CHINA SHADOW BANKING AND THE REAL ESTATE MARKET CBRE GLOBAL RESEARCH AND CONSULTING





Contents

- 3 Executive summary
- 4 Introduction
- 5 Rapid proliferation of shadow banking
- 7 Why is the shadow banking system growing so rapidly?
- 10 Real estate shadow lending
- 14 Opportunities for investors
- 15 Conclusion

CHINA SHADOW BANKING

AND THE REAL ESTATE MARKET



The China shadow banking sector is estimated to account for as much as **US\$3.5-5 trillion**, equivalent to **26%-55%** of the country's GDP. However, the exact size is difficult to calculate.

The growth rate in China substantially outpaced the global average...

The sector expanded by

4200 in 2012 glone

CONCERNS OVER REAL ESTATE SECTOR EXPOSURE TO NON-BANK LENDING



Small and medium developers currently have limited access to bank financing and are therefore more reliant on shadow banking



Large developers can still borrow from banks and access overseas capital markets



The government is unlikely to tolerate a market-wide collapse

OPPORTUNITIES FOR LENDERS AND INVESTORS



Foreign lenders: Provide recourse loans to overseas listed developers



Large developers: Prepare for refinancing and market consolidation



Investment funds: Engage in structured deals with debt components to enhance risk adjusted returns

CBRE GLOBAL RESEARCH AND CONSULTING

This report was prepared by CBRE Asia Pacific Research Team, which forms part of CBRE Global Research and Consulting—a network of preeminent researchers and consultants who collaborate to provide real estate market research, econometric forecastina and consulting solutions to real estate.



Introduction

In recent years domestic banks in China have turned more cautious towards lending to the real estate sector and bank loans have become increasingly difficult to obtain. As a result, more developers are seeking alternative sources of financing to fund their growth and expansion. One option is to raise debt through the shadow banking market.

The shadow banking system in China encompasses a collection of non-bank financial intermediaries which provide services similar to commercial banks but are not subject to the banking regulations. There are a wide range of intermediaries including underground banks, microcredit companies, off-balance sheet loans for domestic banks, private equity funds and trust products.

This system is not unique to China - the largest shadow banking markets are the United States and United Kingdom – but it is expanding at a tremendous rate, growing by 42% in 2012 alone. The size of the shadow banking sector in China is estimated by various institutions to range from US\$3.5-5 trillion, accounting for as much as 26% to 55% of the country's GDP. However, calculating its exact size is not easy, especially in areas where there is a lack of an established legal framework to regulate activity.

Chart 1: Size of the debt market in China

RMB 80 Trillion Public Debt Private Debt RMB 26.9 Trillion RMB 101-110 Trillion **US\$4.4 Trillion** US\$17-18 Trillion RMB 21-30 Trillion US\$3.5-5 Trillion **RMB 18.4 Trillion US\$3 Trillion RMB 8.5 Trillion US\$1.4 Trillion** GOVERNMENT BOND SHADOW BANKING BANK LENDING

Source: CBRE Research, Asian Bonds Online, PBOC, Moody's, S&P, Fitch, Q4 2013.

Note: Government bonds include obligations of the central government, local governments, the central bank, and state-owned entities.

CORPORATE BOND

Due to the recent slowdown in the residential market, defaults are starting to emerge. Xingrun Real Estate in Zhengjiang, Zhejiang has been the most high-profile victim to date, leaving a total of RMB 3.5 billion of unpaid debt. These recent events have prompted talk of:

- whether there will be more default cases?
- how these will impact the overall real estate market?
- whether they will have a knock-on effect on the already slowing economy in China?

This paper will examine these issues and discuss the implications for the China real estate market.

¹ Global Shadow Banking Monitoring Report 2013, Financial Stability Board

Rapid proliferation of shadow banking

The trend for non-bank financial intermediaries to enter the lending business is a global one and not confined to China. The Financial Stability Board of the Bank for International Settlement (BIS) estimates that the overall size of non-bank financial intermediation was equivalent to 117% of global GDP in 2012, a much higher percentage than in China. However, the sector expanded by 42% in China in 2012 alone, substantially outpacing the global average of 8.1%.

In developed markets, the major non-bank intermediaries such as insurance firms and investment banks are regulated. However, those intermediaries in China are less transparent and not as strictly regulated. There is also less protection for junior lenders - particularly when a default occurs - as China's Bankruptcy Law is rarely used. Borrowers seldom work out problems under Bankruptcy Law and there are few judges and lawyers specialising in the field.

The China shadow banking sector can roughly be divided into three components: trust market, offbalance loans largely packaged as wealth management products (WMPs); and a range of financial institutions such as underground banks, microcredit companies, internet credit, private lending and private funds. In general, lending rates in the non-bank sector tend to be higher and terms tend to be shorter.

Table 1: Major components of the China shadow banking sector

Components	Characteristics
Trust investment products	 Size: RMB 10.9 trillion in 2013* Can be a collective trust with a maximum of 200 holders or a single unit trust entrusted to banks for distribution Regulated under the Trust Law and supervised by the China Banking Regulatory Commission (CBRC)
Wealth management products	 Structured investment products with a wide range of underlying assets distributed via commercial banks Can be securitised trust loans as a major type of off-balance sheet loan
Private lending	 Includes a range of lending institutions such as underground banks, microcredit companies, internet credit, private lending and private funds

Source: CBRE Research, Q2 2014.

The most regulated component of the China shadow banking system is the trust market which is bound by the Trust Law and supervised by the China Banking Regulatory Commission (CBRC). China's trust sector has expanded almost 10 times over in the past five years from RMB 1.24 trillion in 2008 to RMB 10.9 trillion in 2013, bypassing the asset size of the insurance sector. The trust sector now accounts for about 20% of China's GDP.

Trust products can be sold directly to individual investors as collective investment products but are subject to a maximum limit of 200 holders. Alternatively, a trust company can design a trust plan according to a commercial bank's specifications. The commercial bank then raises funds under its brand, packaged as "wealth management products" (WMPs) for retail investors, and funnels the capital to the counterpart in the form of trust loans. By doing so, the loans will not be added to the official loan quota on the bank's balance sheet. WMPs are therefore a major type of off-balance sheet loan. This relates to the point that products are starting to overlap and are involving more complex structures.

The section of the paper below makes reference to trust and WMP products as they have higher transparency due to the fact that they are more regulated. However, the problems with these products can also apply to other non-bank sectors.

Trust 10 RMB trillion Insurance Mutual fund 2007 2008 2009 2010 2011 2012 2013

Chart 2: Total assets under management of the financial sectors in China (excluding banks)

Source: CBRE Research, PBOC, CBRC, CSRC, CIRC, China Trustee Association, Asset Management Association of China, McKinsey, Q4 2013

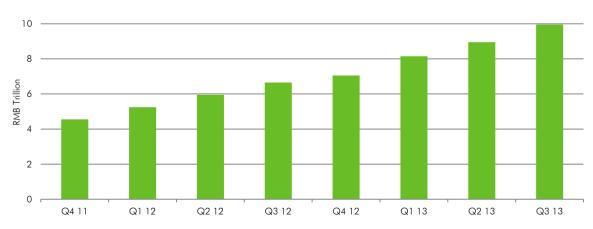


Chart 3: Outstanding wealth management products through domestic banks

Source: CBRE Research, Bank of America Merrill Lynch, Q3 2013.

Why is the shadow banking system growing so rapidly?

Filling the gap in the traditional banking industry

Small and Medium-sized Enterprises (SMEs) have long been the backbone of China's domestic economy, contributing up to 60% of national GDP. However, domestic banks are highly reluctant to lend to these companies, which also include small developers. Traditionally, SMEs are perceived to have a high risk profile as there is a lack of a comprehensive credit assessment system and a poor credit underwriting system to identify the better companies or to help set the pricing of loans to SMEs².

Consequently, over 90% of SMEs are reportedly unable to obtain loans from domestic banks whilst 62% can only rely on private loans, according to a survey conducted by the China Federation of Industry & Commerce in 2012. Under these circumstances, the shadow banking system has emerged to meet borrowing demand from SMEs.

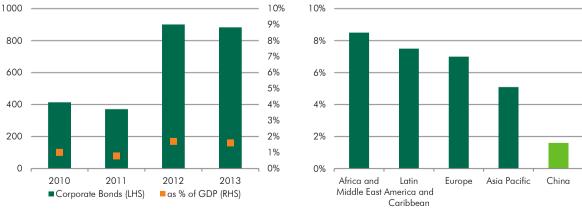
Immature capital markets

China's corporate bond and stock markets are still at an initial stage of development. The country's corporate bond market is primarily comprised of the interbank market and exchange-traded market, both of which have limited trading volume. Corporate bonds are subject to interest rate restrictions, with yields not permitted to exceed 140% of the bank deposit rates of the respective loan terms. Therefore, the size of the bond market is only 1.6% of China's GDP compared to 5.1% in Asia Pacific and 7% in Europe. The debt market in China is largely focused on commercial bank lending where interest rate levels are yet to be liberalised.

Although China GDP growth is one of the fastest globally, the performance of its domestic equity market has been one of the worst - if not the worst - over the past two decades. This is making it difficult for listed companies to raise capital through follow-on issues. In addition, the Chinese government occasionally halts IPO activity in the A-share market.

Chart 4: Size of China corporate bond market

Chart 5: Corporate bond market as a % of GDP (at the end of 2013)



Source: CBRE Research, People's Bank of China, Bank for International Settlements, Q4 2013.

² Companies defined as having annual sales below RMB 2 billion or total assets below RMB 100 million.

Over the past 20 years China has halted IPO activity a total of eight times, with the most recent suspension occurring from November 2012 to the end of 2013. However, since the lifting of these restrictions at the end of 2013, none of the 682 companies applying for an IPO has obtained official approval. Whilst overseas-listed developers (mainly in Hong Kong) have still been able to raise additional equity and debt to fund their projects in China, it continues to be extremely challenging for SMEs to do so.

Excess liquidity looking for a home

China's economy grew at a CAGR of 9.8% between 2000 and 2013. However, its M2 (an indicator of broad monetary supply) grew at a CAGR of 17.7% during the same period, far outpacing GDP growth. The increased money supply floating in the economy is pushing investors to aggressively search for investment products. Restrictions on the movement of capital prevent a lot of this money from aging abroad and therefore there needs to be a domestic channel for it to flow into.

There are limited investment channels as the bond and equity markets are underdeveloped and volatile. Property investment is also now subject to far stronger restrictions. Liquidity is therefore being pushed to other channels such as shadow banking and offshore investments.

Implementation of RMB Real GDP arowth 4 trillion stimulus plan by the Central Government 25% 20% 10% 5% 2013

Chart 6: Real GDP and M2 growth

Source: CBRE Research, People's Bank of China, National Bureau of Statistics China, Q4 2013



The returns offered by trust products are far more attractive compared to the domestic stock market. However, such high margin lending is for borrowers with varied loan servicing capability. Risks attached to high margin lending should not be overlooked.

Shadow loans: high margin lending

Trust loan or wealth management products are securitised products packaged from shadow lending. Generally speaking, trust loans or WMPs can offer up to 7% or higher returns to investors. This is a lot more attractive compared to bank deposit rates, which range from 2.6% for 3 month to 4.8% for 5 year deposits, or government bonds which yield at 3.5-3.8%. The returns look far more attractive compared to the domestic stock market which has been notoriously volatile and has never recovered from the 2008 collapse. The Shanghai stock index recorded a loss of 6.7% in 2013.

As WMPs are distributed via commercial banks, it gives the impression that these products are low risk and backed by banks to backstop any potential loss. Underground lending is less accessible by retail investors but annualised returns can reach as high as 50%. However, such high margin lending is for borrowers with varied loan servicing capability. Risks attached to high margin lending should not be overlooked, particularly when regulatory protection of retail investors in China still lags behind the international standard.

Chart 7: Average returns in 2013



Source: CBRE Research, People's Bank of China, Capital IQ, China Trustee Association, Q4 2013.

Chart 8: Interest rate margins



Source: China Financial Services Holdings, Q1 2014, Inside China's Shadow Banking: The Next Subprime Crisis, 2013.

Real estate shadow lending

Developers' capital stack is shifting towards shadow lending

The China property sector is highly fragmented, with over 85,000 developers. There is a very big pool of small local developers with varied quality and experience. Traditionally there have been three key sources of funding for Chinese developers: proceeds from the pre-sale of new properties, bank loans, and fund-raising in the capital markets.

After the central government began to increase its efforts to cool down the property market in 2010, the domestic capital markets essentially shut down for Chinese developers. At the same time, domestic banks turned more cautious towards the sector due to increasing risks. Most A-share listed developers still have access to domestic bank loans but bank financing has become more difficult to obtain for small- to medium-sized developers.

Financing costs for large and small developers vary significantly. The average interest rate for top tier developers can be as low as 4%. In comparison, local developers are forced to rely on the shadowbanking system where interest rates can often be in double-digits. However, large and small developers' profit margins (before deducting interest expenses) on development projects are similar. This puts bigger developers in a much stronger financial position. As a result, developers are all aiming to grow by scale and by using financial leveraging without carefully assessing their financial capacity but with the expectation that land values will keep rising.

Consequently, proceeds from pre-sales have become the major source of funding for smaller developers, meaning that their cashflow has become more dependent on the pace of pre-sales. The central government's introduction of a number of austerity measures in recent years to slow down the real estate market has resulted in a slowdown in sales, greater uncertainty over the rate of pre-selling and a squeeze on profit margins. In a good year such as 2013 when property sales were booming, developers had the means to embark upon more acquisitions and expansion. However, in a more challenging year such as 2011, developers had to rapidly scale down their expansion, and in some cases even slow or suspend construction activity on new projects.

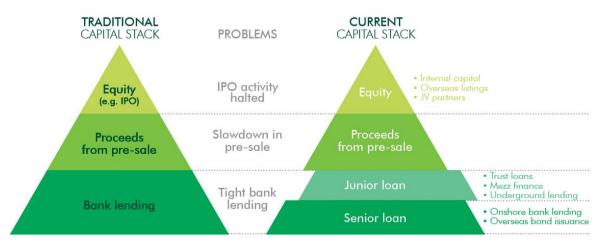


Chart 9: Capital stack of Chinese property developers

Source: CBRE Research, Q2 2014

Trust loans and private loans are usually short-term, ranging from one year to a maximum of three years. However, the construction project cycle is about four to five years. Previously, borrowers would accept the expensive loans, assuming that the pre-sales of a project would match the loan termination. However, as the pre-sales market deteriorated, developers have had to find other solutions. Some may lower prices to speed up sales, but this only accelerates the pressure on price cutting. Others may look for refinancing options but it could become more difficult to refinance via trust loans as investors raise their risk concerns over shadow lending. According to Bloomberg, data compiled by Use Trust shows that the issuance of property-related trusts slid 49% g-o-g in Q1 2014³.

On balance, overseas-listed developers have enjoyed a competitive advantage over domestic-listed or unlisted developers as they enjoy comparatively better access to the international capital market, both in the equity and, more importantly, the international bond market. For example, Hong Kong-listed Chinese developers have been able to take advantage of the low-interest rate environment and rising risk appetite in the international bond market since 2012. In 2013 alone, Chinese developers raised US\$55.2 billion on the overseas capital markets, mainly through the issue of high-yield USDdenominated bonds, syndicated loans and equities. This is equivalent to 39% of the domestic corporate bond market for all sectors. As a result, most Hong Kong-listed developers have had the capital to be able to continue to expand and gain market share in China.

Emerging defaults

When the economy is experiencing a boom period, the risks of over-expansion of the credit market are often barely noticed. When the economy slows down – as is currently happening in China - investment projects become less profitable. Companies are more acutely aware of the high interest rates they must pay for shadow loans, which are sometimes higher than the returns to be generated from the underlying investment object.

Since the beginning of 2014 there have been a number of significant defaults in both real estate and other sectors. In January, a high-profile RMB 3 billion collective trust programme (CTP) issued by China Credit Trust (中诚信托) was close to default but the sole distributor and custodian bank for the trust (ICBC) refused to bail out investors in the event of default. The crisis was finally resolved after an unidentified third party stepped in and agreed to pay back the principal to investors. In March, Shanghai Chaori Solar Energy Science and Technology Co (上海超日太阳能科技), a struggling solarequipment supplier, declared that it would not pay the full amount of interest on a corporate bond, marking the first-ever default in the China corporate bond market.

The real estate market also saw its first default this year. March saw the collapse of Xingrun Real Estate, a local developer based in Fenghua, Zhengjiang, which left a total of RMB 3.5 billion (US\$556 million) of unpaid debt. The company has a number of residential projects, all located in Fenghua, a tier III/IV city. Out of the RMB 3.5 billion of unpaid debt owed by the company, approximately RMB 2.4 billion was obtained from banks and the remainder from private loans, i.e. the shadow banking sector. The company reportedly had to pay interest rates of between 18-36% on its private loans.

This high profile default has put the spotlight on the distressed situation facing many developers in lower tier cities where market conditions are deteriorating rapidly, primarily due to oversupply. Property sales in Fenghua have slowed down markedly since Q4 2013 and Xingrun made a major error in building villas in the city which is not particularly affluent.

³ "Property Trust Sales Drop 49% as Vicious Loop Seen: China Credit", 11 April 2014, Bloomberg

What can we learn from history?

Defaults are nothing new in China. On 16 January 1999 the state-owned Guangdong International Trust and Investment Corporation (GITIC, 广东国际信托投资公司) went bust in what is still the largest bankruptcy in Chinese history.

GITIC functioned as the main fund-raising arm of the Guangdong government. Although an independent company, GITIC was controlled by provincial authorities, which often enlisted it to help finance projects such as the toll highway that connects Shenzhen to Guangzhou. GITIC had RMB 38.8 billion of debt but only about RMB 21.4 billion of assets. In the subsequent four years after the collapse, only 12.5% of the loans were repaid.

Hundreds of trust companies shut down after GITIC went bankrupt. Construction of a large number of development projects backed by the trusts was halted. Many trust companies invested heavily in lossmaking state-owned enterprises, as well as property and equity markets for quick returns. The returns on such investments were hit by government policies aimed at restraining the overheating economy and the Asian Financial Crisis.

In 1999, the government began to restructure the trust sector, which had been undergoing a long period of consolidation. In 2001, the government issued the "PRC Trust Law" requiring all trust companies to re-register with the People's Bank of China (PBOC). When the new Trust Law was implemented, only 60 of the 239 existing trust companies, which subsequently passed the regulatory function to the China Banking Regulatory Commission (CBRC), were allowed to continue operating under the new regulations.

The government subsequently decided to establish four distressed asset management companies (AMCs) to receive, manage and dispose of NPLs from commercial banks which suffered from the collapse of the trust market, the impact of the Asian financial crisis and the reform of state-owned enterprises. The four AMCs are Huarong (华融), Cinda (信达), China Orient (东方) and China Great Wall (长城). The four AMCs selectively converted their distressed loans into equity.

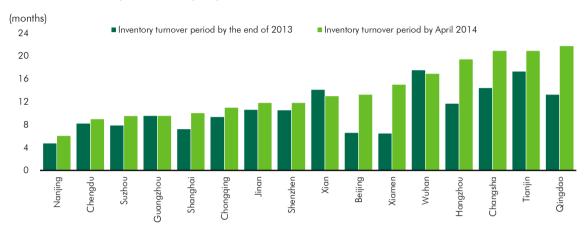
By the end of 2012 the four AMCs had cumulatively acquired distressed assets with an original value of more than RMB 3.1 trillion. They are still actively receiving NPLs from commercial banks and extending their businesses to distressed trust assets. The total consolidated net profit of the four AMCs in 2012 was RMB 22.4 billion. China therefore already has a platform in place to clean up NPLs if more defaults emerge. This platform could be one of the possible solutions to the current problem.

The government has established four distressed asset management companies to receive NPLs. China therefore already has a platform in place to clean up NPLs if more defaults emerge.

More defaults expected but unlikely to impact overall real estate sector

Economic growth in China has continued to weaken in 2014 and is placing additional strain on the already stagnant residential real estate market. Sales in lower tier cities are lacklustre whilst transactions in Beijing are limited by the introduction of the self-use housing programme. Among the 16 major Chinese cities tracked by CBRE, the average inventory turnover period increased by three months on average in April, meaning that it is taking developers more time to sell their stock. Qingdao and Tianjin have the longest inventory turnover period at 21 and 22 months respectively.

Chart 10: Inventory turnover by city



ource: CBRE Research, SouFun CREIS, April 2014 Note: Inventory turnover is the ratio between gross floor area available for sale (including presale) and average sales volume during the review period

Concern over the shadow banking sector is expected to result in credit tightening of alternative financing channels. Going forward it will become more difficult to raise funds for new trust or WWPs. As inflation pressure has come down substantially as internal consumption has softened, there is less pressure to raise the policy interest rate and more leeway to loosen monetary policy.

Small-to medium-sized local developers in lower tier cities that have largely been reliant on the pre-sale financing model will be more exposed to risks arising from the slowdown in pre-sales and availability of working capital. More defaults in the China property sector are expected but only within the tolerance level of the central government as authorities want to ensure lenders are more vigilant towards controlling the quality and volume of their lending.

In recent months we have seen some moves to support the market, including:

- the PBOC urging banks to sponsor first time home buyers;
- the State Council calling on the China Development Bank (CDB) to set up an organisation to sell specialised home financing bonds for the construction of social housing and infrastructure;
- several city governments reportedly introducing "Price Reduction Restrictions" and loosening "Home Purchase Restrictions" to alleviate the pressure on house price cuts.

These announcements are a clear signal that the government intends to utilise a small stimulus to encourage real housing demand and wants to direct buying activity only to specific market segments. The government has the capacity to bailout the sector if needed, given the substantial size of its closeto-RMB 4 trillion foreign reserves and its state-owned assets, which total over RMB 21 trillion. Defaults in the property sector are a political issue highly dependent on the decision of the central government, and not just a market issue. Investors therefore need to aware the high policy risk in this sector.

Opportunities for investors

Recent years have seen more discussion about property debt investment in China given the high interest rates at a time when yields in the direct property market have compressed to below 5% in tier 1 cities. However, there will be limited opportunities for foreign lenders due to a number of technical difficulties, which include:

- Offshore lenders cannot register onshore collaterals;
- It is difficult to reach a consensus on the valuation of development projects with borrowers, particularly with regard to the treatment of Land Appreciation Tax (LAT);
- Cash-trap when remitting capital outside China.

In many cases, offshore lenders may prefer to provide mezzanine loans to projects that have a comparatively more guaranteed cash flow. However, the owners of such projects can often obtain financing onshore relatively easily as there is significant pool of onshore lenders. When providing financing to construction projects, lenders will demand guaranteed payment by the parent company. They will also want to lock in the time period so they can enjoy high interest income. There have been some cases where lenders have refused to accept early repayment from the borrower.

For investment funds and equity investors, now is the opportune time to begin searching for attractive deals in the residential market, since many developers are struggling to obtain financing. However, their focus should be on tier I markets where demand remains robust and land supply is more balanced. There will also be opportunities for private equity funds to provide capital to fill the funding gap for developers by engaging in more structured deals. Instead of purely investing in equity stakes in development projects, investors can structure investment deals with a debt component or sellback options to enhance their risk-adjusted investment return. For example, investors can demand interest payments like a loan but can have a call option to turn the interest into an equity stake if market conditions improve. Alternatively, they can participate in the deal as an equity partner but exercise sellback options to turn their interest into loans.

For real estate developers, now is the time to prepare for the contraction of the shadow lending pool and plan for their refinancing needs as most of their loans are short-term, at two to three years. A number of developers have already turned more willing to form joint ventures with investors, both domestic and foreign, to bridge the financing gap. Going forward there is likely to be a period of consolidation among real estate developers. For property companies in a stronger financial position, including those listed overseas as well as foreign developers which are active in China, there will be opportunities for them to engage in special situation investments on an equity and platform level.

Table 2: Opportunities for investors

Who?	Opportunities
Foreign Lenders	 Technical difficulties regarding onshore/offshore structure, remittance of payment outside China, uncertain cash flow from underlying projects Only provide project financing with a guarantee from parent company
Investment funds and equity investors	 More chances for opportunistic investors to provide capital to fill the funding gap for developers Structuring investment deals with debt components or sellback options to enhance their risk-adjusted investment returns; focus on tier 1 cities
Large developers	 Prepare for the shrinkage of the shadow lending pool Plan ahead for their refinancing needs More open to forming joint ventures to fill the financing gap

Source: CBRE Research, Q2 2014.

Conclusion

For a nation as big as China there is no way to avoid bad loans. The shadow banking issue requires the government to create a sound and enforceable legal framework on loan defaults and bankruptcy.

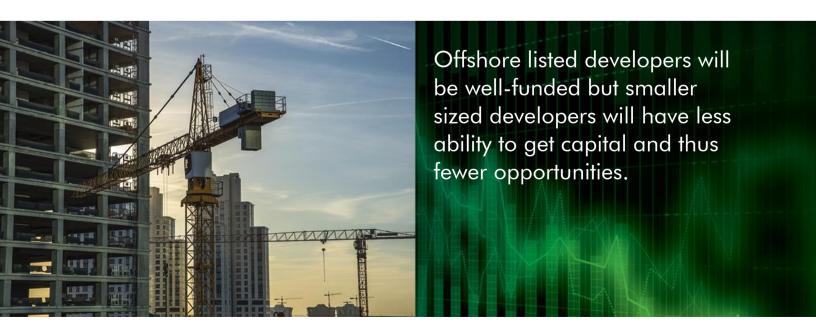
There needs to be a more comprehensive legal framework covering the different types of financial intermediaries in order to raise the transparency and sophistication of loan underwriting. At the same time, there is a pressing need to modernise the Chinese banking sector and introduce a more effective credit evaluation scheme so that banks can effectively price loans. However, banking sector reform in China is a broader issue and will take time to resolve.

There is still a need for the existence of the shadow banking sector as a counterpart to the banking system and as a means to offer a wider variety of services to fulfill the needs of the Chinese economy, which continues to grow in size and complexity.

Increasing concern over the shadow banking system has seen the central government increase its oversight on trust products. As a result, the amount of capital raised through trust loans fell by 79% y-o-y in Apr 2014. The shadow lending pool is likely to shrink or at least grow at much slower rate in forthcoming quarters.

There is a big gap between the shadow lending term (around two years) and project cycle (about four to five years). There will likely be higher demand for refinancing and / or attempts to speed up sales by offering price cuts. However, it will still be challenging for developers to manage operating cash flow. Those which fail to do so will face the risk of default. Smaller developers in tier III and tier IV cities which focus on the residential sector will be particularly vulnerable. Policy changes add a further layer of complexity although new measures are likely to help relieve the situation.

Despite the short term uncertainty over the resolution of the over-expansion of the lending market and problematic lending, the long-term outlook for economic growth in China remains largely positive. The current situation presents a window of opportunity for investors to negotiate lower prices and yieldenhancing investment terms on projects in upper tier cities where the demand-supply situation is more balanced.



For more information about advisory on capital markets and investments, please contact:

CAPITAL ADVISORS

CBRE Capital Advisors Asia Pacific Limited
Authorized and Regulated by Hong Kong Securities and Future Commission
Licensed Corporation CE No: BBM048

Nick Crockett

Executive Director, Asia Pacific +65 6229 1136 nick.crockett@cbre.com.sg

Canon Yau

Director, Asia Pacific +852 2820 6597 canon.yau@cbre.com.hk

Sharon Law

Director, Asia Pacific +852 2820 6559 sharon.law@cbre.com.hk

For more information about this regional SPECIAL report, please contact:

RESEARCH

Henry Chin, Ph.D. Head of Research, Asia Pacific +852 2820 8160 henry.chin@cbre.com.hk

Ada Choi, CFA

Senior Director, Asia Pacific +852 2820 2871 ada.choi@cbre.com.hk Frank Chen, CFA
Head of Research, China
+86 21 2401 1369
frank.chen@cbre.com.cn

For more information regarding Global Research and Consulting activity, please contact:

Nick Axford, Ph.D.

Global Head of Research +852 2820 8198 nick.axford@cbre.com.hk Follow Nick on Twitter: @NickAxford1

Raymond Wona

Managing Director, Americas Research +1 416 815 2353 raymond.wong@cbre.com

Henry Chin, Ph.D

Head of Research, Asia Pacific +852 2820 8160 henry.chin@cbre.com.hk

Neil Blake, Ph.D.

Head of Research, UK and EMEA +44 20 7182 2133 neil.blake@cbre.com Follow Neil on Twitter: @neilblake123

Follow CBRE

















CBRE GLOBAL RESEARCH AND CONSULTING

This report was prepared by CBRE Asia Pacific Research Team, which forms part of CBRE Global Research and Consulting—a network of preeminent researchers and consultants who collaborate to provide real estate market research, econometric forecasting and consulting solutions to real estate investors and occupiers ground the globe

All materials presented in this report, unless specifically indicated otherwise, is under copyright and proprietary to CBRE. Information contained herein, including projections, has been obtained from materials and sources believed to be reliable at the date of publication. While we do not doubt its accuracy, we have not verified it and make no guarantee, warranty or representation about it. Readers are responsible for independently assessing the relevance, accuracy, completeness and currency of the information of this publication. This report is presented for information purposes only exclusively for CBRE clients and professionals, and is not to be used or considered as an offer or the solicitation of an offer to sell or buy or subscribe for securities or other financial instruments. All rights to the material are reserved and none of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party without prior express written permission of CBRE. Any unauthorized publication or redistribution of CBRE research reports is prohibited. CBRE will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on information in this publication.

