done? This paper contends that exploring why bubbles were created in the first place and examining other past cases of asset and credit bubbles in comparative terms can provide some valuable lessons not only for understanding China's current situation but also for projecting potential future government strategies for coping with a financial downfall.

In this context, this paper explores the origin of China's recent credit and asset boom by comparing it with the Japanese bubble economy in the late 1980s by focusing on the asymmetric pattern of financial liberalisation under high savings. It argues (1) that both cases show a 'confidence trap'⁴ in that policy-makers of the government shared a complacent mindset thinking that they can achieve the optimal mix of market liberalisation and repression based on a belief that their political economic system is fundamentally different from others; (2) that such complacent confidence precipitated the

supply-side driven financial reforms, in which both governments tried to diversify the credit channels of bank deposits by promoting non-bank financial intermediaries, not properly tackling the lack of the demand from real economic sectors; and (3) that exogenous shocks – the Plaza Accord in 1985 to Japan and the US subprime mortgage crisis in 2007–2008 to China – played a pivotal role in inducing each government to take aggressive monetary easing and fiscal expansionary measures, as macroeconomic performance was directly linked with the legitimacy and credibility of the government.

Despite these similarities, the Chinese case is certainly different from the Japanese case in (1) that local politics has promoted a ‘too secure to fail’ situation in which rent-seeking activities and the collusive relations among the state, state-owned banks, and SOEs are difficult to rein in, thus aggravating the hidden systemic risks and (2) that China needs to liberalise its capital account under the drastically changed situation of the global foreign exchange markets from the Japanese bubble economy period of the 1980s. Therefore, China should develop broader and deeper domestic capital markets and strengthen macro-prudential financial regulatory governance before it attempts to fully liberalise capital accounts and internationalise the yuan.

To compare the two cases, this paper adopts a comparative institutional approach (Aoki *et al.* 1997; Aoki 2001). We cannot properly measure the degree of congruence or cohesiveness of policy preferences across countries, primarily because of the different institutional setting of each country. It is not plausible to deduce the collective or shared policy preferences based on combining individual expectations and perceptions of market conditions. Another challenge concerns the lack of available data on the topic. Alternatively, this paper analyses how policy-makers’ complacent confidence worked in the specific institutional context of each country by focusing on the role of key government agencies in financial liberalisation – such as the Ministry of Finance (MOF) and the Bank of Japan (BOJ) in Japan and the People’s Bank of China (PBOC) and the National Development and Reform Commission in China – and their policy formulation and implementation with regard to financial reforms.

The paper is organised into three parts. The first section will explore the origins of the asset and credit bubble in Japan in the 1980s, focusing on the paradox of excessive domestic savings, which contributed to creation of a sense of complacent confidence, with respect to the Japanese economic system in general and the financial system in particular, among Japanese economic policy-makers. The second section will compare the structural features of the Japanese bubble economy with the recent bubble in China by focusing on how regulators in both cases tried to deregulate a bank-centred financial system, associated with high domestic savings, in an asymmetric way, by focusing on the diversification of credit provision channels from bank financing to non-bank financing and the manner in which such asymmetric liberalisation has contributed to the explosion of credit growth. The last section discusses policy and theoretical implications of the current study.

The origins of the Japanese asset and credit bubble

The bubble creation and its bust

The Japanese bubble economy developed during the 1980s resulting in asset prices skyrocketing and growing private credit provided by banks, starting in 1985 (Wood 1992). As Figure 1 illustrates, the urban land price index increased more than four times from 1980 to 1990. During this same time period, the Tokyo Stock Exchange First Section Price Indexes (TOPIX) increased almost six times. Japanese banks continuously channelled growing deposits towards real estate, construction, and the wholesale and retail business sectors.⁵ The increasing loan provisions to these sectors rapidly expanded the volume of loans in accordance with the increasing value of the collateral, which was typically real estate.

The bubble economy burst in September 1990.⁶ It was triggered by the abrupt and sharp increase of interest rates by the BOJ. The BOJ began to intervene in the financial market in order to slow the

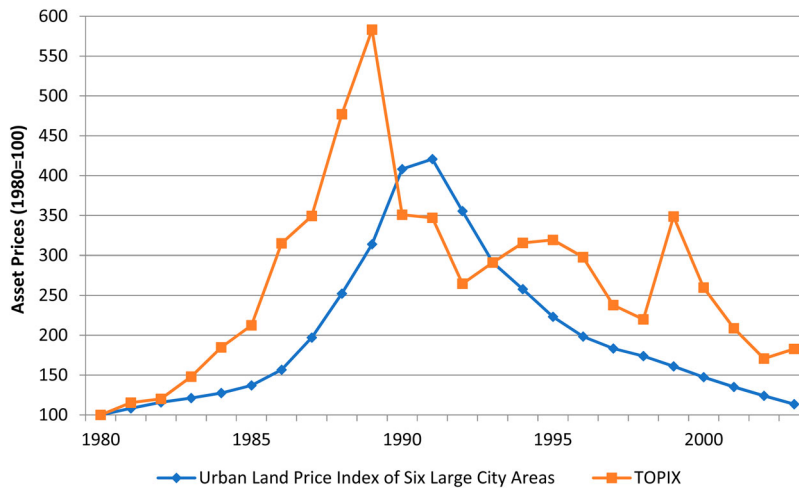


Figure 1. Japan's stock and land prices (1980–2003). Source: Japan Real Estate Institute & Tokyo Stock Exchange.

Note: The urban land price index is the index for six large city areas, and TOPIX is the Tokyo Stock Exchange First Section Price Indexes.

pace of rising asset prices from May of 1989. Asset prices increased at an alarming speed, and officials of the BOJ came to realise that it needed to take some drastic measures in order to check the boom. Under these circumstances, the BOJ raised the discount rate from 2.5 per cent in 1988 to 6 per cent in 1990. Accordingly, debt repayment came to be more difficult, and some speculative and Ponzi finance units started to fail to meet their debt obligations. In this context, in September of 1990, Itoman, a trading company-turned-property developer and major client of the Sumitomo Bank, went bankrupt. This was the beginning of successive bankruptcies in the early 1990s, and the wave of bankruptcies appeared as the real estate market started to collapse. In turn, falling land prices exacerbated the economic performance of those highly leveraged companies with the inflated collateral value of real estate (Mikuni and Murphy 2002: 145–88).

Consequently, in the 1990s, both land and stock prices fell substantially. Urban land prices in the six major city areas in 2003 were the same as they were in 1980. The TOPIX also fell substantially during the 1990s. More specifically, the collapse of asset (stock and land) prices between 1990 and 1996 resulted in cumulative losses of nearly ¥1000 trillion (about \$7 trillion), or roughly the equivalent of two years of GDP. Of these losses, more than 63 per cent (¥643 trillion) was accounted for by the decline in land prices (Economic Planning Agency 1998). Because of the continued decrease in asset prices, non-performing loans rapidly accumulated in the banking sector (Cabinet Office 2001). Hence, it took a long time to resolve the non-performing loans in the banking sector, because of the prevalence of ‘zombie lending’ – which provided additional loans to already underperforming firms (Hoshi and Kashyap 2004b, Caballero *et al.* 2008).

What went wrong then? There was a dramatic rise and fall of the bubble economy owing to inter-related structural and macroeconomic policy factors (Blomström *et al.* 2003, Kikuo and Tsutomu 2003, Muramatsu and Okuno 2003a, 2003b, Saxonhouse and Stern 2004, Hamada *et al.* 2011). Japan's remarkable economic growth in the 1950s and 1960s was based on an export-oriented development strategy, where its industrial structure and financial system were geared towards export promotion. Industrial sectors aimed at global markets developed extensively, but the development of domestic market-oriented industrial sectors did not develop in parallel with export-related sectors. The bifurcated economic system then began to reveal its structural vulnerabilities as the Japanese economic system came to be more integrated with the global economy. Chronic trade surpluses made Japan the number one creditor country in the world in about 1985. At the same time, this highlighted the mercantilist nature of Japan's economic relationships with the rest of the global economy. Under

these circumstances, at the turn of the 1980s, the Japanese economic system was placed under both domestic and external pressures to rebalance its domestic and external imbalances. The rebalancing efforts began with financial liberalisation. Japan attempted to transform its export-driven economic system into a more domestic, consumption-oriented system, and the Japanese government pursued financial liberalisation to facilitate this transformation.

Asymmetric financial liberalisation and banks' loan diversification strategy

Japan consolidated a bank-centered financial system, which was geared towards promoting exports during its high economic growth from the 1950s to the late 1970s. Banks played a central role in mobilising and distributing domestic capital, especially for developing strategic industrial sectors (Calder 1993, Aoki and Patrick 1994, Hoshi and Kashyap 2004a). During this period, Japan's financial system was relatively insulated from international finance, despite its growing economic influence in the international economy. Cross-border capital flows were tightly regulated by Foreign Exchange Law (December 1949) and the Law Concerning Foreign Capital (May 1950). The Foreign Capital Law repressed any short-term oriented, speculative inflows of foreign capital. It authorised only the inflow of long-term oriented, high-quality foreign capital (Aramaki 2006). Moreover, from 1952, the Japanese government allowed only authorised foreign exchange banks to retain a certain amount of foreign currency (Aramaki 2006: 195).

This insulated situation started to change from the mid-1960s. The government started to liberalise foreign exchange and capital accounts, when Japan started to produce trade surpluses. In 1960, the Japanese government adopted a Basic Plan for the Liberalisation of Trade and Foreign Exchange. It attempted to liberalise first the trade regime, then capital accounts, and finally the financial sector, in a sequential and gradual way. Nevertheless, cross-border capital flows were limited through the control of authorised foreign exchange banks (Aramaki 2006).

The situation changed drastically from the early 1980s. In December of 1980, the Japanese government revised the Foreign Exchange Law comprehensively, and with this revision, regulations on capital account transactions underwent a substantial change, from general prohibition to general liberalisation (Rosenbluth 1989). The government deregulated restrictions on overseas borrowing and investing in cross-border portfolio securities. It shifted the regulations from the pre-approval system to the prior-reporting system to the MOF. It also liberalised controls on corporate bonds markets gradually; this deregulation had an immediate and significant impact on corporate financing (Tsuruta and Miyasaka 1999).

A series of these deregulations in foreign exchange were introduced with a long-term goal of internationalising the yen. From 1980 to 1986, the Japanese government eased restrictions governing a variety of offshore yen transactions – including the issuance of euro-yen bonds, euro-yen lending to Japanese residents, and the issuance of euro-yen certificates of deposit (CDs). It also loosened restrictions on domestic banks' issuance of CDs and removed restrictions on forward foreign exchange transactions, spot conversion of foreign currencies into yen by banks, and the sale of foreign CDs and commercial paper in Japan. It further took initiatives to increase the participation of foreign financial institutions in Japan's capital markets. Consequently, foreign financial institutions and companies increasingly started to acquire yen-denominated securities in the Japanese market and foreign capital surged to Japan in the 1980s (Hoshi and Kashyap 2004a).

All these measures aimed at expanding market access resulted in a restructuring of Japanese corporate liabilities. Manufacturing firms, especially those large firms listed on the stock markets, increasingly mobilised more funds through domestic and overseas capital markets, and various types of bonds started to substitute for bank credit. For example, total funds raised in overseas markets in 1981 exceeded ¥1.4 trillion, nearly triple the 1975–1979 annual average of ¥560 million, and overseas securities issues rose steadily from a level under 20 per cent prior to 1980 to nearly 50 per cent by 1985 (Kester 1991: 188). Consequently, bank loans towards the manufacturing sector decreased from the peak of 50 per cent in the 1960s to 15 per cent in 1990, as Table 1 shows. In particular,

Table 1. Distribution of bank credit to industries (%).

| | 1960 | 1970 | 1980 | 1990 | 1995 |
|----------------------|-------|--------|---------|---------|---------|
| Manufacturing | 49.7 | 44.7 | 32 | 15.7 | 14.9 |
| Construction | 2.7 | 4.7 | 5.4 | 5.3 | 6.4 |
| Real estate | 0.8 | 3.8 | 5.6 | 11.3 | 15.3 |
| Finance | 1.5 | 1.2 | 3.3 | 10 | 10.2 |
| Wholesale and retail | 28.9 | 28.8 | 25.5 | 17.4 | 16.1 |
| Other services | 2.3 | 4.5 | 6.8 | 15.4 | 15.5 |
| Others | 14.1 | 12.3 | 21.4 | 24.8 | 21.6 |
| Total | 100 | 100 | 100 | 100 | 100 |
| (trillion yen) | (8.1) | (39.2) | (134.6) | (376.0) | (487.6) |

Source: Bank of Japan (2000).

during the 1980s, manufacturing sector's share in total bank loans declined from 32 per cent to 16 per cent. The loss of major loan clients from the manufacturing sector posed a serious economic challenge for Japanese banks, since banks relied on loans for over 65 per cent of their profits.

It was a daunting task for the Japanese banks to find alternative clients who can replace those large manufacturing firms. One of fundamental problems was lacking real demand for bank loans (Fukao 2003). Historically, Japanese households held, on average, over 50 per cent their financial assets in bank savings accounts (Takayama and Kitamura 1994). Notably, Japanese households preferred long-term time deposits, and out of all bank savings, the ratio of long-term deposits was continuously very high, with the ratio remaining above 60 per cent consistently during the 1980s.⁷ The growing volume of deposits enhanced bank assets, and Japanese banks occupied all the top 10 largest banks, based on deposits, in the world in 1988 (Nash 1988). However, such growing deposits resulted from the lack of demand from real economic sectors.

What made the situation worse was government's uneven deregulation. The Japanese government deregulated banks' deposit interest rates as a way of liberalising the banking system. This measure made banks in more competitive business environment against other banks, and banks' profits were squeezed. However, the government did not allow banks to participate in the securities businesses directly in order to protect those newly burgeoning non-bank financial institutions engaged in securities businesses. Indeed, since the late 1970s, securities companies and banks have conflicted about the bonds transactions by banks, and the conflict lasted in the 1980s (Muramatsu and Okuno 2003a: 313–58). Moreover, the government did not allow banks to participate in the short-term government bond market and retail financing services (Okazaki and Hoshi 2003). Not many alternative investment areas remained to the Japanese banks. Under these circumstances, Japanese banks tried to utilise the aggressive monetary easing policy, adopted by the government to cope with the anticipated deflationary pressures to the economy owing to the Plaza Accord in September of 1985. They expanded cross-shareholding practices with their client firms while channelling more money to the real estate, construction, and retail business sectors.

The plaza accord and monetary easing policy

During the entire period of the 1980s, the US suffered chronically growing trade deficit from its trade relations with Japan. Accordingly, the US government pressured the Japanese government to appreciate its own currency, which was not floating freely with the US dollar. The Reagan administration and the Nakasone Cabinet set up consultation committees, not only to liberalise the Japanese economic system, but also to depreciate the US dollar against the yen. In the end, the Japanese government complied with the pressures from the US government, as Japan enjoyed chronic trade surpluses in trade relationships with the US from the mid-1960s (Kozyou 2003). Owing to the Plaza Accord, the yen appreciated to almost double its original value (see Figure 2).

The Plaza Accord worked as an exogenous shock to the Japanese economy (Mikuni and Murphy 2002, Ueda 2011). The sudden appreciation was expected to be negative for Japan's exports, causing

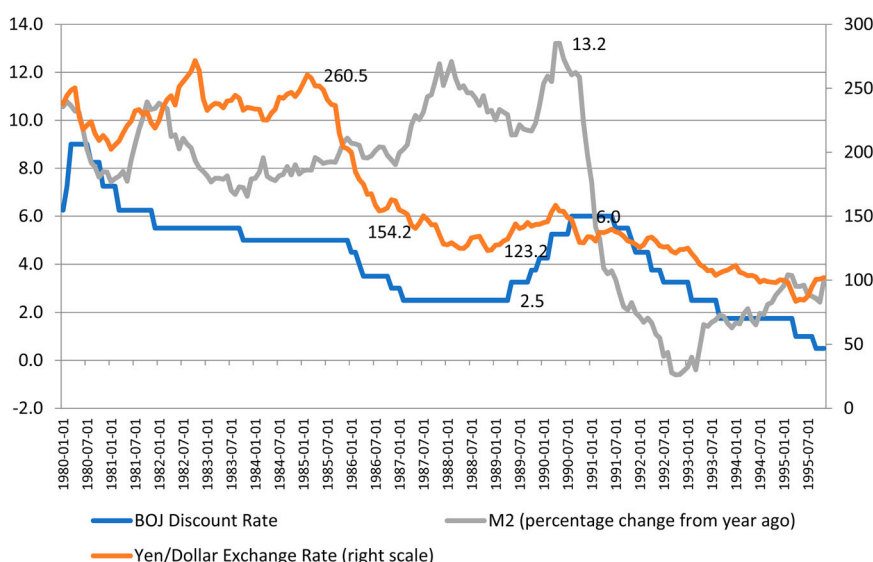


Figure 2. Yen-dollar exchange rate, discount rate, and money supply (M2). Source: OECD (n.d.).

deflationary pressures to the economy. To cope with the situation, the BOJ lowered the discount rate immediately and the money supply (M2) rapidly increased from 1986 to 1990, as Figure 2 highlights. Consequently, bank credit exploded.

During the 1980s, total bank loans increased more than twofold, from ¥135 trillion to ¥376 trillion, as Table 1 illustrates. This increasing ratio of bank loans – 15 per cent annually – exceeded the nominal GDP growth rate, which had annually been 5 per cent during the 1980s. Consequently, the total bank lending to GDP ratio rose rapidly, from 70 per cent of GDP in the late 1970s to 108 per cent by 1990. More specifically, domestic credit increased in the banking system by approximately ¥26 trillion annually between 1981 and 1985; between 1986 and 1990, it almost doubled – ¥46 trillion annual average. The growing bank credit went to bid up land and equity prices. During the second half of the 1980s, residential land prices almost doubled, commercial land prices tripled, and stock prices steeply increased (Yoshikawa 2003).

Two practices greatly contributed to the skyrocketing land and equity prices. One was the practice of using land as collateral, and the other one was the cross-shareholding practice. Credit rating system was underdeveloped in the Japanese ‘main bank’ system. Bank-firm relations were exceptionally long, very often exceeding more than 30 years, on average, based on trust (Aoki and Patrick 1994, Kang 2014). Moreover, Japanese banks developed a ‘*yokonarabi* (horizontal line-up)’ management style in which banks followed the investment pattern of other banks. This management style was a product of the Japanese government’s prohibition for excessive competition among city banks, trust banks, regional banks, long-term credit banks, and other small banks through licensing power and administrative guidance (Okazaki and Hoshi 2003: 338–41). Under the circumstances, Japanese banks usually did not look at borrowers’ cash flows in assessing their capacity to service debt (Fukao 2003). Instead, banks often requested real estate or land as collateral for loans. Therefore, higher land prices raised the collateral value, and banks could expand loans accordingly.

Another amplifying factor was a prevalent cross-shareholding practice, *Kabushiki mochiai* (mutual aid shareholding), between banks and those listed firms in the stock market (McCauley 2013). In the Japanese ‘main bank’ system, all the large banks owned much equity in each other. However, more importantly, large city banks cross-held the shares of a large group of firms (*kigyo shudan*)⁸. ‘Main bank’ was typically among the top five shareholders of a given firm (Aoki and Patrick 1994: 13–14). Under these circumstances, the Japanese government limited banks’ shareholding to 5 per

cent of a given firm's equity in 1987. Moreover, the Basel Capital Accord in 1987 established the 8 per cent minimum ratio of capital to risk-weighted assets.

Responding to such changing regulatory environment banks' capital, Japanese banks stepped up their equity issuance. According to the data, compiled by NLI Research Institute of Tokyo, based on a sample of 2426 firms, about a fifth (21.4 per cent) of corporate and bank equity had been owned by cross-shareholding firms in 1990 (Scher 1999). In 1987, banks held about 6.2 per cent of firm shares, but it increased to 7.3 per cent by 1991 (Scher 1999: Table 2). Banks' shareholdings of listed firms' equities amounted to more than 100 per cent of the city banks' own equity, and it was more in the case of the long-term credit banks and the trust banks (McCauley 2013: 580). Accordingly, as equity prices rose sharply, banks became richer and lent more. In short, 'the cross-holdings that served an insurance function at the micro, cross-sectional level became over time a runaway engine of macroeconomic instability' (McCauley 2013: 581).

Despite growing speculative finance, however, BOJ officials were not fully aware of the seriousness of the inflation in asset prices. They were more concerned with the stability of general price levels. Indeed, the index of price levels was not unduly serious from 1986 to 1988 (Ryunoshin 2003). Moreover, the Japanese government allowed banks to put 45 per cent of the unrealised stock-market gains from banks' shareholdings as tier 2 capital. Consequently, the direct linkage between the TOPIX and Japanese banks' capital was intact. The BOJ also did not supervise dollar loans at home or those extended by branches of Japanese banks in foreign markets. For example, to get around the window guidance, Japanese banks booked dollar loans at their domestic offices and round-tripped funds from Tokyo to foreign branches, which in turn extended loans to domestic borrowers, mostly in dollars. Such loans rose from less than \$100 billion in the mid-1980s to \$400 billion by the end of the decade (McCauley 2013: 589).

Meanwhile, MOF officials regarded expanding bank loans as a positive economic indicator of increasing domestic demand, pre-empting any recessionary effects of the sudden appreciation of the yen and increasing tax revenues (Okazaki and Hoshi 2003: 354). Indeed, the budget deficit started to grow larger starting from the late 1970s. In 1974, after the first oil crisis, for the first time since the end of World War II, the real GDP growth rate was negative. In 1975, special deficit-financing bonds were issued. In 1979, the ratio of bond issues to total expenditures reached its first peak of 34.7 per cent. In response to the growing budget deficit and the debt level, the MOF attempted to achieve fiscal consolidation during the 1980s. In 1983, the MOF established a plan to

Table 2. Aggregate social financing^a to the real economy (flow-based, 2012–2016) (unit: trillion Yuan).

| Type | Year | Total | RMB loans | Foreign currency-denominated loans | Entrusted loans | Trust loans | Undiscounted bankers' acceptances | Net financing of corporate bonds | Equity financing by non-financial enterprises |
|-------------|------|--------|-----------|------------------------------------|-----------------|-------------|-----------------------------------|----------------------------------|---|
| Flow-based | 2012 | 15.76 | 8.20 | 0.92 | 1.28 | 1.28 | 1.05 | 2.26 | 0.25 |
| | 2013 | 17.32 | 8.89 | 0.58 | 2.55 | 1.84 | 0.78 | 1.81 | 0.22 |
| | 2014 | 16.41 | 9.78 | 0.36 | 2.51 | 0.52 | −0.13 | 2.38 | 0.44 |
| | 2015 | 15.29 | 11.27 | −0.64 | 1.59 | 0.04 | −1.06 | 2.82 | 0.76 |
| | 2016 | 17.80 | 12.44 | −0.56 | 2.19 | 0.86 | −1.95 | 3.00 | 1.24 |
| Stock-based | 2015 | 138.14 | 92.75 | 3.02 | 10.93 | 5.39 | 5.85 | 14.63 | 4.53 |
| | 2016 | 155.99 | 105.19 | 2.63 | 13.2 | 6.31 | 3.9 | 17.92 | 5.77 |

Source: PBOC (n.d.).

Notes: RMB loans and foreign currency-denominated loans refer to those issued to the real economy by the financial system during a certain period of time, barring the funds lend to non-bank financial institutions by the banking financial institutions and external loans. Data were from the PBOC, the National Development and Reform Commission (NDRC), the China Securities and Regulatory Commission (CSRC), China Insurance Regulatory Commission (CIRC), China Central Depository and Clearing Corporation Limited (CCDC) and National Association of Financial Market Institutional Investors (NAFMII).

^aAggregate social financing refers to the total volume of financing provided by the financial system to the real economy during a certain period of time, where real economy means domestic non-financial enterprises and households.

stop issuing special deficit-finance bonds by 1990 and introduced a 'ceiling' on government expenditures to restrain the growth of deficit-financing bonds (Budget Bureau 2004).

The MOF also had a long tradition of 'fiscal over monetary policy' in its policy-making history. Within the MOF, the Banking Bureau and other financial bureaus had been weaker than the Budget Bureau in economic policy-making. Traditionally, the Budget Bureau had been the most powerful elite bureau within the MOF. For example, the Bureau's director was usually promoted to the post of MOF administrative vice minister, the most powerful position as a career bureaucrat. Under these circumstances, growing tax revenues, resulting from rising asset prices, were regarded as a positive sign for the fiscal consolidation, and bank supervision was not a priority in the MOF's economic policy-making.

In retrospect, the Japanese government had to tackle the low demand from real economic sectors, which was reflected in the ever-growing bank deposits. It could not be resolved by diversifying the funding channels of the growing bank deposits to the non-banking sectors. However, government officials projected that financial liberalisation would rebalance both internal and external imbalances, which were revealed by the low consumption and chronic trade surpluses and pushed the uneven financial deregulation. They strongly believed that 'Japan is different' and that they could upgrade Japan's financial system rapidly, as they succeeded in enhancing the competitiveness in the manufacturing sector. The Japanese government's compliance to the abrupt appreciation of the yen and the adoption of a free-floating exchange rate system at the Plaza Accord and the Basel Accord in 1987 reflect such confidence.

With the uneven financial deregulation, export-related large corporations gradually relied more on direct financing than bank loans, thus forcing banks to diversify their loan portfolios from the export-oriented, large corporations to the domestic market-oriented sectors, primarily to real estate, construction, and retail business sectors (Hamada *et al.* 2011). What made the situation worse was that the Japanese government did not introduce appropriate macro-prudential financial supervisory system that could monitor the systemic risks, embedded in the growing interconnectedness between the banking and the non-banking sectors. To a large extent, China's financial liberalisation over the past decade has followed the similar path Japan took in the 1980s.

Origins of China's asset and credit bubble

As with Japan in the 1980s, China has been exposed to similar external pressures for economic liberalisation in general and financial liberalisation in particular, since its entry to the World Trade Organization (WTO) in 2001 (N'Diaye 2010). Responding to such external pressures, the Chinese government has tried to liberalise its bank-cantered financial system as a way of rebalancing its domestic and external imbalances. To a large extent, regaining the pattern of China's financial liberalisation since its entry to the WTO, shares of all the key characteristics reflect that which we can observe from the Japanese case in the 1980s. China's experience also shows a paradox of high savings in the process of asymmetric financial liberalisation. The Chinese government has also targeted the banking industry first and focused on the supply-side financial reforms. It tried to develop securities markets by diversifying the credit channels to the corporate sector from bank financing to non-bank financing. However, most importantly, Chinese policy-makers were confident that the Chinese government can maintain an optimal mix of financial liberalisation and financial repression, as China's political economy system is fundamentally different from that of other capitalist economies.

Since its entry into the WTO, the Chinese government has attempted to liberalise the financial system, and a series of reform measures for financial liberalisation were decided through the National Financial Work Conference (NFWC). The Communist Party of China and the State Council held the first NFWC in November 1997 in the middle of the Asian financial crisis, and it was held every five years since then. The second NFWC held in February 2002 set the policy direction to prepare for the opening up China's financial sector to foreign investors by the end of 2006. It especially targeted to improve the corporate governance and management efficiency of state-owned commercial

banks (SOCBs). For this purpose, it proposed to diversify the ownership structure of SOCBs, especially three major SOCBs – Bank of China, China Construction Bank and Industrial and Commercial Bank of China – into joint-stock commercial banks (JSCBs), which would be listed on stock exchanges. The 16th Central Committee of the CPC in October 2003 officially allowed the change of the ownership structure of the SOCBs into JSCBs (Okazaki 2007, Chunhang 2009). On the other hand, the Chinese government tried to develop securities markets by channelling the ever-growing bank deposits to non-banking financial sectors. In this process, off-balance companies were created, and these companies have channelled the growing bank deposits into high yielding non-banking sectors, often called ‘shadow banking’ sectors.

The Chinese case also shows some key differences from the Japanese case. One of the most distinctive ones is the role of local politics. In China, the diversified credit channel from the banking sector has promoted the activities by off-balance sheet companies, especially in the local areas through local financing vehicles, and those off-balance sheet companies have recklessly borrowed and spent on behalf of local governments. This close, and very often collusive, linkage between local politics and local financing vehicles has created a ‘too secure to fail’ situation, in which involving actors expect that the central government will bailout or help in the event of a financial crisis. This trend has been strengthened, owing to the growing deflationary pressures, triggered by the global financial crisis of 2008. Another different feature is that the Chinese government has attempted to internationalise its own currency when the global foreign exchange markets have drastically changed from the period of the 1980s when Japan tried to liberalise its financial system. As with a double-edged sword, capital account liberalisation can transform Chinese financial markets more deep and broad, but it causes a growing systemic risk to the financial system owing to the rampant increase of cross-border capital flows.

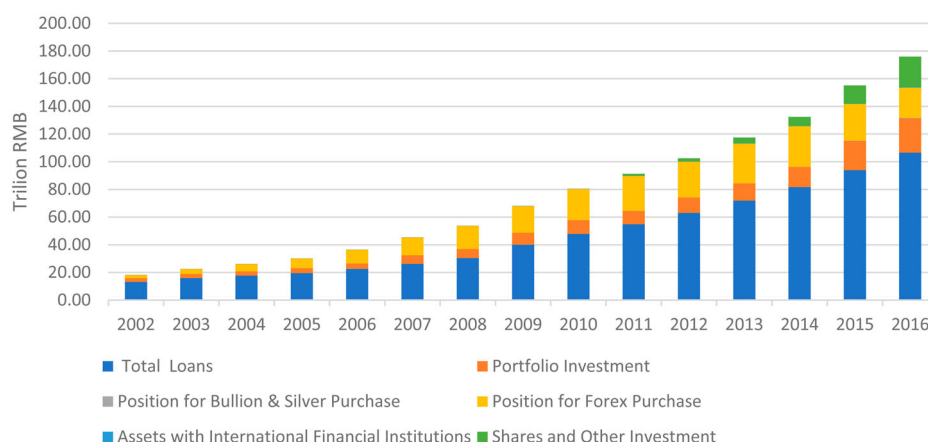
Banking liberalisation and credit growth

China also consolidated a bank-centered financial system (Walter and Howie 2012, Huang *et al.* 2013). As in Japan, domestic high savings have greatly contributed to such consolidation. The growth rate of China’s domestic savings has been higher than the economic growth rate. Its national savings rate has been higher than that of most other East Asian countries, including Singapore and the OPEC countries (Hung and Qian 2013, Ma and Yi 2013). From 1978 to 2012, gross domestic savings⁹ (local currency-based) increased annually at 17.4 per cent, exceeding 50 per cent of GDP in 2006, while GDP grew at 9.9 per cent per annum (World Bank 2017, World Development Indicators (WDI) data). Consequently, financial institutions’ credit provision to the real economic sectors, which is called ‘social financing’ in China, also increased almost 10 times from RMB 18.2 trillion in 2002 to RMB 175.9 trillion by the end of 2016, as Figure 3 shows.

A notable trend is not only the rapid growth credit provision but also the change in the funding distribution to the real economic sectors. First, the share of loan types of funding decreased rapidly from 2002 to 2008, as Figure 3 shows. It was 72 per cent of the total ‘social financing’ in 2002, but it went below 60 per cent in 2007 and stayed at about 60 per cent, after a slight rebound from 2009. This pattern indicates that bank financing decreased rapidly before the global financial crisis in 2008, with the introduction of those measures of bank liberalisation from 2002 with the entry of the WTO. Second, the funding for building a deeper security market expanded greatly. Financial institutions’ total funding for portfolio investment was only RMB 2.6 trillion in 2002, but it increased continuously and reached at RMB 24.7 trillion by the end of 2016. Meanwhile, from 2011, the funding for shares and other investment¹⁰ also increased greatly. It was only RMB 1.2 trillion in 2011, but it increased to RMB 22.0 trillion only in five years. Overall, the funding for portfolio and shares investments by Chinese financial institutions increased very rapidly, occupying more than 27 per cent of social financing in 2016.

Third, the share of Forex purchase was a great portion, but its relative significance declined. In 2002, financial institutions used RMB 2.3 trillion to purchase Forex, and then. the purchase amount

a. Amount



b. Proportion

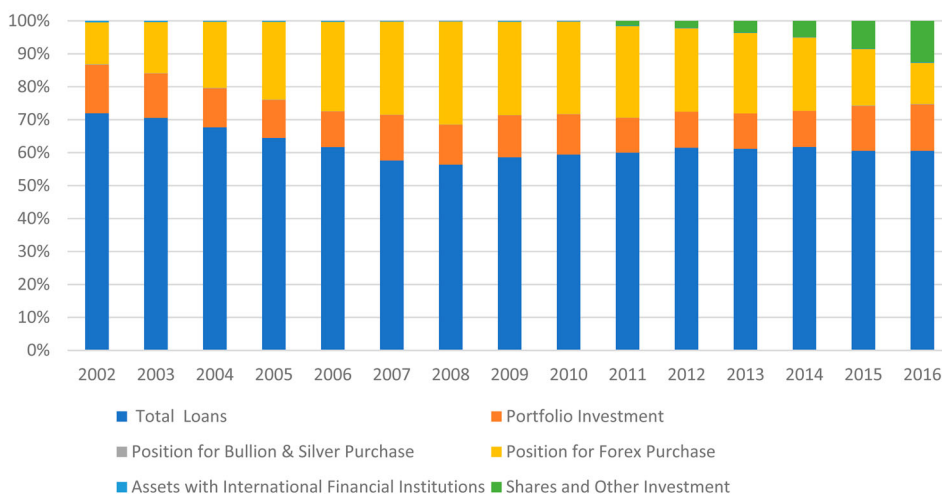


Figure 3. Uses of credit funds of financial institutions (2012–2016, by sectors). (a) Amount, (b) proportion. Source: PBOC, Annual Statistical Data.

Notes: Financial institutions include the PBOC, policy banks, state-owned commercial banks, other commercial banks, urban commercial banks, rural commercial banks, rural cooperative banks, urban credit cooperatives, rural credit cooperatives, finance companies, trust and investment companies, leasing companies, postal savings bureaus, foreign financial institutions.

continuously increased until 2014, which was spent RMB 29.4 trillion. However, since then, Forex purchase amount sharply declined to RMB 21.9 trillion in 2016, reflecting the recent trend of capital flight, which we will review in the following section on capital account liberalisation. Meanwhile, the share of Forex purchase in the total amount of social financing increased from 12.7 per cent in 2002, peaked in 2008 as 31.3 per cent, and then continuously declined to 12.5 per cent in 2016. These trends indicate that China's financial system has gradually developed securities markets, although a loan type of bank financing still occupies about 60 per cent of social financial.

In comparison with the Japanese case, we should note that China's bank deposits have been relatively small with respect to the economy. For example, China's bank deposit-to-GDP ratio exceeded 50 per cent in 2010, but it was a similar level of Japan's in 1962. Japan's bank deposits exceeded 100 per cent of GDP in 1972, and it rose continuously through the 1980s and 1990s until it peaked at 227 per cent of GDP in 2000. Notably, Japan's bank deposits did not decrease at all even after the burst of

the bubble economy in late 1990 and the systemic banking crisis in 1997–1998. By contrast, China's bank deposit-to-GDP ratio from 2001 to 2011 is less than one-third of Japan's ratio in the 1980s (see Figure 4).

Nonetheless, Chinese banks have been more aggressive in providing credit than Japanese banks did during the bubble economy period. In terms of the bank credit to deposit ratio, Chinese banks has provided about 2.5 times more credit from 2001 to 2011, compared with the bubble economy period in Japan from 1985 to 1991 (see Figure 5). Indeed, China has pursued a more aggressive investment-driven economic growth model than Japan did during its high economic growth period in the 1950s and 1960s. For example, China's gross capital formation¹¹ to GDP has been constantly more than 30 per cent of GDP from 1970. It exceeded 40 per cent of GDP in 2003, and since 2009, it has sharply increased, reaching 47.6 per cent of GDP in 2013 (World Bank, WDI data). This high level of gross capital formation highlights the fact that the Chinese economy has grown with the continued investments for fixed assets such as constructing roads, railways, residential dwellings, commercial and industrial buildings, among others.

Chinese banks' such aggressive loan provision reflects the unique institutional features of China that create a 'too secure to fail' situation. Despite the continued efforts to diversify the ownership structure of SOCBs, the Chinese government maintains its majority ownership of SOCBs. Bank failures are not a politically acceptable event at all, and this unique situation creates a 'too secure to fail' situation. Chinese bankers are fully aware of the fact that the government will not allow banks to fail, and it will take whatever costs to prevent bank defaults. This confidence allows them to take more risks, without the worry about systemic financial risks. Indeed, the Chinese government resolved the serious non-performing loans problem in the banking sector in the late 1990s and early 2000s by establishing public asset management companies and injecting fiscal money (Ma and Fung 2002, Shih 2004). According to an analysis by Okazaki (2007), a total of RMB 785 billion (or US\$ 95 billion) was injected from 1998 to 2005 – RMB 270 billion in 1998 and RMB 515 billion from 2003 to 2005 – and this was equivalent to 10 per cent of the central government's revenue (excluding debt income) for the period 1998–2005 (Okazaki 2007: 30).

Another contributing factor for the credit explosion was the adoption of a market-based reform of interest rates. Since the late 1990s, the PBOC has gradually deregulated interest rates. It also relaxed restrictions on the interest rates of loans and deposits (Porter *et al.* 2009). In 2012, the PBOC expanded the floating interest rate for deposits and bank loans. With interest rate liberalisation, Chinese banks

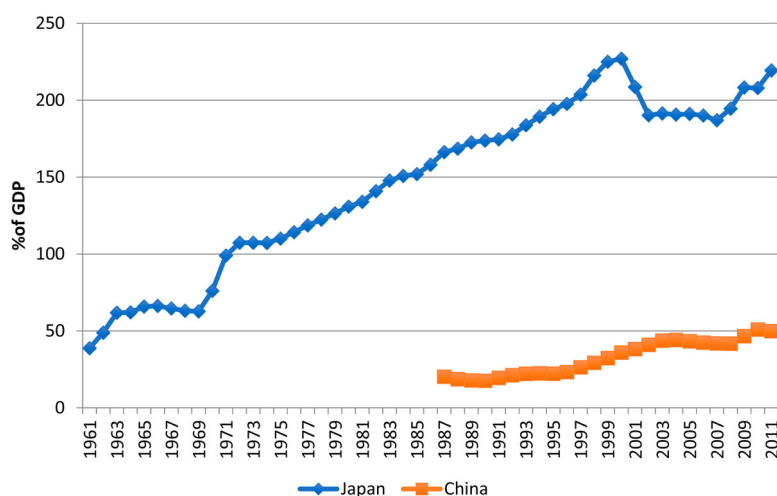


Figure 4. Bank deposits to GDP, 1961–2011. Source: World Bank, Global Financial Development Database.

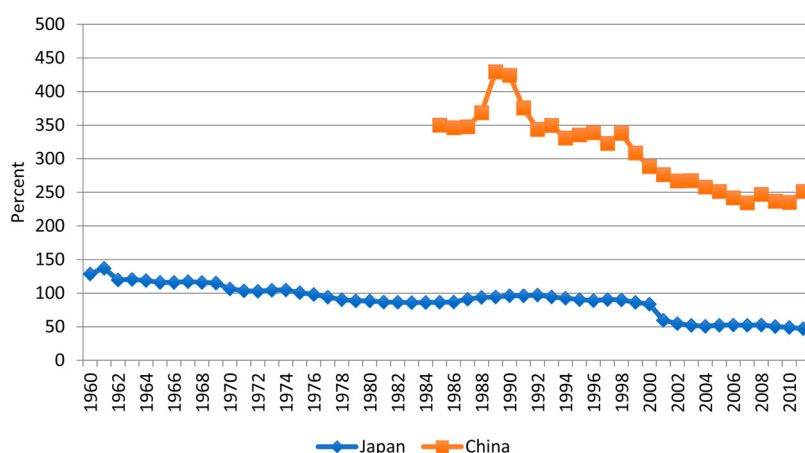


Figure 5. Bank credit to bank deposits, 1960–2011. Source: World Bank, Global Financial Development Database.

have been exposed to more competition, and banks' net interest margins and return on assets, which shows the profitability relative to total assets, declined from 2008 to 2014 (PBOC 2013).¹²

Chinese banks have coped with the profit squeeze by developing the interbank markets. They have attempted to bypass loan quota and arbitrage interest rate control by engaging more with inter-bank transactions. They have also been in compliance with the policy direction of government's financial reform: lowering bank financing while promoting direct financing through developing securities markets. Consequently, interbank markets have grown rapidly. As Figure 3 shows, the share of conventional bank loans in 'social financing' has declined over the past decade. Meanwhile, non-financial enterprises' direct financing through corporate bonds and equity financing have greatly increased, accounting for 17.5 and 17.3 per cent of the total financing aggregates in 2014, respectively (PBOC 2015: 25).

China's interbank markets have also grown much faster than Japan's did in the 1980s. In particular, the growth of bond financing has been spectacular. The outstanding balance of corporate bonds was only RMB 86 billion in 2000, but it increased to RMB 11.6 trillion in 2014, increasing more than 130 times. During the same period, the outstanding balance of treasure bonds increased from RMB 1.3 trillion to 10.7 trillion. Moreover, from the 2011 financial bonds¹³ that began to be issued and the outstanding balance, over RMB 12.5 trillion were issued in 2014 (PBOC 2015: 230, Table 19). Recently, the BIS data on credit provision (BIS n.d.) show that from 2007 to the second quarter of 2016, corporate debt grew roughly five times in dollar terms from \$3.5 trillion (97 per cent of GDP) to \$17.9 trillion (168 per cent of GDP), which is by far higher than other emerging economies and most advanced economies, and SOEs were the main borrowers that contributed to such a rapid growth of corporate debt.

Meanwhile, the global financial crisis of 2008 played a pivotal role in China's exceptional credit growth, as the Plaza Accord shock did for the Japanese economy. China's macroeconomic policy responses to the global financial crisis of 2008 were far more drastic and comprehensive than the Japanese case after the Plaza Accord. To fight against the deflationary pressures, the PBOC continuously lowered the discount rate from 10.44 per cent in the mid-1990s to 2 per cent by October 2015, although there was a temporary increase of discount rate, from 3.33 per cent to 4.14 per cent in 2008 (World Bank, GFD data). The Chinese government has pursued monetary easing policy more aggressively than the Japanese government did in the late 1980s (Ueda 2011). Moreover, the Chinese government has taken a series of fiscal stimulus measures, primarily to build more socioeconomic infrastructure; RMB 5 trillion economic stimulus packages since 2008 – RMB 4 trillion (\$586 billion) in 2008 and RMB 1 trillion (\$157 billion) in 2012 – and more fiscal stimulus measures are on the way. Consequently, China's monetary aggregates reached the similar level of the Japanese bubble

economy in the late 1980s. Specifically, in terms of the liquid liabilities to GDP ratio, China's level reached 179.4 per cent of GDP by 2013. This is the same level as Japan's in the late 1980s (see [Figure 6](#)).

The Chinese government's aggressive monetary easing policy led to a stock boom. The Chinese stock boom before 2008 was more dramatic than the Japanese case in the late 1980s. In Japan, it took about 5 years for the stock prices to increase more than three times from November of 1984, when the total share prices for all shares were only 30 per cent of the peak prices in December 1989. By contrast, it took only a year for China to increase the stock prices three times, from October 2006 to October 2007. The total traded value of stocks, turnover, and market size (capitalisation) increased greatly from the late 1990s until 2007. Since then, it has plummeted sharply and has been fluctuating until recently. Specifically, stock market capitalisation to GDP increased from 34.4 in 2002 to 125.2 in 2007; it then declined to 58.7 in 2011 (World Bank, GFD data) (see [Figure 7](#)). China's ratio of the total value of stocks traded to GDP exceeded 222 per cent in 2007, and such a high value of traded stocks is more than two times higher of Japan's ratio in the late 1980s. In short, the stock boom in China has been more dramatic and volatile than Japan's one during the Japanese bubble economy.

Rising risks from the shadow banking practices

Despite some critical similarities as noted above, the Chinese case of bubble creation also has some fundamentally different features. One of such features is that local politics is closely related to the growing 'shadow banking' practices and debt explosion. Local politics has been important in Japanese politics, but Japan has maintained a more centralised policy-making structure than in China (Curtis 1988, 1999). In China, the central-local relations have been one of the defining characteristics of its political economy (Lieberthal and Oksenberg 1988, Landry 2008). and the growing shadow banking sector has been closely related to the opaque relations between local governments, local government financing vehicles (LGFVs), and local real estate developers.

There is no clear consensus as to the definition of the shadow banking sector in general, and in the Chinese case in particular, which depends on the definition, the scope and size of the shadow banking sector varies. The Financial Stability Board (FSB) adopts an economic function approach

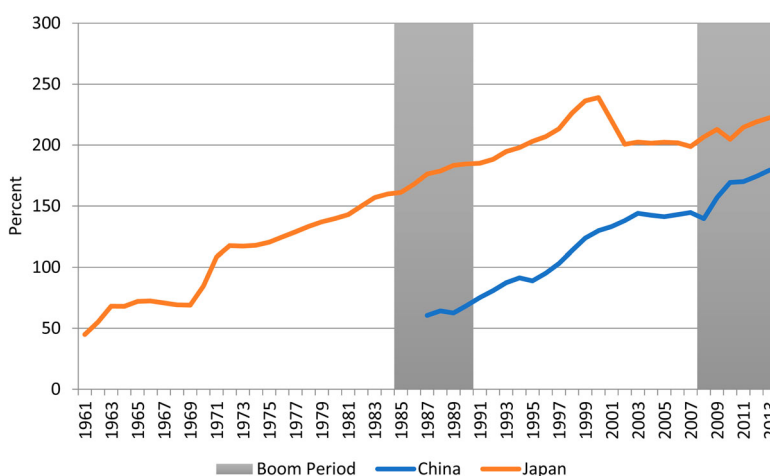


Figure 6. Liquid liabilities to GDP, 1961–2013. Source: World Bank, Global Financial Development Database.

Notes: Liquid liabilities are also known as broad money, or M3. They are the sum of currency and deposits in the central bank (M0), plus transferable deposits and electronic currency (M1), plus time and savings deposits, foreign currency transferable deposits, certificates of deposit, and securities repurchase agreements (M2), plus travellers' checks, foreign currency time deposits, commercial paper, and shares of mutual funds or market funds held by residents.

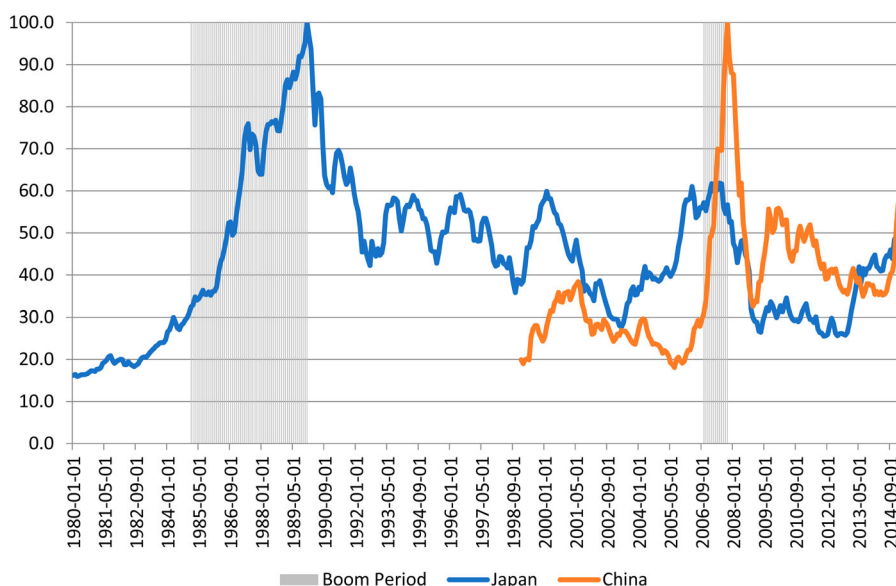


Figure 7. Total share prices for all shares for China and Japan, 1980–2015 (monthly frequency). Source: OECD (n.d.).

Notes: Japan's stock prices = 100 (in December 1989). China's stock prices = 100 (in October 2007).

and describes it broadly as 'credit intermediation involving entities and activities outside of the regular banking system' (2015: 1). By contrast, the International Monetary Fund (IMF) has suggested the noncore liabilities concept that encompass all noncore liabilities of both bank and nonbank financial institutions (Harutyunyan *et al.* 2015). Most studies of China's shadow banking systems focus on both the asset side and the liability side of nonbanking financial institutions' credit extension to the real economy (Douglas *et al.*, 2015; Li 2016). For example, the FSB's shadow banking data, which focuses more on the economic functions of different financial institutions, estimated the size of China's shadow banking industry at \$2.7 trillion in 2014, accounting for about 26 per cent of China's GDP. Meanwhile, other reports have suggested a much larger size of the shadow banking sector, ranging from \$5.19 trillion (50 per cent of GDP) to \$8.3 trillion (79 per cent of GDP) (FSB n.d.), including both the liability side and the asset size of nonbanks (Li 2016: Table 1). Overall, it looks true that China's shadow banking sector remains relatively smaller than that of other advanced economies where financial derivatives markets are much developed.

What matters, however, is not the size but the speed of the increase of the shadow banking industry. The relative size of the shadow banking sector has been sharply on the rise in China. For example, according to the FSB's shadow banking data, the asset size of banks increased 8.5 times from \$3.3 trillion in 2003 to \$ 28.1 trillion in 2014. During the same period, the asset size of nonbank financial intermediaries¹⁴ increased almost 350 times from \$8.6 billion to \$3.0 trillion. As with other advanced economies, the asset size of nonbank financial institutions decreased in 2008, but it quickly rebounded (FSB 2015). Moreover, non-bank lending grew two times faster than bank lending recently. It grew by 36 per cent per year from 2007 to 2014, while bank lending increased by 18 per cent (Dobbs *et al.* 2015: 85).

Another important aspect is that the growing shadow banking sector is closely interconnected with banks' growing off-balance sheet activities. The sharp expansion of wealth management products (WMPs) highlights this trend. WMPs are sold by banks and trust and securities companies to retail customers, and they provide loans primarily to property developers, such as money market instruments. Banks are not only issuers but also buyers of WMPs. These loans are typically for one to three years, while they target higher returns than banks' deposit interest rates. This practice

creates maturity mismatch risks (Dobbs *et al.* 2015: 85). Moreover, WMPs are often directed towards those activities, which are explicitly banned by the Chinese government, aiming to bypass the financial supervision. It is difficult to estimate how those illegal or banned activities are interconnected with regulated financial sectors, owing to the opaque nature of financial transactions. However, according to one estimation, assets in WMPs have grown 86 per cent per year since 2007, totalling \$1.7 trillion and accounting for about 20 per cent of total non-bank lending in the second quarter of 2014 (Dobbs *et al.* 2015: 85). The most recent data provided by the BIS suggest that as of end-June 2016, WMPs issued by banks totalled RMB 26.3 trillion, almost 40 per cent of 2015 GDP (BIS 2017: 11).

The rapidly growing entrusted and trust loans are such examples.¹⁵ Entrusted loans are usually made by large companies to smaller companies by borrowing money at lower interest rates and lending it at higher interest rates. These entrusted loans have grown sharply. As Table 2 shows, from 2012 to 2016, entrusted loans grew annually more than RMB 2 trillion, and the outstanding loans reached RMB 13.2 trillion by the end of 2016. Meanwhile, trust loans are usually used for loans to corporate borrowers in sectors such as real estate, infrastructure, and mining, and they usually promise returns of 10–15 per cent and typically require investors to commit their funds for two- or three-year periods. Trust loans were rather in decline, but they still grew annually about RMB 1 trillion, reaching RMB 6.3 trillion by the end of 2016.

Chinese banks have tried to keep WMPs off their balance sheets, and for this purpose, they often turn to securities firms to manage the funds collected through WMPs. According to a BIS analysis, as of June 2016, about 40 per cent of the aggregate WMP portfolios were invested in the bond market (BIS 2017: Graph B, right-hand panel). Securities firms often try to leverage their bond investments in order to enhance capital returns by using repurchase agreements through informal verbal agreements between market players (BIS 2017: 11). Consequently, the corporate bonds market has grown, while it has been increasingly interconnected with banks' off-balance sheet activities. For example, as Table 2 shows, net financing through corporate bonds has increased annually more than RMB 2 trillion from 2012 to 2016, and its outstanding amount reached about RMB 18 trillion by the end of 2016. Meanwhile, Chinese banks have often used bankers' acceptance notes¹⁶ to hide their off-balance sheet lending or in order to avoid breaching loan-to-deposit ratios or other lending restrictions, as well. The Chinese government has tried to crack-down on these off-balance sheet practices; for example, the outstanding amount bankers' acceptance notes has been in decline from 2014, as Table 2 shows. This trend highlights that the financial regulatory framework should be more properly institutionalised to account for the inter-connected nature of the financial system.

A systemic crisis, however, may occur by the so-called 'rigid redemption', which refers to 'the situation when wealth management products may default or fail to deliver targeted interest payment' (PBOC 2014: 155). If it occurs, commercial banks, trust companies and insurance companies need pay off the principal and interests to the investors in order to maintain their own reputation. In other words, investors for WMPs seek high yields, but they do not want to take the responsibility when things go wrong and when financial institutions try to sell more WMPs, promising high yields and neglecting their due diligence of risk management. Furthermore, some of these institutions have violated regulatory rules and have gotten involved in illegal lending and fundraising, triggering risk events in some areas.¹⁷

What makes the situation worrisome is that growing funding to the real estate sector through shadow banking vehicles is closely interconnected with local politics, especially with local government debt (Liang 2016, Sheng and Soon 2016, Wei 2016). China's local governments have used LGFVs to fund infrastructure, social housing, and other projects, thus inflating property prices. Local governments' benefits, gained from booming real estate or construction industry, correspond with the incentives of Chinese investors who are eager for finding higher-yield investment products through various nonbank financial intermediaries. From the perspective of local governments, providing more loans to property developers and construction-related companies through LGFVs is a very tempting policy option to improve local governments' fiscal revenue and debt repayment

capability (Dobbs *et al.* 2015: 78). Consequently, the debt of LGFVs has skyrocketed. According to an audit report on local government finances, LGFVs owe about \$1.7 trillion of debt by the second quarter of 2014, which sharply increased by 27 per cent per year from \$600 billion in 2007. Local governments have used more than 20 per cent of recent loans to pay older debts, and they have funded the money for almost 40 per cent of debt servicing and repayments by land sales (Dobbs *et al.* 2015: 83).

In particular, both the central and local governments have used SOEs as a conduit for policy-driven investment to mitigate the growth slowdown since the global financial crisis of 2008 (Batson 2016, Lam and Schipke 2016). Consequently, China's corporate debt has been on the sharp rise. For example, the outstanding amount domestic corporate bonds increased more than 22 times in 9 years, from \$108.8 billion in December 2007 to \$2.4 trillion in March 2016 (FRED database). Standard measures of credit in China classify credit extended to LGFVs as credit to the corporate sector. Many LGFVs perform fiscal functions, and a sizeable part of this credit should be classified as public debt (Maliszewski *et al.* 2016: footnote 2). Indeed, a significant part of corporate borrowing in reality should be financed by local governments' off-budget fiscal spending. LGFVs have provided loans to SOEs for financing infrastructure projects and local governments that have guaranteed repayments (Maliszewski *et al.* 2016).¹⁸ Indeed, mounting corporate debt overhang has posed potential systemic risks and spillovers to other economic sectors.

This interconnectedness, however, makes conventional interest rate policy less effective. The PBOC has attempted to create a market-based benchmark interest rate system, and the Shanghai Interbank Borrowing Rate (Shibor)¹⁹ has been gradually established. However, when the PBOC increased the Shibor rates frequently to curb excessive credit growth, such increases do not have any real impacts in checking the money supply, as Figure 8 shows. The money supply (M2) has been more than tripled in less than 8 years, from RMB 50.7 trillion in February of 2009 and to RMB 155.0 trillion by December of 2016. This ineffectiveness of the conventional interest rate measure

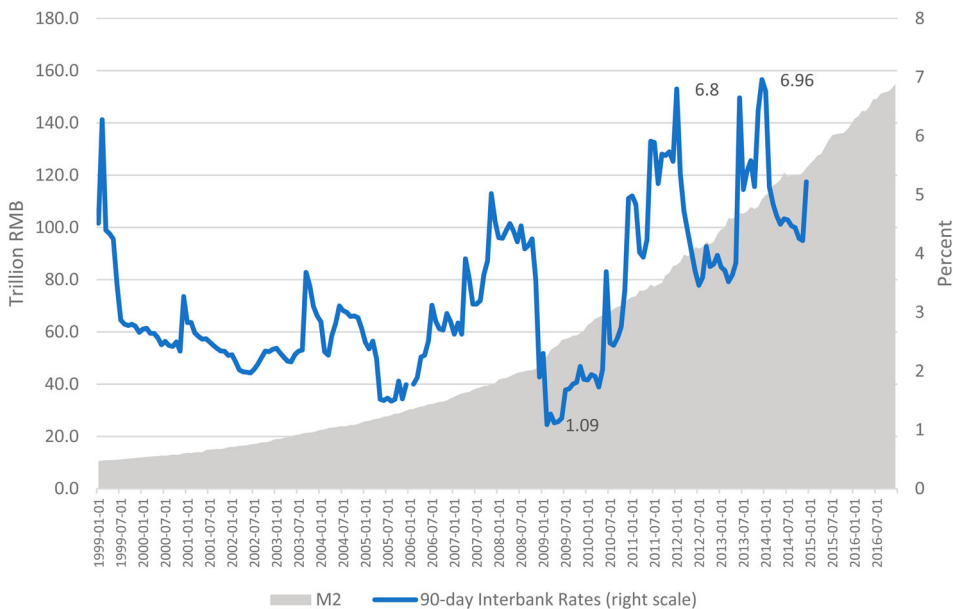


Figure 8. M2 and 90-day interbank rates (monthly, 1999–2016). Source: M2 from the International Monetary Fund (International Financial Statistics) and the interbank rates from OECD (n.d.).

Note: M2 comprises M1 plus time and savings deposits in national currency of resident non-bank financial corporations and non-bank non-government sectors with the PBOC and banking institutions.

highlights the fact that more direct controlling measures against the increasing money supply may be necessary to check the credit bubbles.

Just as officials at the MOF in Japan have perceived the rising asset prices positively in the 1980s, because rising prices have contributed to increasing tax revenues, it appears that officials of Chinese local governments see inflating property prices as a positive indicator for increasing fiscal revenue by selling land use rights at higher prices.²⁰ Likewise, as financial supervision has not been a priority in Japanese economic policy-making, it is not a priority for Chinese local governments to strengthen financial supervision or curbing the inflating property markets. Macro-prudential supervision and the regulation framework has not been properly strengthened yet, thus posing great systemic risks to the entire financial system. However, it is clear that we cannot foresee the looming bubbles in the real estate sector correctly without considering the common interests, shared between local governments and their financing vehicles, and the opaque credit intermediation between the banking and the non-banking sector (Maliszewski *et al.* 2016).

Rising risks from capital account liberalisation

The Japanese economy accumulated huge foreign exchange reserves during its high economic growth period and became the number one creditor country in 1985. Such a huge amount of foreign exchange reserves, resulting from chronic trade surpluses, contributed to building confidence among Japanese economic policy-makers that the Japanese economy can properly cope with the currency appreciation agreed at the Plaza Meeting. The Japanese government tried to liberalise its capital account gradually after it became a member country of the Organisation for Economic Cooperation and Development (OECD) in 1964. However, Japan did not have to open its domestic markets for inward foreign direct investment until 1984, and it did not fully liberalise the short-term cross-border capital flows until 1989, when the OECD changed the Code of Liberalisation of capital movements (Encarnation and Mason 1990).

However, China has faced a far more volatile and fluid foreign exchange market than Japan faced in the 1980s. According to the Triennial Central Bank Survey of April of 2016 by the BIS, the volume of global foreign exchange markets daily turnover increased from \$1.2 trillion in 1998 to \$5.1 trillion in 2013 (BIS 2016: 5). This kind of foreign exchange environment is radically different from the situation when Japan agreed to the Plaza Accord and stopped the yen-dollar peg. The yen was pegged to the US dollar, as China's yuan is today, but the yen-dollar peg was not an outlier case in the 1970s and 1980s. Cross-border capital flows were also limited during the period. China has nevertheless been pressured for more swift capital account liberalisation since its entry to the WTO.

Capital account liberalisation has been a double-edged issue for the Chinese government. On the one hand, capital account liberalisation is a necessary course of action to internationalise the yuan. The Chinese government has accumulated tremendous amount of foreign exchange reserves, reaching \$4 trillion in early 2014. However, as the yuan is not fully internationalised, China's export-driven growth has also deepened its dependence on the US dollars often referred to as the 'dollar trap' (Prasad 2014), and this dependence has challenged the effectiveness of its monetary policies, providing both deflationary and inflationary pressures to the economy (Reade and Volz 2013). Therefore, China needs to make efforts to internationalise the yuan and capital account liberalisation as a necessary step to be implemented.

Rash liberalisation, however, can pose systemic risks to the whole economy. As various historical cases highlight (Eichengreen 2002, 2004), capital account liberalisation works effectively when capital markets are well developed. Chinese policy-makers seem to be well aware of this peril, as they have learned from those cases of financial crises in South Korea, Mexico, and other emerging economies. Most of them experienced financial crises shortly after they opened their financial markets and liberalised capital account. Indeed, Mexico and South Korea adopted the capital account liberalisation as their prerequisite to be a member of OECD in 1994 and 1996, respectively, and they experienced financial crises. Consequently, the National Development and Reform Commission and other

branches of government have been hesitant to move ahead with financial market reform and capital account liberalisation (Volz 2014). Nonetheless, it is always challenging to find an optimal balance between the speed and sequence of capital account liberalisation.

The Chinese government adopted a managed floating foreign exchange rate system in 2005 and has gradually deregulated the foreign exchange markets. Over the past few years, it has taken measures to internationalise the yuan. It introduced a yuan-denominated offshore clearinghouse in Hong Kong in 2007 and in Singapore in 2012 while also allowing yuan-denominated bond markets in Hong Kong ('dim sum bonds'). China also expanded yuan-denominated bond issues by non-residents in China ('panda bonds') in 2010. The PBOC tried to expand the settlement of all types of cross-border trade by using the yuan (Prasad and Ye 2013, Roache and Maziad 2013). Consequently, the volume of the yuan settlement of cross-border trade and investments has increased greatly, and the number of yuan accounts opened at the domestic banks by foreign institutions has also increased (PBOC 2013). Indeed, one of the most spectacular changes in China's flow of funds over the past few decade has been the growing significance of foreign exchange (Kawai and Eichengreen 2015).

With the growing volume of cross-border capital flows, however, the yuan-to-US dollar exchange rate has fluctuated to a greater degree, and the volume of cross-border capital flows has fluctuated accordingly. However, in 2016, China's foreign exchange reserves dropped below \$3 trillion, to the growing capital outflow. Moreover, a growing number of non-financial institutions in China have borrowed dollar loans from low interest rates offshore markets and converted the loans into yuan, either disguised as a foreign direct investment or export revenue, for lending at a high interest rate, primarily to those land developers or construction companies. This kind of carry trade, associated with the shadow banking sector, has posed serious systemic risks on the Chinese financial system, as capital flight can be accelerated with further capital account liberalisation (Kawai and Eichengreen 2015).

China's capital and financial account balance has fluctuated more sharply, in response to the change in the yuan-dollar exchange rate. The fluctuation in the cross-border capital flow has affected the growing scope of the floating exchange rate (see Figure 9). Consequently, increasingly volatile cross-border capital flows can magnify the financial vulnerability of those financial and non-financial institutions engaged in carry trade, as they are exposed to the double mismatch, both the currency and the maturity mismatch (He and McCauley 2013, Roache and Maziad 2013). Without proper pre-emptive supervisory measures, the growing carry trade can cause a chain of bankruptcies, posing potentially systemic risks to the entire financial system, thereby triggering the bursting of the asset and credit bubble. It may be much more prudent to slow down the speed of capital account liberalisation while putting a policy priority on developing much deeper and broader domestic capital markets, despite the growing external pressures for currency appreciation and giving up the yuan-dollar peg (McCauley 2011, Gao 2012, Yu 2012).

Conclusion

As in Japan in the 1980s, China has been exposed to growing normative and political pressures, not only for correcting its external and domestic economic imbalances, but also for complying with the global economic standards, norms, and rules. Responding to such growing pressures, the Chinese government has also tried to liberalise its financial system, as the Japanese government did in the 1980s. China's financial liberalisation process shows a similar pattern that we could observe from the Japanese experience in the 1980s. As with the Japanese government, the Chinese government did not tackle the lack of real demand for additional capital and pushed the 'catch-all' liberalisation in three sectors: the banking sector, securities markets, and foreign exchange. A series of efforts to diversify the credit channel to the economy resulted in creating an oversupply of credit to the economy. Moreover, as with the Japanese case, such liberalisation efforts have been driven primarily by normative and political pressures to rebalance the domestic and external imbalances incurred by

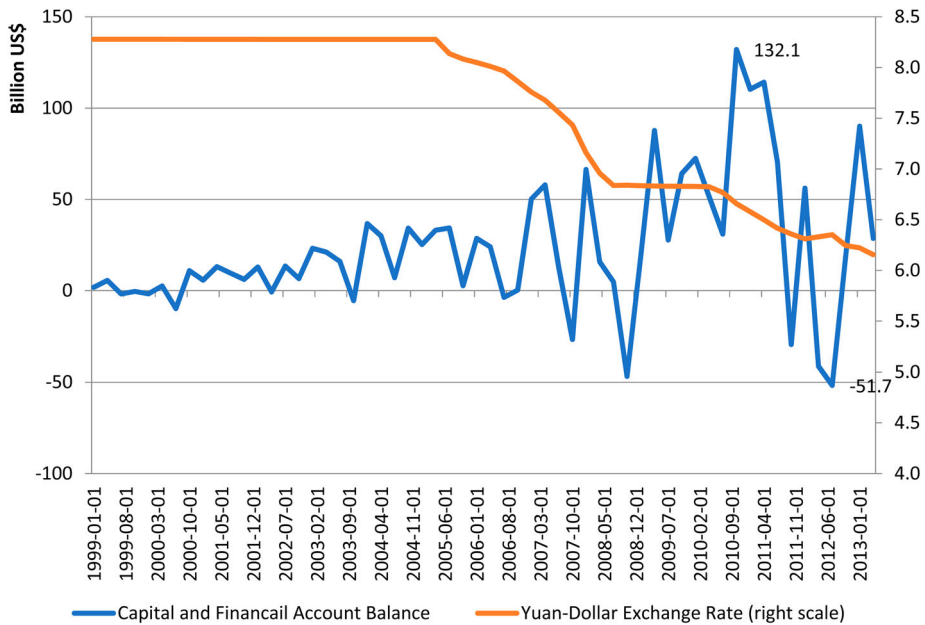


Figure 9. Yuan-dollar rate and capital-financial account balance, 1999–2013. Source: Board of Governors of the Federal Reserve System and OECD (n.d.).

WTO entry. Credit expansion was already underway in the early 2000s, and it exploded with the growing securities markets through interbank transactions, especially in the course of coping with deflationary pressures, posed by the external economic shock of the global financial crisis in 2008. Overall, China's recent credit expansion since 2007 has been much faster than the credit expansion during the bubble economy in Japan.

Both cases suggest that proper sequencing and pace is critical for successful financial liberalisation, especially when a financially depressed economy attempts to liberalise its financial system. The bubble creation pattern in both cases shows that a real focus on financial liberalisation should be placed on the demand side of the real economy. In the course of financial liberalisation, the true problem in both cases is not on a lack of available funding for investments but on the lack of demand from real economic sectors, as revealed by ever-growing deposits to the banking sector. However, both governments place an emphasis on diversifying the credit channel from bank financing to non-bank financing while not paying sufficient attention to tackling the lagging demand. In particular, policy-makers of the time in Japan expected that the speedy shift of the credit channel from bank financing to non-bank financing would induce corresponding demand for productive investments, thus ultimately creating a more innovative economic system. However, such efforts merely transferred growing bank deposits into more speculative and opaque sectors, thus creating asset bubbles. The result, in Japan, probably unintended, was thus that when a financially repressed economy attempts to liberalise its financial system, the government should have taken a more prudent approach in resolving the perils of excessive savings or the lack of real demand from the economy.

Another lesson was that institutionalising a macro-prudential financial supervisory system is critical for the successful management of systemic risks, embedded in the growing interconnectedness between the banking and the non-banking sectors. The Japanese government tried to liberalise the financial system, targeting the banking sector first and then channelling bank deposits to securities markets, while simultaneously deregulating foreign exchange. However, such a 'catch-all' approach did not go hand in hand with institutionalising a macro-prudential financial supervisory mechanism.

During the bubble economy period, there was no mechanism for coordinating oversights, which could monitor the systemic risks embedded in the growing interconnectedness between the banking and the non-banking sectors. China has followed a similar path. In China, financial regulatory and supervisory functions remain segmented by different authorities – the China Banking Regulatory Commission, the China Insurance Regulatory Commission, the China Securities Regulatory Commission, and the PBOC, the State Administration of Foreign Exchange, and others (Elliott and Yan 2013, Huang *et al.* 2013).²¹

Both cases highlight that a real risk of financial liberalisation lies in the complacent confidence that their political economy system is essentially different from other cases. During the bubble economy in the late 1980s, Japanese policy-makers projected that Japan's financial system could be engineered successfully, as Japan did in building the competitiveness of the manufacturing sector. Japan's compliance to the abrupt appreciation of the yen and the adoption of a free-floating exchange rate system at the Plaza Accord in 1985 and the Basel Accord in 1987 reflects Japanese policy-makers' overconfidence at the time. Japanese policy-makers appear to have believed that the Japanese style of stakeholder capitalism could overtake the US style of shareholder capitalism, even under the same rules of the financial game. Such overconfidence led to the rush of financial liberalisation without a fine tuning of the pace and sequence of financial liberalisation with an amplification of the complacent anchoring bias that 'Japan is different'. It appears that both Chinese political elite and common people share this complacent confidence that 'China is different'. Both the elite and public at large of China strongly seem to aspire to be a hegemonic power, driven to overtake the United States. The stronger the desire, the more aggressive the measures to internationalise the yuan, as to overcome the dollar trap' that is often regarded as an essential element of becoming a hegemonic power. In this context, the Chinese government has taken a series of aggressive measures to internationalise the yuan, including the speedy capital account liberalisation. Consequently, the yuan has been approved to be one of five basket currencies in the IMF from October of 2016. However, the recent capital flight from China, reflected in the decreasing foreign exchange reserves, signals that a real risk lies in such political measures to become the number one economy by internationalising the yuan too soon.

China has a long history of financial repression, and a such situation has created a 'too secure to fail' syndrome in which SOEs, SOCBs, non-banks, and private investors expect that the government will bail them out in the event of a crisis. China's financial liberalisation over the past decade has introduced financial products and instruments with varying yields, and more funds have been channelled into high yielding sectors and products, such as real estate and foreign exchange, which are often highly speculative and opaque. The recent sharp rise of financial intermediation through the shadow banking sector, associated with carry trade, is such an example. The potential systemic risks that the current credit and asset boom pose to the Chinese economy may be much more severe than the 'China-is-different view' estimates, not only because of repressed information, but also because of the interconnectedness of all different financial sectors, which are not properly captured by conventional sectoral analyses. Therefore, already ever-growing opaque and speculative shadow banking practices associated with carry trade will become more rampant, if the Chinese government fully liberalises cross-border financial transactions with an aim of internationalising the yuan as quickly as possible.

Notes

1. Basel III introduced a countercyclical capital buffer concept to measure the systemic financial vulnerabilities and uses the gap between the credit-to-GDP and its long-term trend as a primary indicator for the countercyclical capital buffers. However, its reliability as a proper indicator to predict the systemic financial vulnerabilities has been criticised (Edge and Meisenzahl 2011), and the Bank for International Settlement has tried to defend the usefulness of using the credit gap. For more details, see Drehmann and Tsatsaronis (2014).
2. It was about 25 per cent, while credit gaps above 10 per cent is often regarded as the benchmark for risk credit booms.

3. Major western journals, such as *The Wall Street Journal*, *The Financial Times*, and *The Economist*, have repeatedly reported on the systemic risks of China's asset bubble, although, their diagnoses and prescriptions have been different. It appears that more reports have been inclined to emphasise the impending systemic risks of China's asset and credit bubbles.
4. The phrase was borrowed from Runciman's book (2015). In reviewing the history of democracy in crises, he highlights the formation of the sense of complacency as a primary factor that leads to a failure of democracy. This paper also highlights the danger of growing sense of complacency shared among policy-makers in the course of financial liberalisation.
5. In the 1990s, the share of non-performing loans provided to these three sectors exceeded more than over half of the total outstanding non-performing loans in the Japanese banking sector (Cabinet Office, 2001, 2002).
6. The bubble economy essentially ended in 1990, with the plummet of the stock markets, but it was not until January 29, 1993, that a Japanese prime minister acknowledged that the 'Bubble Economy' had collapsed.
7. The ratio of long-term deposits increased over 70 per cent in the 1990s, even after the collapse of the bubble economy.
8. Six largest groups were those affiliated with the top six 'city' banks: Mitsui, Mitsubishi, Sumitomo, Dai-ichi Kangyo, Sanwa, and Fuji Banks.
9. This is calculated as GDP minus final consumption expenditure of household sector, private corporate sector and public sector.
10. The PBOC introduced the category of 'shares and other investment' in the annual social financing statistics, so the data from the previous year are not available. However, we can still understand the overall funding trend.
11. The World Bank's World Development Indicators database defines that

fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and work in progress.
12. The return on assets increased from 0.46 in 2005 to 1.02 in 2006 and then again to 1.27 in 2007. It declined to 0.76 in 2011 (World Bank, GFD database).
13. Bonds issued by financial institutions, including financial bonds issued by China Development Bank, policy financial bonds, common bonds, subordinated bonds and hybrid bonds issued by commercial banks, asset-backed securities, bonds and short-term financing bills issued by securities companies, and financial bonds issued by asset management companies.
14. The FSB uses the category 'other financial intermediaries', distinguished from banks, insurance companies, and pension funds.
15. A trust company invests client funds according to a pre-specified objective, purpose, amount, maturity, and interest rate. Entrust loans are similar to trust loans, except that the fund usage is specified by the trustor.
16. These bills are notes from a firm instructing a bank to pay a specific sum to a third-party payee on a particular date. However, if the payee needs the money earlier, it can cash the bill early for a discount – either at the same bank or a different one.
17. For instance, Zhejiang Xingrun Real Estate Co., a real estate developer with 3.5 billion yuan (\$566.6 million) of debt, collapsed in March of 2014. Their debt is related to 15 banks, including the China Construction Bank (Bloomberg News, 17 March 2014).
18. The 2015 budget law allows all provincial governments to issue local government bonds, subject to approval by the National People's Congress. Borrowing must now also be included in the local fiscal budget, which must now be elaborated in the context of a medium fiscal plan repayments (Maliszewski *et al.* 2016).
19. Shibor was introduced in January 2007 to address problems with the China interbank offered rate (Chibor) and uses the same calculation method as the London interbank offered rate (Libor).
20. Chinese governments do not sell land. Instead, they sell land use rights. This practice enables governments not to lose their land ownership and to re-sell the land use rights on multiple occasions.
21. In late 2015, Central Committee of the Communist Party of China made a long-overdue announcement that it would strengthen the coordination of financial supervision during the 13th Five-Year Plan (2016–2020) period. However, it is yet to be seen whether it will be implemented successfully as planned and whether it can detect hidden systemic financial risks.

Acknowledgements

I am deeply thankful to Steven K. Vogel and Hong Yung Lee for their insightful comments and guidance at an early stage of this research and to those anonymous reviewers for their invaluable comments for revision.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This work was supported by Research Foundation of The City University of New York [69273-00 47].

Notes on contributor

Myung-koo Kang teach political economy and Asian affairs at Baruch College, City University of New York, from the fall of 2012. Before joining Baruch College, I taught at Claremont McKenna College from 2008 to 2012. I conducted my research on Japan's banking problem by being affiliated to the Ministry of Finance, Japan, from 2003 to 2004, and research on the diffusion of Western modern financial system to Imperial Japan and then to colonial Korea by being affiliated to the Institute for Advanced Study (Princeton, New Jersey) as a visitor from January to August of 2011.

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