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AMTD 尚乘
Equity Research

China city commercial banks

Sector report

In search for new growth engine

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City commercial banks in search for new growth engine

In the past few years, with the accelerated financial disintermediation and interest rate liberalization, city commercial banks were limited by their smaller branches in regional urban area. They experienced bigger NIM pressure and shifted business towards interbank/investment operations to diversify their assets and grow scale. However, since 2017, the regulatory call for financial deleveraging and unwinding of non-standard assets is posing challenges. City commercial banks need to shift their business model from focusing on scale towards innovation and profitability. With larger corporates gradually moving to direct financing, small & micro enterprise and retail business will be the key for them to succeed.

Small & micro-enterprise + retail business will be the key

We believe in the next ten years, competitiveness in small & micro enterprise and retail business, technology and talent will be the key competitive strategy for city commercial banks to stand out. City commercial banks have a long history of serving local small & micro enterprises. To differentiate from SOE banks, joint-stock banks and internet giants, city commercial banks need to put community bank strategy at heart and cater to special local demand. If a city commercial bank can provide differentiated services, high quality small & micro enterprises and retail customers not only can retain low cost demand deposits, but also bring in lucrative fee income and high quality consumption loans which would help to boost ROA and ROE.

FinTech enables community banking strategy; industry alliance an option

Internet giants are posing increasing competition on retail business and small & micro enterprise business. Given city commercial banks' flexibility, collaborating with internet players can give city commercial banks access to new customers, advanced technology and extensive consumption scenarios. Examples include city banks' cooperation with WeBank to provide funding for Weilidai. To improve their bargaining power, city commercial banks need to develop mobile/internet based products and services that cater to local demand. However, such strategy requires high upfront investment in IT system and human resources. An industry alliance that focuses on FinTech infrastructure development and resource & experience sharing could be a winning strategy.

The rise of central and western China offers new opportunities

A city commercial bank's success is highly dependent on the success of local economy. We therefore expect in general stronger performance of city commercial banks in the Pearl River Delta, the Yangtze River Delta and in fast-growing central China and western China. In addition, we want to highlight opportunities arising from fast-developing tier 2 cities with strong industry clusters and net population inflow. City commercial banks in these regions/cities are likely to benefit from the strong demand from both retail and small & micro enterprise customers. In addition, with further development of rural area and new round of urbanization, we expect rural area to offer abundant opportunities. We expect to see city commercial banks to go deep into county or even rural area.

Experience from US regional banks suggests room for regional banks

While the number of regional banks in the US has been declining and their market share has been shrinking due to increasing industry consolidation post the financial crisis, surviving regional banks demonstrate strong profitability and specialization due to their community bank approach and deep understanding of local economy.

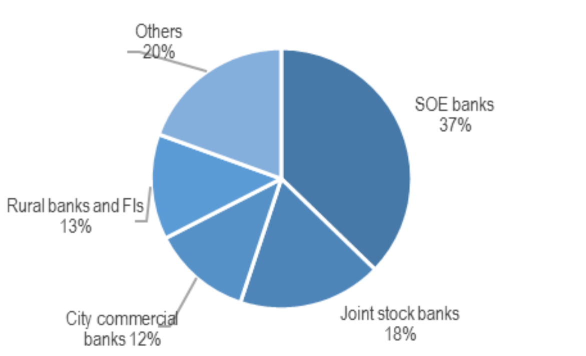
City commercial banks need new growth engine

A highly competitive segment

City commercial banks operate in the most competitive cities in China. Unlike national SOE banks that enjoy wide branch network in both rural and urban area, city commercial banks are facing fierce competition from SOE banks, joint-stock banks and local rural commercial banks in urban district. Therefore, they tend to focus on serving local SMEs and tend to have weaker deposit base. Due to regulatory requirements, city commercial banks are unable to expand physical networks outside of their own province, therefore, their performance are highly dependent on the success of local economy.

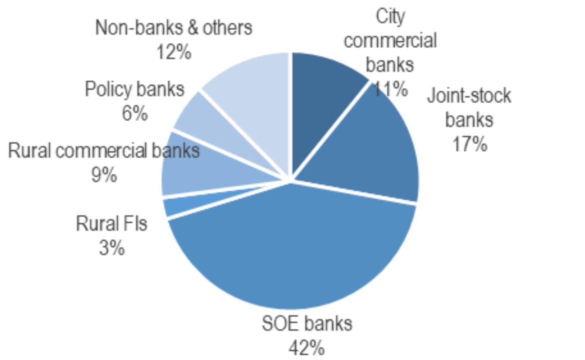
In the past few years, with the accelerated financial disintermediation and interest rate liberalization, city commercial banks experienced bigger NIM pressure and shifted business towards interbank/investment operations to diversify their assets and grow scale. However, since 2017, the regulatory call for financial deleveraging and unwinding of non-standard assets is posing challenges. City commercial banks need to shift their business model from focusing on scale towards innovation and profitability. With larger corporates gradually moving to direct financing, a relative lower household leverage than corporate, small & micro enterprise and retail business will be the key for them to succeed.

Figure 1: China banking system asset market share (2017)



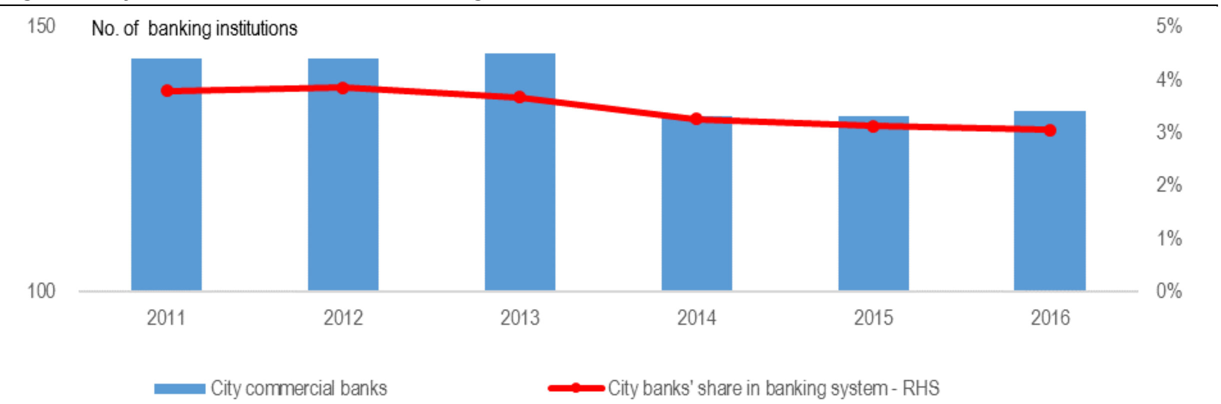
Source: PBOC, CBRC

Figure 2: China banking system net profit market share (2016)



Source: PBOC, CBRC

Figure 3:City banks account for 3% of banking institutions

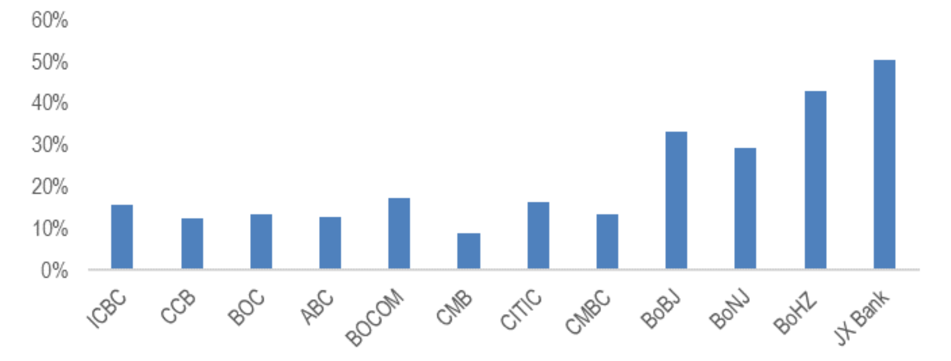


Source: PBOC, CBRC

City commercial banks focus on serving local SMEs & micro enterprises

City commercial banks' major shareholders include local governments and local corporates. They are deeply rooted in local market and mainly serve local SMEs and private businesses. As a result, their loan yields are normally higher than that of national banks. SMEs & micro enterprises not only can bring in deposits, but also bring in retail customers through salary accounts etc.

Figure 4: Small & micro loans as % of total loans

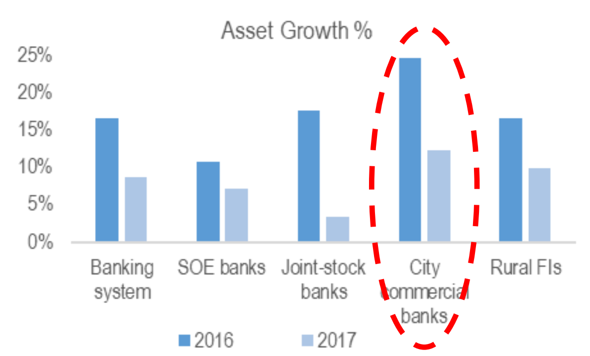


Source: Company data, AMTD Research

Strong asset growth - scale-driven profit growth put to an end

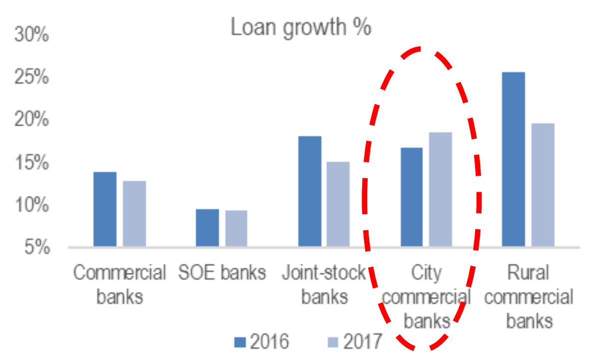
During 2012-2016, city commercial banks' asset growth was significantly higher than that of SOE banks and joint-stock banks. This was mainly driven by their active interbank/investment operations while loans' share in total assets gradually declined (Figure 10). In 2017, this trend has been reversed, city commercial banks' asset growth significantly slowed down, similar to the trend seen in joint-stock banks.

Figure 5: City commercial banks had the highest asset growth in 2016 & 2017; but asset growth significantly slowed down in 2017



Source: PBOC, CBRC; Note: Rural FIs include rural commercial banks, rural credit cooperatives, rural credit unions and new rural financial institutions

Figure 6: City commercial banks' loan growth slower than rural commercial banks



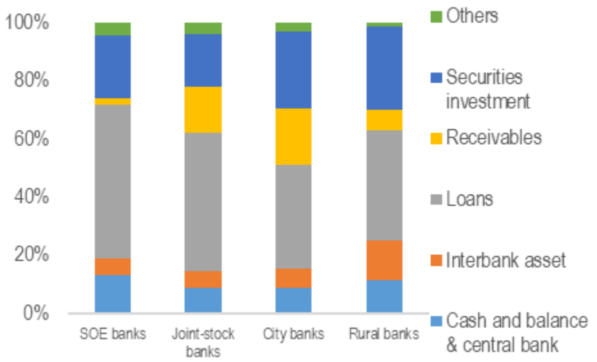
Source: PBOC, CBRC; Note: Rural commercial banks' loan growth may be inflated by formation of new rural commercial banks from rural credit unions.

Balance sheet mix – investments exceeded loans

City commercial banks' asset mix is characterized as low allocation to loans and relatively high allocation to investment receivables. Constrained by supervision on loan growth and relatively weaker deposit base, city commercial banks allocate their excess liquidity to receivable assets which normally include quasi-loan assets (also known as non-standard assets). Other allocation mainly includes securities investment.

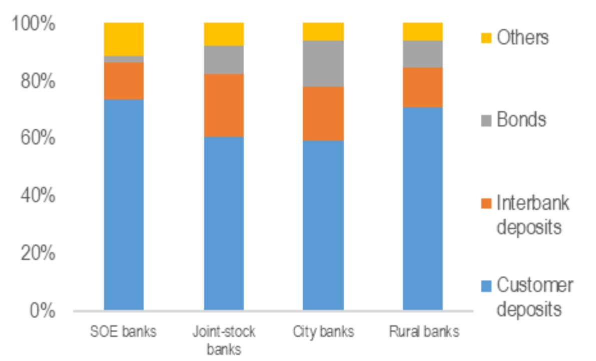
On the liability side, similar to joint-stock banks, city commercial banks tend to rely less on deposits. Customer deposits accounted for only 60% of city commercial banks' liability, which is much lower than that of SOE banks and rural commercial banks. On the contrary, city commercial banks rely more on interbank deposits.

Figure 7: Asset mix comparison 2017



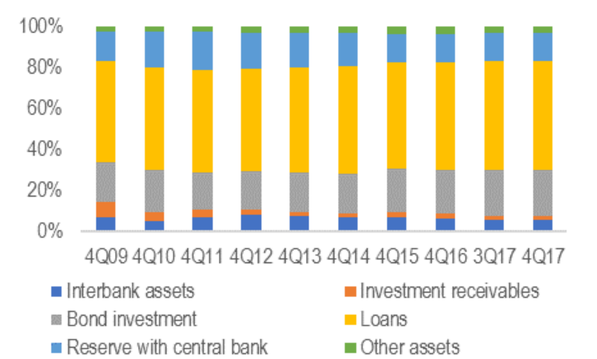
Source: Company data, AMTD Research

Figure 8: Liability mix comparison 2017



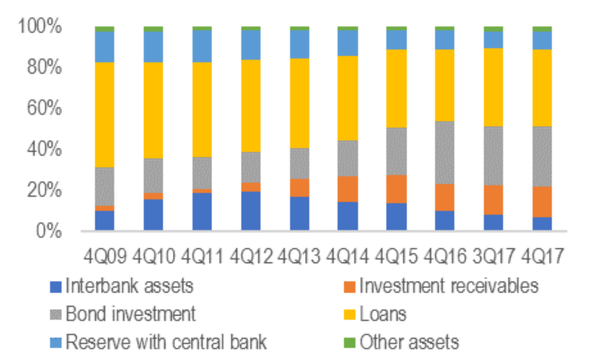
Source: Company data, AMTD Research

Figure 9: SOE banks asset mix relatively stable



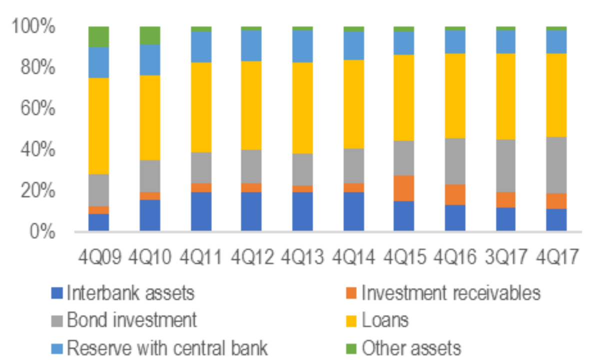
Source: WIND, company data

Figure 10: City commercial banks may need to unwind its position in investments; loans only accounting for less than 40% of assets



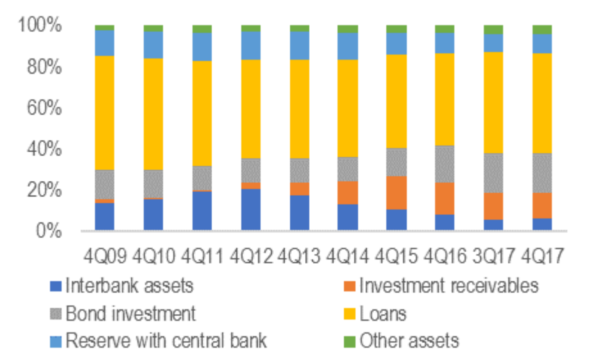
Source: WIND, company data

Figure 11: Rural commercial banks shifting to interbank assets and bond investment



Source: WIND, company data

Figure 12: Joint-stock banks also allocate significant assets to investment receivables and bond

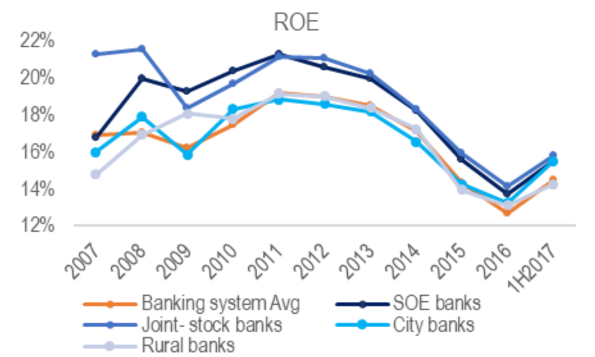


Source: WIND, company data

City commercial banks' profitability is the lowest among all banks

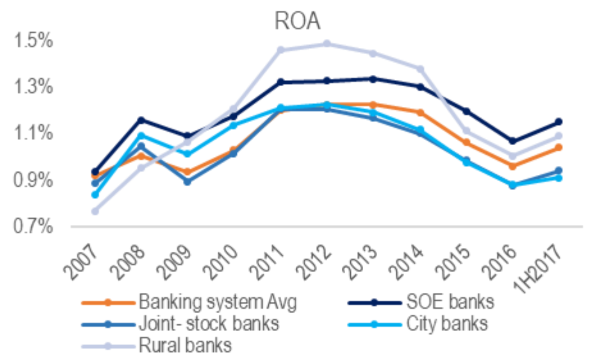
Compared with SOE banks and joint-stock banks, city commercial banks in general have relatively weak ROE and their ROE are at a similar level with rural commercial banks. Similar to the situation of ROE, ROA of city commercial banks is lower than peers after 2013. We believe the low level of ROA and ROE is attributable to fierce competition which squeeze city banks' profitability. On the one hand, city commercial banks' net interest margin has been squeezed due to their weak bargaining power to raise loan yield as well as to lower funding cost. On the other hand, they have far less fee income compared with large SOE banks and joint-stock banks.

Figure 13: City commercial banks' ROE has been in line with rural commercial banks, but lower than that of SOE banks and joint-stock banks



Source: WIND, CBRC, AMTD Research; Note: 1H2017 ROE is calculated by data of listing banks

Figure 14: City commercial banks' ROA maintains at similar level with joint-stock banks but much lower than SOE banks and rural commercial banks



Source: WIND, CBRC, AMTD Research; Note: 1H2017 ROA is calculated by data of listing banks

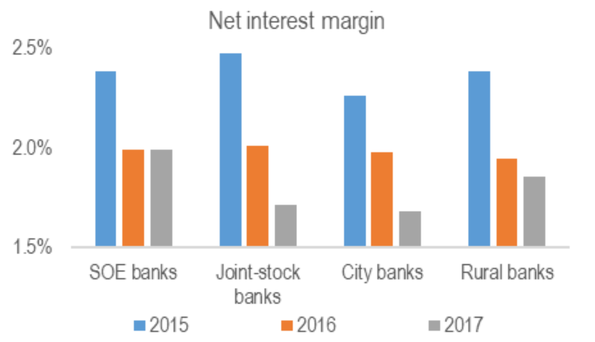
We aggregate the financial data of leading banks including 5 SOE banks, 5 national joint-stock banks, 15 city commercial banks and 14 rural commercial banks for the year 2016 and 2017. City commercial banks' ROE was maintained at a similar level with other three categories due to their high leverage. However, their ROA in 2016 was the lowest and 24bps lower compared with SOE banks.

Net interest margin rebounded in 2017

Due to monetary loosening, net interest margin narrowed for all banks from 2015 to 1H2017. However, in 2017, net interest margin (NIM) started to recover - first seen in SOE banks, and later in joint-stock banks. City commercial banks' net interest margins are the lowest among all types of banks. With competition for deposits in the cities becoming fiercer than before, city commercial banks' spreads have been under bigger pressure.

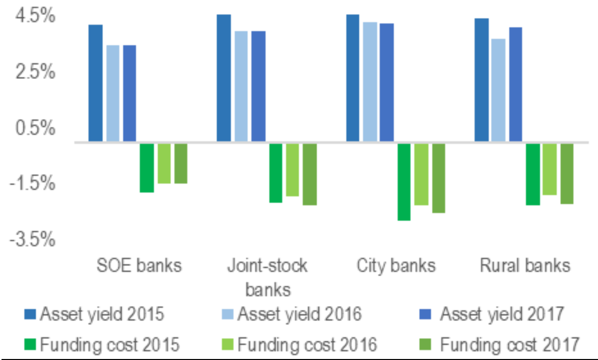
In the first half of 2017, city commercial banks' average net interest margin dropped by 27bps while SOE banks' NIM remained at a similar level (Figure 15). This was driven by a decline of asset yield and rise of funding cost. We believe this was likely because it is harder for banks to charge SMEs higher interest rates during an economic downturn, as well as to collect funds from them. Therefore, NIM had further dropped.

Figure 15: City commercial banks and joint-stock banks NIM experienced bigger pressure from 2015 to 2017



Source: Company data

Figure 16: Asset yield vs funding cost

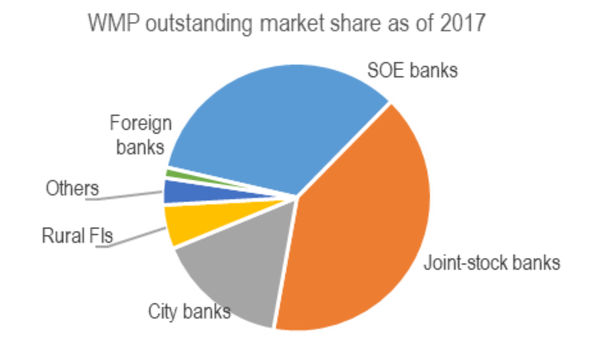


Source: Company data

City commercial banks' wealth management products are lagging behind

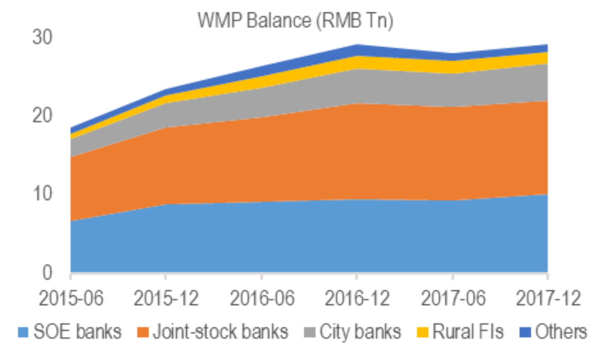
With banks' implicit guarantee on returns, wealth management products essentially acted as the replacement for time deposits. As of Dec-2017, city commercial banks' outstanding wealth management products were Rmb 4.72trn, only 16% of their total liability. The 16% is far less than joint-stock banks' 29%. After the implementation of new regulations on asset management industry, city commercial banks' investment capability will face further challenges.

Figure 17: City commercial banks' market share in WMP is far from national banks (2017)



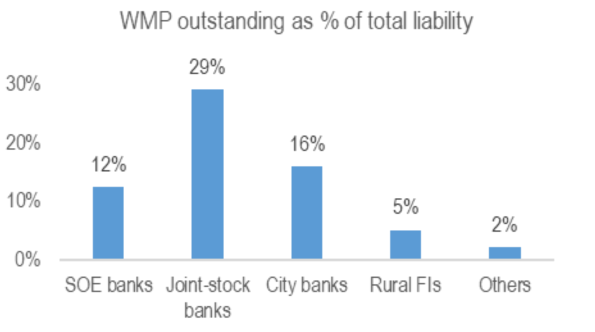
Source: Wind

Figure 18: City commercial banks WMP outstanding



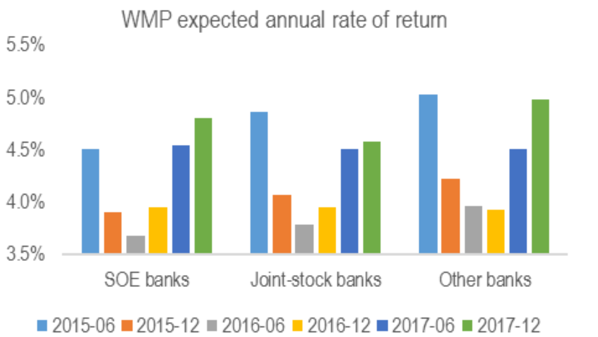
Source: Wind

Figure 19: City commercial banks WMP as % of total liability is low (2017)



Source: Wind

Figure 20: WMP expected annual rate of return （2015-2017）



Source: Wind

Weakness in fee income business

In general, city commercial banks tend to rely more on the traditional deposit – lending spread business with a smaller fee income contribution in revenue. As a result, city commercial banks' non-interest income expressed as a % of revenue was much lower than SOE banks and joint-stock banks.

We believe the low revenue contribution from fee income businesses is attributable to relatively low demand for capital market service from SMEs and lack of competitiveness of city banks' wealth management products. Lack of attractiveness of bank cards issued by city banks at the moment is another factor resulted in low fee income. However, this area has great potential for improvement.

Figure 21: Key profitability ratio comparison across different types of banks in 2017

2017	Net interest income to avg assets	Non-interest income to revenue	Revenue to avg asset	Cost-income ratio	Credit cost as % of avg loans	LDR	ROA	ROE	Asset to equity (x)
SOE banks	1.99%	24%	2.64%	33%	0.93%	76%	1.02%	13.38%	13.1
Joint-stock banks	1.71%	36%	2.69%	32%	1.55%	89%	0.90%	13.56%	15.1
City commercial banks	1.68%	21%	2.13%	29%	1.45%	67%	0.84%	13.28%	15.8
Rural commercial banks	1.85%	19%	2.27%	35.67%	0.97%	56%	0.87%	13.72%	15.9

Source: Company data, AMTD Research

Figure 22: Key profitability ratio comparison across different types of banks in 2016

2016	Net interest income to avg assets	Non-interest income to revenue	Revenue to avg asset	Cost-income ratio	Credit cost as % of avg loans	LDR	ROA	ROE	Asset to equity (x)
SOE banks	1.99%	27%	2.75%	34%	0.77%	74%	1.07%	14.0%	13.2
Joint-stock banks	2.01%	33%	3.01%	31%	1.80%	82%	0.92%	14.5%	15.8
City commercial banks	1.97%	19%	2.43%	29%	1.72%	63%	0.89%	14.78%	16.6
Rural commercial banks	1.87%	21%	2.37%	38%	0.97%	55%	0.87%	13.83%	16.0

Source: Company data, AMTD Research

Loan book mix – Higher exposures to small & micro enterprises

Compared to SOE banks and joint-stock banks, city commercial banks' retail loans account for a much smaller portion in total loans. In the meanwhile, city commercial banks rely more on corporate loans, which contribute more than 70% of loan balance.

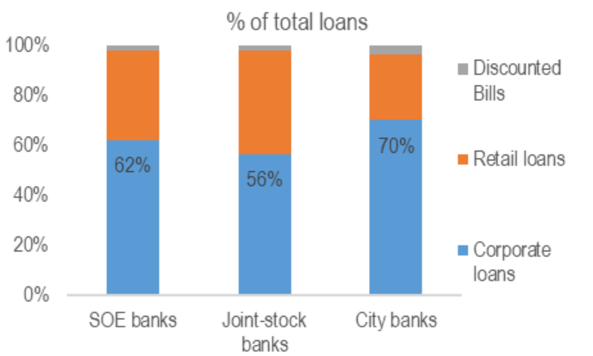
Corporate loans - Higher exposures to SMEs & micro enterprises

City commercial banks have higher exposures to local SMEs & micro enterprises. This is reflected in their higher portion of loans to manufacturing, wholesale & retail, and commercial service sectors. As most of state-owned enterprises and large corporations tend to seek financial source from national banks or bond market, city commercial banks develop their competitive advantage in SME lending. Their corporate loan mix also mimic the industry structure of local economy.

Retail loans

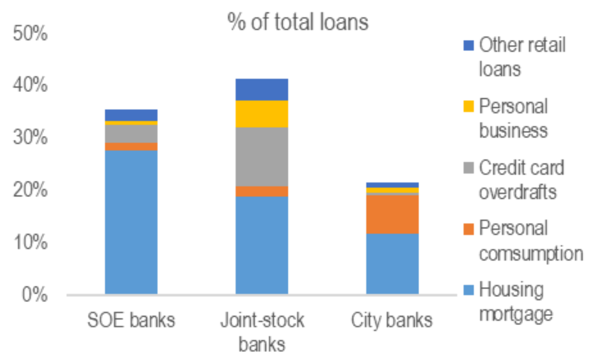
City commercial banks tend to have smaller exposures in retail loans due to highly competitive personal loan market in cities. Mortgage loans usually contribute the biggest balance to personal loans. However, city commercial banks do not have a competitive advantage to provide attractive rates to retail customers compared with national banks.

Figure 23: Loan book mix comparison (2017) – City commercial banks rely more on corporate loans



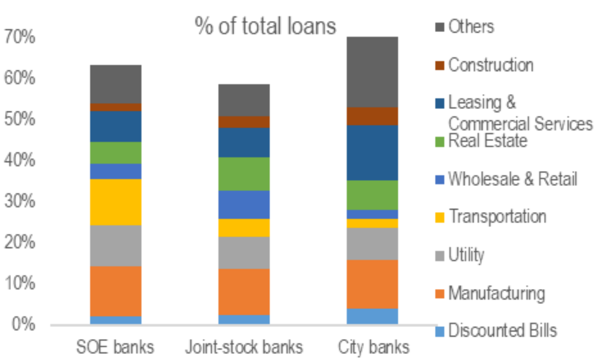
Source: Company data

Figure 24: Retail loan mix (% of total loans, 2017) – City commercial banks have smaller exposure in retail loans



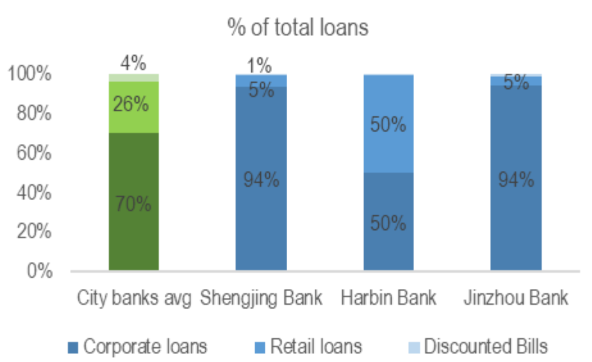
Source: Company data

Figure 25: Corporate loan mix (% of total loans, 2017) – City commercial banks have significant higher exposures to corporate loans, most of which are SMEs



Source: Company data

Figure 26: City commercial banks loan mix (2017) – Some are outliers with different mix due to locations and banking strategies



Source: Company data

Branch productivity outperforming peers

Compared with other types of banks, city commercial banks tend to have higher operating efficiency in terms of branch productivity and employee productivity. Their asset per branch is at a similar level as joint-stock banks. The cost-income ratio of city commercial banks is the lowest, with only 29% in 2017, while the ratio of SOE banks, joint-stock banks and rural commercial banks are 33%, 32% and 36% respectively. This is due to that city commercial banks' branches are located in cities with more population and higher wealth density. However, their employee cost tends to be lower than that in tier 1 cities.

High branch productivity

In terms of branch productivity, city commercial banks asset per branch in 2016 was slightly behind joint-stock banks, while it is more than double than that of SOE banks and tribble than that of rural commercial banks. In the meanwhile, city commercial banks are able to keep their operating cost per branch proportionately lower, with less than 40%

operating cost/PPOP per branch. This is likely that city commercial banks' major clients are in city area and centralized in one location, therefore, it is less labor-intensive than lending to companies in rural places.

Figure 27: Branch productivity comparison across different types of banks

2017, Rmb m	Asset per branch	Loans per branch	Deposits per branch	Number of employees per branch	Revenue per branch	PPOP per branch	Operating cost per branch	Profit per branch
SOE banks	1,683	876	1,130	25	21	27	6	16
Joint-stock banks	3,183	1,549	1,798	33	42	31	12	15
City commercial banks	3,308	1,218	1,969	28	70	50	20	28
Rural commercial banks	1,554	630	1,053	19	34	22	12	12

Source: Company data, AMTD Research

Employee productivity

Employee productivity further proves the operating efficiency of city commercial banks. As city commercial banks branches operate on a relatively leaner basis compared with joint-stock banks, their asset per employee in 2017 ranked the highest among all types of banks in China. With lower operation cost per employee, city commercial bank shows great efficiency on generating profit by utilizing its human resources. However, on the contrary, city commercial banks' level of loans per employee was not as prominent as other ratios, mainly due to their large receivable balance instead of loans.

Figure 28: Employee productivity comparison across different types of banks

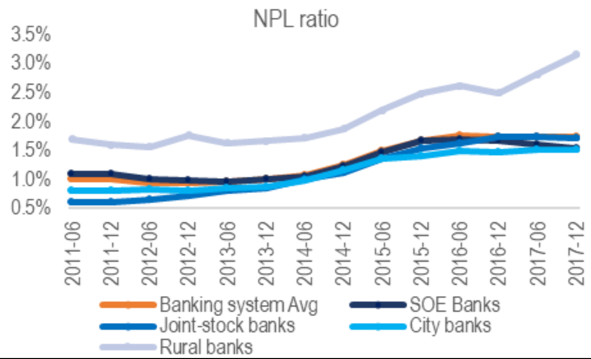
2017, Rmb m	Asset per employee	Loans per employee	Deposits per employee	Revenue per employee	Staff cost per employee	Operating cost per employee	PPOP per employee	Profit per employee
SOE banks	65	34	44	0.80	0.27	0.24	1.04	0.61
Joint-stock banks	97	46	54	1.25	0.44	0.34	0.91	0.47
City commercial banks	129	48	77	2.71	0.38	0.79	1.94	1.10
Rural commercial banks	81	32	54	1.76	0.39	0.63	1.13	0.66

Source: Company data, AMTD Research

Asset quality

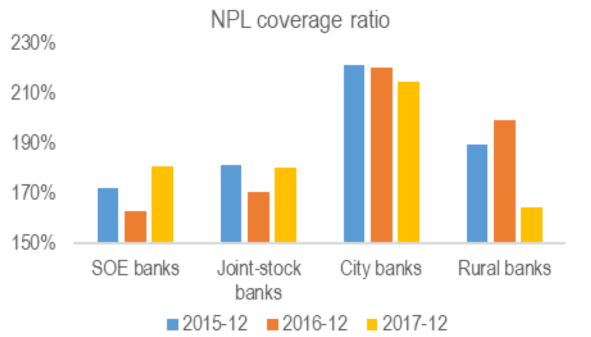
City commercial banks' NPL ratios on average are slightly lower than that of SOE banks and joint-stock banks, and much lower than rural commercial banks. The high NPL ratios of rural commercial banks are due to relatively weaker risk management and vulnerable borrowers such as rural SMEs and micro enterprises during an economic downturn. On the contrary, city commercial banks tend to have improved risk management system and higher quality borrowers.

Figure 29: City commercial banks NPL ratio climbing slower than other types of banks



Source: WIND

Figure 30: City commercial banks' NPL coverage ratio remained highest among various banks



Source: PBOC, CBRC, AMTD Research

Retail banking increasingly important

In recent years, retail banking has been growing much faster than corporate banking due to 1) a relatively low household leverage compared to corporate leverage; 2) better asset quality of retail loans especially mortgages compared to that of corporate loans; 3) strong demand for retail financial services such as bank cards, wealth management, etc.; and 4) retail business can be highly standardized and automated; enabling technologies and economy of scale reduce the cost-income ratio.

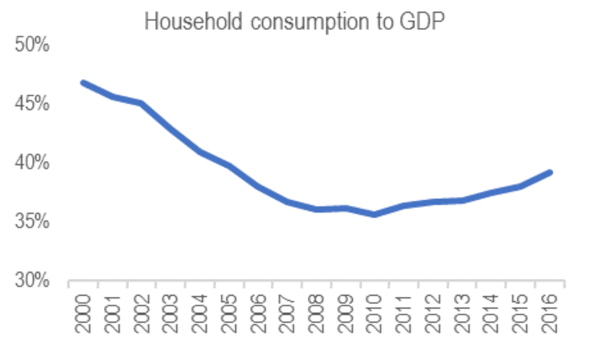
Compared to national banks, city commercial banks have much weaker retail businesses in terms of retail deposits, retail loans, bank cards, wealth management, agency business, etc. However, this is set to change as China's economic structure has entered a mature stage of industrialization and urbanization. Accelerated urbanization and much faster population growth in tier 2 cities than tier 1 cities will also support a faster growth in retail banking, which is favorable for city commercial banks to further strengthen their retail segment.

Consumption is likely to take over investment to drive GDP growth

Household consumption as % of GDP recovered from 35.6% in 2010 to 39.2% in 2016. Consumption is contributing more to the economic growth than investment. Retail segment not only can have low risk mortgage loans, but also can generate lucrative fee income businesses such as bank card fees and wealth management fees.

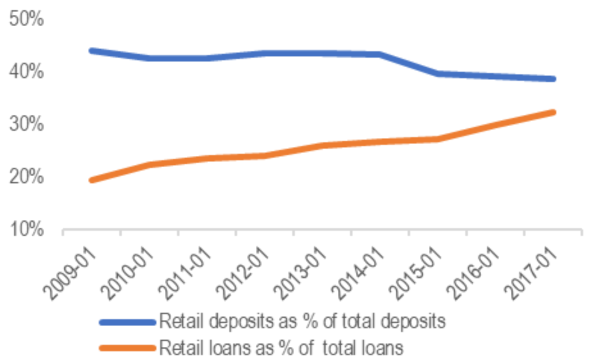
Retail loans as % of total loans has been steadily increasing driven by strong growth in mortgages and unsecured consumption loans. On the other hand, retail deposits as % of total deposits has been declining due to the accelerating disintermediation.

Figure 31: Household consumption's share in GDP increasing



Source: Company data

Figure 32: Retail loans' share steadily increasing; retail deposits' share declining due to disintermediation

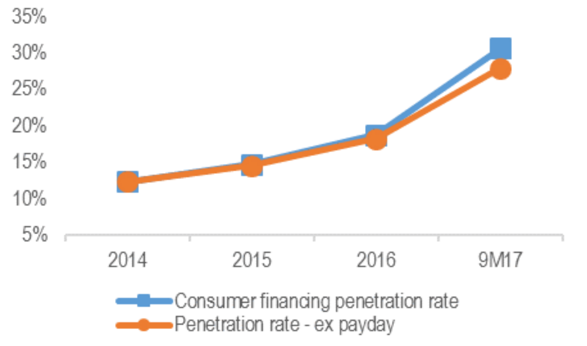


Source: Company data

Consumer leverage still has room to grow

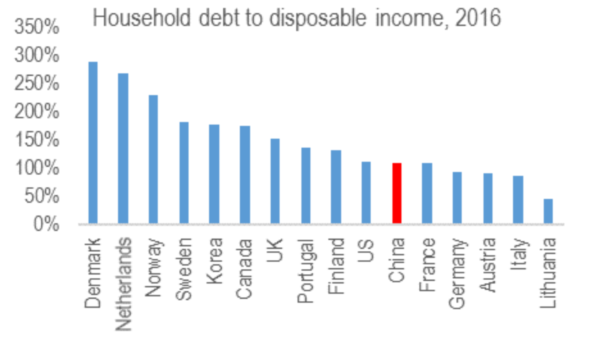
Compared to other developed countries, China's household debt level is not high, and majority of it was in the form of mortgages (**Figure 34**). We estimate that only 15-20% of urban households have outstanding mortgage loans. This would leave room for growth in home equity loans for the higher income group and credit loans for the low-mid income group. The market growth going forward will be driven by 1) a fast growth in consumption; and 2) a continued rise in penetration rate.

Figure 33: China consumer finance penetration rate – new consumer credit to national retail sales



Source: PBoC, China National Statistical Bureau, China UnionPay, Wangdaizhijia, AMTD estimates

Figure 34: China household debt level not high compared to other developed countries

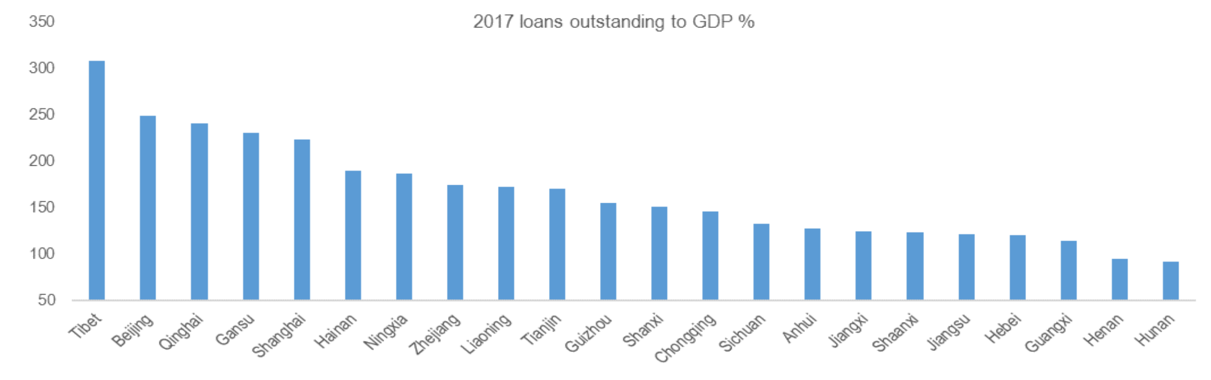


Source: OECD, AMTD estimates

The rise of central and western China offers new opportunities

A city commercial bank's success is highly dependent on the success of local economy, we therefore expect in general stronger performance of city commercial banks in the Pearl River Delta, the Yangtze River Delta and in fast growing central China and western China. In addition, we want to highlight opportunities arising from the fast development of tier 2 cities in central and western China with strong industry clusters and net population inflow. City commercial banks in these regions/cities are likely to benefit from the strong demand from both retail and small & micro enterprise customers. In addition, with further development of rural area and new round of urbanization, we expect rural areas offer abundant opportunities. We expect to see city banks to go deep into county or even rural area.

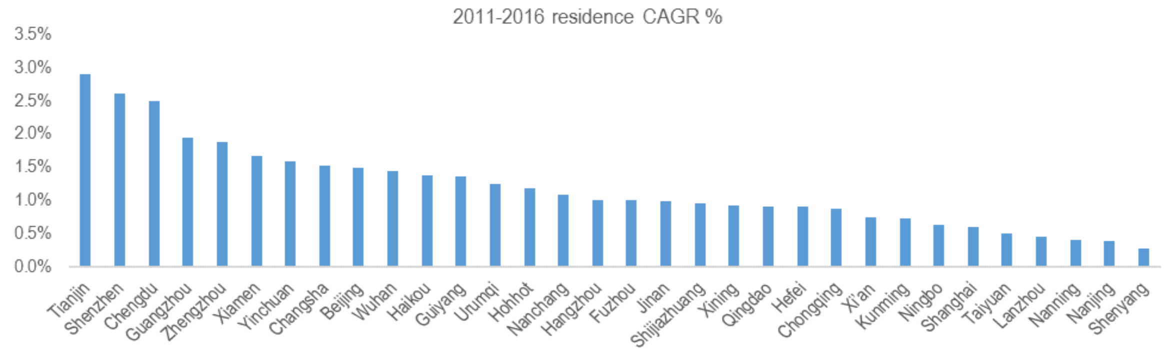
Figure 35: The fast-growing central and western regions have lower leverage



Source: WIND

With a new round of urbanization, tier 2 cities in fast-growing regions have been recording very healthy population inflows or returning of local talent that used to work in more developed regions. These include Chengdu, Zhengzhou, Changsha, Wuhan, Guiyang, Nanchang and Hangzhou. Population inflows would translate to strong demand for retail banking services such as mortgage, small business loan, wealth management, bank card, etc.

Figure 36: Major tier 2 cities in fast growing regions record healthy population inflows



Source: WIND

Retail banking can be high ROE business

We believe retail banking can be high ROE business due to:

- Retail business tend to retain low cost demand deposits mainly due to convenience of services provided.
- Current retail loans are mainly lent to high quality mid-high income individuals who tend to have higher spending power and possess bigger asset portfolios; this can translate to high bank card fees, wealth management fees and agency fees.
- Current retail loan portfolio concentrated in high quality mortgage loans which tend to have very low default rate and high recovery value.
- Mortgages have much lower risk weighting which means higher leverage and higher ROE.
- Enabled by financial technologies, retail business can be highly standardized/automated and enjoy low marginal cost and very high economy of scale.

Retail banking requires higher upfront investments and long payback period

We believe the competitiveness in the future generation of retail banking lies in a financial institution's ability to acquire new customers at low cost, product innovation, risk management and risk pricing. The traditional approach to retail banking through physical branch network expansion may not work due to the increasing penetration of mobile and internet-based banking service in both urban and rural area.

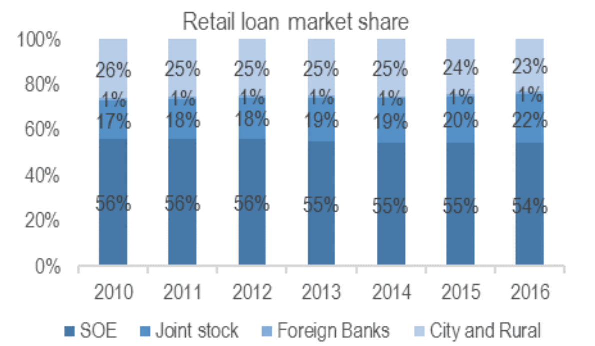
We believe to be competitive in the next generation of retail banking, banks need to invest heavily in IT infrastructure, retail banking human resources, product innovation, process automation, risk identification, etc.

Retail banking competitive landscape fast changing – regional banks catching up on mortgage loans but joint-stock banks focus on consumption loans

As city commercial banks are constrained by their relatively smaller branch network in urban area, and inability to expand physical branches outside their own region, their competitiveness in retail banking has been weaker especially in acquiring low-cost retail deposits and bank cards. This resulted in a much higher deposit cost for city commercial banks compared to other banks.

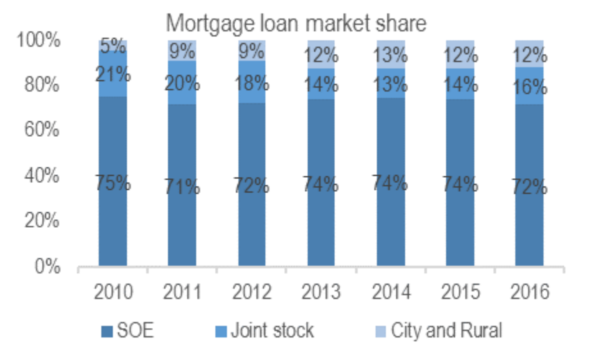
Regional banks' retail loan market share has been declining since 2010. However, their mortgage loan market share has been picking up very quickly likely due to the fast growth of mortgage demand in regional market. Joint-stock banks' retail loan market share has been expanding but not in mortgage market – regional banks' mortgage loans grew much faster from a low base. Joint-stock banks' credit card advance and unsecured consumption loans grew the fastest among all types of banks.

Figure 37: Retail loan market share – regional banks and SOE banks declining while joint-stock banks expanding



Source: PBoC, company data

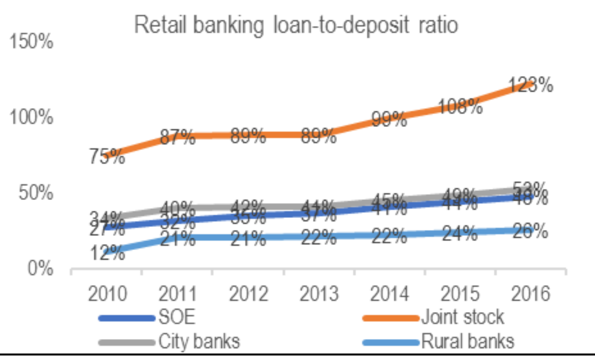
Figure 38: Mortgage loan market share – Regional (city banks+ rural banks) banks taking over market share from SOE banks and joint-stock banks



Source: PBoC, company data

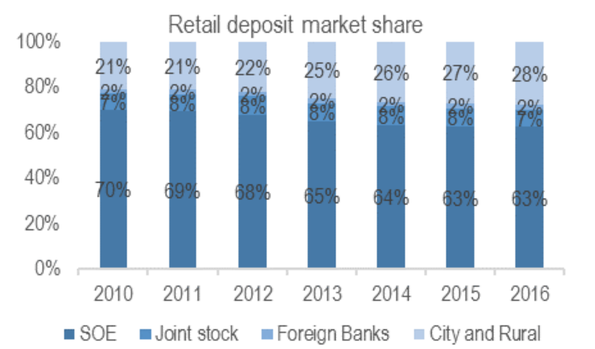
Despite a relatively weaker retail deposit base, joint-stock banks expand their retail loans much faster than their retail deposits. As a result, their retail loan-to-deposit ratio reached to 128% in 2016. On the other hand, rural banks' retail loan-to-deposit ratio has been the lowest due to limited quality loan demand in rural area. Same case for SOE banks, rural deposits are mainly used to fund their corporate loans.

Figure 39: Retail banking loan-to-deposit ratio



Source: PBoC, company data

Figure 40: Retail deposits market share

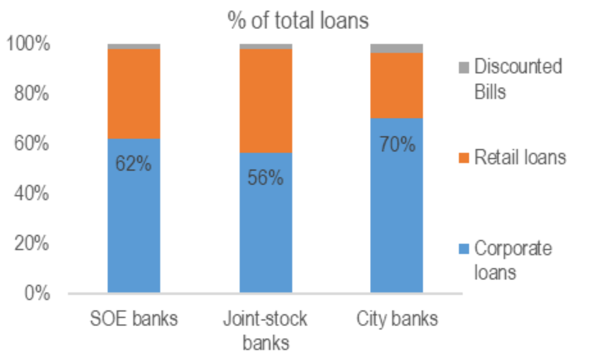


Source: PBoC, company data

SMEs and micro enterprises are also important to retail business

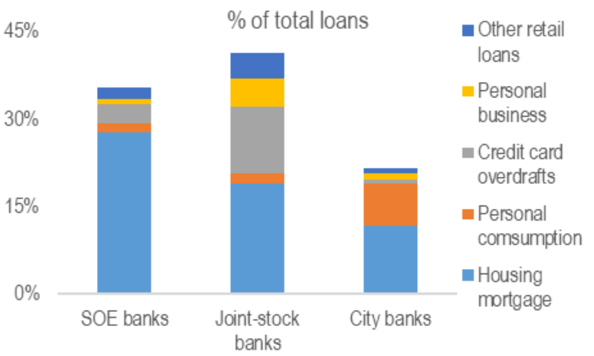
Although personal business loans' share in retail loans have been declining, we believe city commercial banks need to further strengthen their competitiveness in SME and micro loans. They need to leverage on their deep understanding of local SMEs and micro businesses and develop specialization on industry verticals. SME and micro enterprises not only can retain sticky demand deposits but also bring in retail customers through salary account, mortgage loans, etc.

Figure 41: Loan book mix comparison (2017) – City banks rely heavily on corporate loans



Source: Company data

Figure 42: Retail loan mix (% of total loans, 2017) – City commercial banks have smaller exposure in retail loans



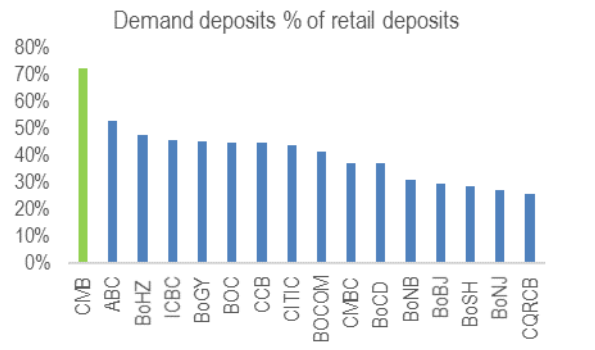
Source: Company data

China Merchants Bank as an example

Taking China Merchants Bank (CMB) as an example. CMB put retail banking as its core strategy as early as 2004. It's one of the early movers among joint-stock banks to put great emphasis on retail banking despite a relatively smaller national branch network compared to SOE banks. It took CMB a long time to establish itself as a retail banking brand – probably one of the best in China.

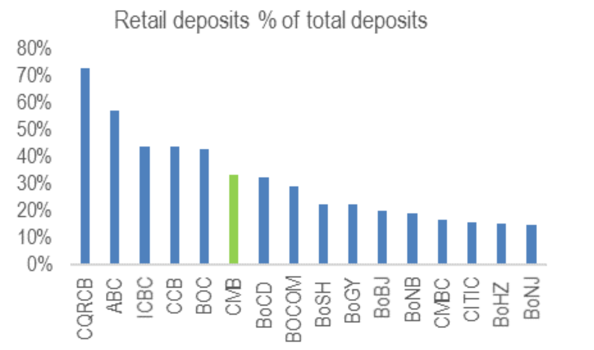
We believe retail demand deposits as % of retail deposits is a very good indicator of the stickiness of a bank's retail customer. As financial disintermediation continues to evolve, time deposits will be replaced by various investment products and majority of banks deposits will be in the form of demand deposits. This has been demonstrated by the best retail banks in developed market such as Hong Kong (Hang Seng Bank) and the US (Wells Fargo). Retail customers tend to leave demand deposits with banks where services such as bank cards, stock trading and wealth management are most convenient. This would leave the bank a low-cost and stable funding base.

Figure 43: CMB's retail demand deposits are the strongest among major banks; even stronger than all SOE banks



Source: PBoC, company data

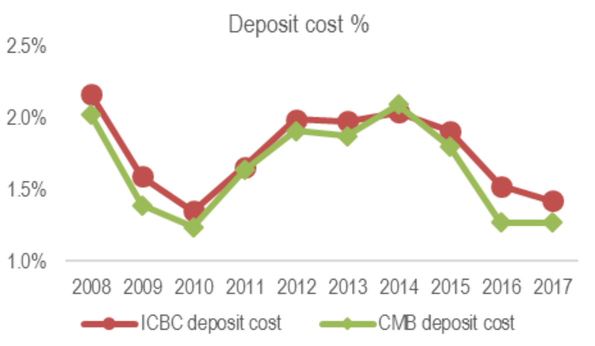
Figure 44: CMB's overall retail deposits' share in total deposits weaker than SOE banks as it mainly focuses in urban area where retail time deposits are replaced by wealth management products



Source: PBoC, company data

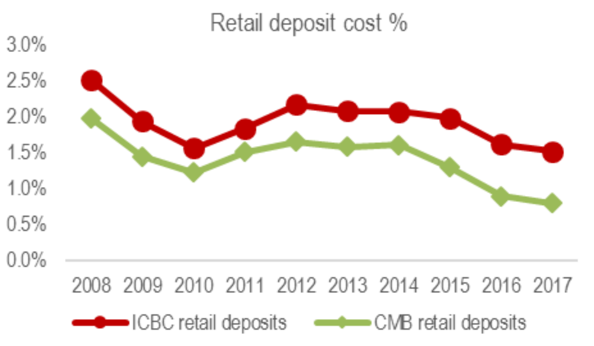
Thanks to its retail banking strategy, CMB enjoys a stable and low cost deposit funding even compared to that of ICBC (**Figure 45**). For example, CMB's deposit cost has been slightly lower than that of ICBC since 2008 despite that its retail deposit as % of total deposits was only 33% in 2017 vs ICBC's 44% (**Figure 48**). This is due to a much higher portion of demand deposits in retail deposits – CMB was 73% in 2017 vs ICBC at only 46%. Demand deposit cost was only 0.30% vs time deposits at 2.44% on average. As a result, CMB's retail deposit cost (0.80%) was 72bps lower than that of ICBC (1.52%) in 2017.

Figure 45: China Merchant Bank deposit rate even lower than ICBC…



Source: Company data

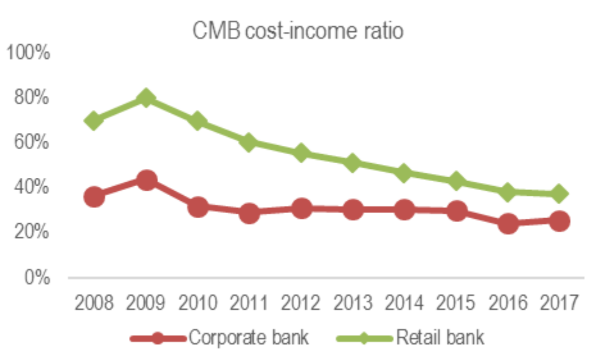
Figure 46: China Merchants Bank retail deposit cost significantly lower than ICBC



Source: Company data

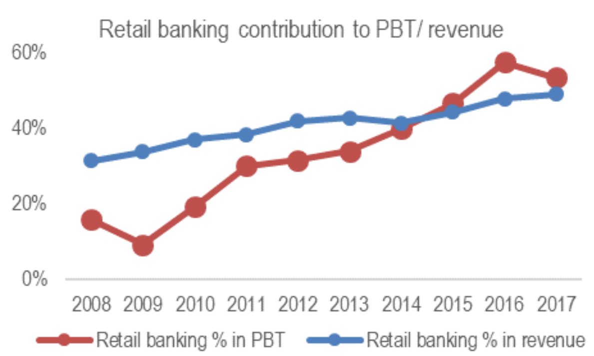
CMB's retail banking cost-income ratio was once above 70% at early stage and, 6 years later in 2010, its cost-income ratio started to decline. Currently retail banking cost-income ratio is still slightly higher than that of corporate banking.

Figure 47: China Merchant Bank retail banking cost-income ratio was as high as 80% at early stage



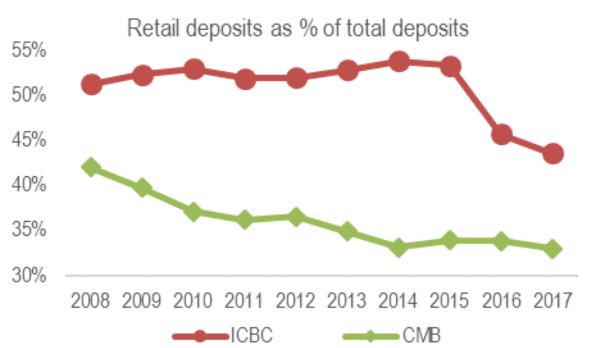
Source: Company data

Figure 48: China Merchants Bank retail banking contribution to revenue and profit steadily increasing



Source: Company data

Figure 49: China Merchant Bank retail deposits as % of total deposits lower than ICBC



Source: Company data

Figure 50: China Merchants Bank retail demand deposits portion significantly higher than ICBC

Source: Company data

Apart from a low-cost deposit base, retail banking customers also generate lucrative fee income businesses. For example, in 2017, CMB's retail banking fee income contributed to

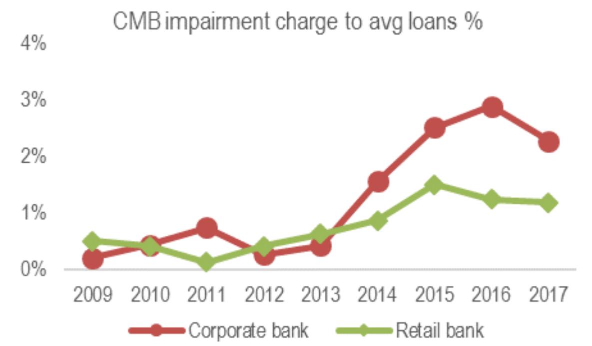
57% of total fee income, and 34% of retail banking revenue. This compares to its corporate banking fee income contributing only 23% of corporate banking revenue.

Retail loans also tend to have much lower impairment charges as CMB is dealing with the best quality individuals with higher purchasing power and large asset portfolio. This holds true for both its mortgage loans and consumption loans.

Figure 51: Retail fee income contribution increasing

Source: Company data

Figure 52: Retail loan impairment charges stable and lower than corporate



Source: Company data

FinTech enables community banking strategy

Community bank strategy providing differentiated retail products

While retail business offers big opportunities for city commercial banks, there are likely to be more competition from both banks and fintech players. For standardized services and products such as retail time deposit and fund transfer, retail banking market concentration is likely to further increase similar to other internet services, as smaller banks tend to be limited by their smaller budget to develop advanced technology compared to larger national banks. However, for non-standardized products that require customization and face-to-face interaction such as small/micro business loans, private bank businesses and bank cards, local banks can utilize their better connection and understanding of local community to differentiate from national players. We believe community banking strategy would be the key to the successful implementation of retail banking.

Current community banking strategy under challenge

2014 and 2015 were peak years for new community bank branches as joint-stock banks and city commercial banks intended to use community bank branches to improve convenience for their customers. Such branches tend to have less employees and only provide limited types of services. Facing competition from internet players such as Alipay, these community bank branches offer limited value to community customers. In 2017, several banks have closed down some community bank branches due to undesired profitability. We believe the problem of current community banking strategy lies in lack of customization of service in individual communities and weak customer acquisition capability.

Internet giants are posing increasing competition

Internet giants are posing increasing competition on retail business & small and micro enterprise business. Large banks are also investing heavily on technology. We believe city commercial banks need to embrace financial technology to improve their service quality, reduce customer acquisition cost, improve customer loyalty and improve risk management. However, compared to SOE banks and joint-stock banks, city commercial banks currently are facing challenges such as a smaller budget to improve IT infrastructure, lack of local talents and inability to expand physical branches in other regions.

We identify three approaches that city commercial banks can adopt to develop its FinTech capability:

1) **Collaborating with internet giants on customer/asset acquisition/risk management:** Given city commercial banks' flexibility, collaborating with internet players can give city commercial banks access to new customers, advanced technology and a wide range of consumption scenarios. In other countries, regional banks are also facing similar situation like city commercial banks in China. Examples include city banks' cooperation with WeBank to provide funding to Weilidai. City commercial banks can also purchase consumer loan ABS issued by internet giants. However, in this case, city commercial banks do not enjoy strong bargaining power.
2) **Utilize technology platform**: City commercial banks need to improve their IT infrastructure in order to improve their in-house competitiveness on mobile banking/digital banking. Examples include Jiangxi Bank's "Shoujimiaodai". Qcloud (cloud service provided by Tencent) offers financial institutions low cost/asset-light solution to improve their IT infrastructure. Ping An Group's OneConnect aims to provide smaller financial institutions an one-stop financial technology solution

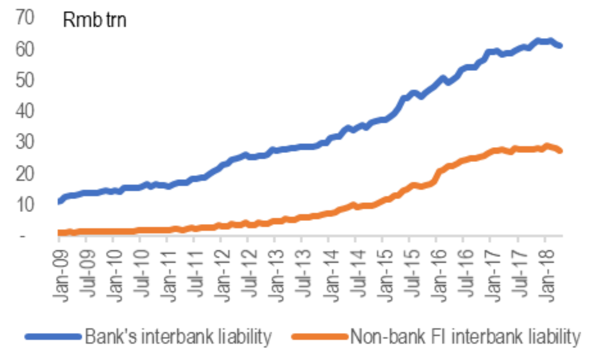
include intelligent marketing, intelligent risk management, retail internet banking platform service, etc.

3) **Industry alliance:** An industry alliance that focuses on in-house FinTech infrastructure development and resource & experience sharing could be a winning strategy to reduce R&D cost and risks.

Unwinding of non-standard credit

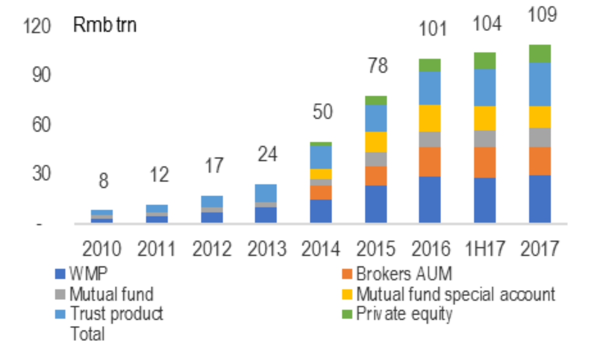
In the past 10 years, with the ongoing financial disintermediation and financial market innovation, the leverage in the financial system has significantly increased – a notable trend was that interbank liability especially for joint-stock banks and regional banks has ballooned. The asset management industry also rises to become the conduit for banks to invest into bond/equity market and non-standard credit assets. As of 1Q18, we estimate financial institutions' interbank liability reached Rmb 90trn (Figure 67), and the big asset management industry AUM reached Rmb 109trn with meaningful funding from commercial banks (Figure 68). This is meaningful compared to total banking system assets of Rmb 250trn.

Figure 53: Commercial banks and non-bank financial institutions interbank liability ballooned



Source: PBOC; Note: We include bond in interbank liability

Figure 54: The asset management industry AUM



Source: PBoC, CBRC, CSRC

However, systemic risks have been built up with increasing fund being leveraged up with duration mismatch, investing into the bond/equity market and flowing into the real estate market and LGFVs. Since the end of 2016, regulators started to roll out a series of regulations aiming at reducing systemic financial risks. To control housing bubble and cleanup of local government debt have also been put at the top of the agenda. On 27th April, the finalized regulation on the asset management industry was released by PBOC, CSRC and SAFE which depicted the deadline to unwind the uncompliant AUM by end of 2020.

We believe this deleveraging process will last during 2018-2020 until interbank liability, conduit type of asset management business and non-standard credit have significantly fallen. We view this positive for the sustainable growth of China's financial market and it will help improve the capital allocation efficiency. However, short-term pain is inevitable. We expect to continue seeing more mini liquidity crunches in certain parts of the financial system for the rest of 2018. In addition, joint-stock banks and regional banks may continue to unwind the non-standard credit and may hurt by competition in deposits.

Where will non-standard credit go?

We believe three ways to digest non-standard credit: 1) switch to loans; 2) switch to bond and ABS; and 3) switch to private equity product. Not all non-standard credit can be switched to other forms of credit.

- Switch to loans: Only a limited portion of non-standard assets can be switched to loans. This approach would still be subject to loan quota guidance and add capital pressure to banks; credit to companies that are in industry not supported by the regulators may be difficult to switch to loans; regional banks' non-standard assets to non-local companies are not able to switch to loans.

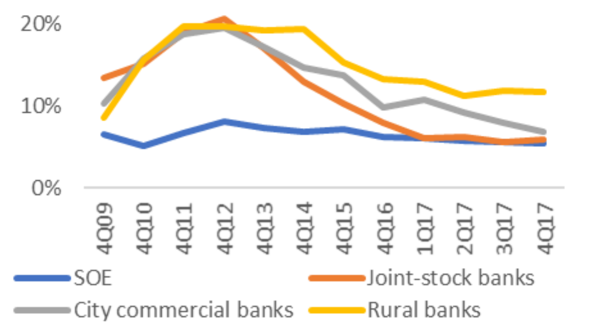
- Switch to bond and ABS: Not all non-standard credit can be switched to bond or ABS. This is due to higher requirement by ABS listing rules.
- Switch to asset management product: Non-standard assets can be packed into asset management products that do not provide principal or return guarantee. The new asset management industry rules prohibit duration mismatch which may make it hard for banks to issue short-term wealth management products that are backed by non-standard credit.

Unwinding of non-standard assets may be painful for smaller banks

Since 2010, joint-stock banks and regional banks profit growth had been driven by financial market operations. Unwinding of the position may lead to painful headline contraction. As the loan-deposit spread narrowed, under the constraint by loan-deposit ratio, loan quota and capital charges, joint stock banks and regional banks (city commercial banks and rural banks) significantly increased their asset allocation into investment (bond and non-standard assets) and interbank assets. These assets are backed by interbank liability which can be scaled up in a short period. Profit from the financial market operations has been driving the profit growth for these smaller banks in the past five years.

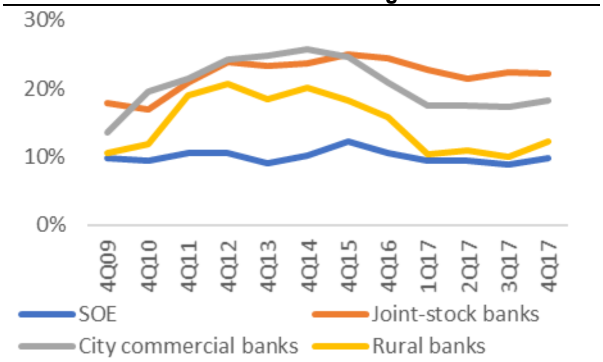
We expect these smaller banks' revenue and profit growth to be under pressure with the contraction in receivables and proper capital/provisioning charge on the non-standard credit.

Figure 55: Interbank assets as % of total assets



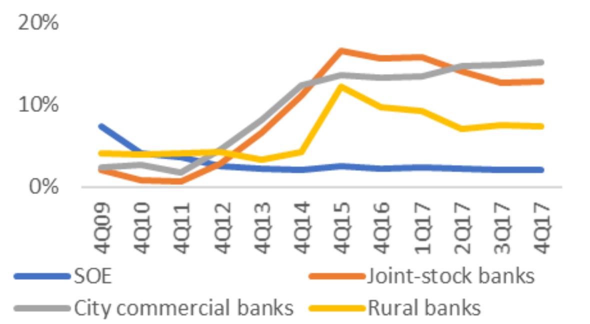
Source: WIND, company data

Figure 56: Interbank liabilities as % of total liabilities – since end-16 this has been declining



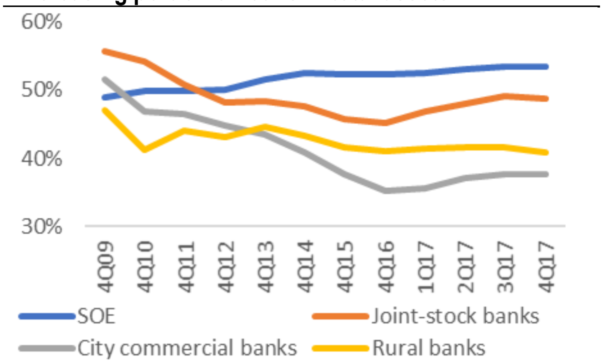
Source: WIND, company data

Figure 57: Investment receivables as % of total assets



Source: WIND, company data

Figure 58: Unwinding of non-standard assets has led to increasing portion of loans in total assets



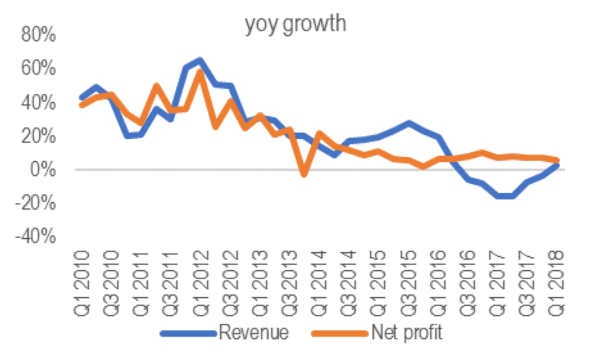
Source: WIND, company data

Smaller banks may see further revenue and asset quality pressure

Non-standard credit will need to be securitized through ABS market or come back to the bank loans. However, this will need to be funded by deposits instead of interbank liability. In general joint-stock banks and regional banks may have weaker deposit base. Rising deposit costs due to increased competition in 2018 have hurt NIM for some banks. This may add asset quality pressure as loan quota will still be limited by capital ratios and funding.

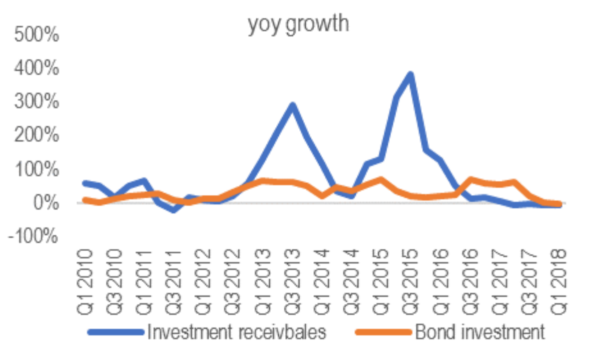
Financial market operations had been a very important profit driver for regional banks and joint-stock bank before 2017. The combined size of interbank assets, investment receivables and bond investment had even exceeded that of loans. However, this is changing under regulator's determination to deflate the bond bubble and reduce leverage in the interbank market. In 2018, regional banks' financial market operations may suffer from regulatory clampdown and their revenue growth is likely to remain under pressure. However, this may partly be compensated by the rising spread.

Figure 59: Industrial Bank (601166.SS) one of the biggest players in the interbank market experienced revenue contraction in 2017



Source: Company data

Figure 60: Industrial Bank investment receivables and bond investment shrinking



Source: Company data

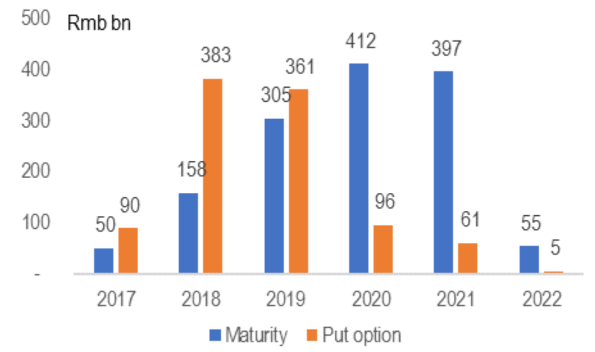
Bond market may see elevated defaults – this may hurt banks' asset quality

Onshore bond market was the first to feel the pain as it is liquid and where the most leverage lies in. However, we believe the goal is a normalization of credit growth and to force the credit into the real economy. Real estate developers and LGFVs are likely to feel very tight refinancing environment as they are two largest group of borrowers in the non-standard credit market. Therefore, their incentive to borrow in offshore bond market is likely to significantly increase in 2018.

For developers, their incentive to recycle cash from fast sales will be higher in 2018 despite very tight price cap policy in tier 1 and tier 2 cities. Sector consolidation will intensify.

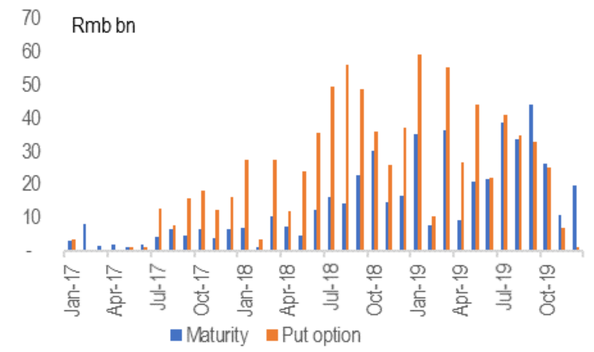
Due to the bull physical market in 2015-2017 and the loosening of onshore bond issuance for developers, a lot of onshore developer bonds were issued during that time and will reach mature or puttable date in 2018-2019. According to WIND data, there are Rmb 158bn of developer bonds that mature in 2018 and Rmb 305bn in 2019. In addition, a historical high of Rmb 383bn of developer bonds will reach puttable date in 2018 and Rmb 361bn in 2019. We remind investors to watch out for high maturity month in 2H18 and early 2019. Some of these developers may find it hard to refinance through onshore bond market.

Figure 61: Onshore developer bond will hit maturity and put option wall in 2018-2019



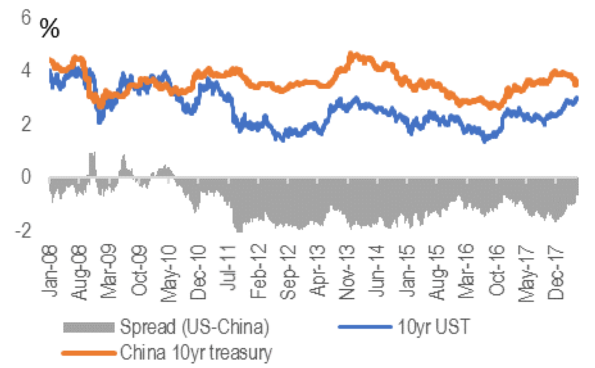
Source: WIND

Figure 62: 2H18 and early 2019 will see large amount of onshore developer bonds mature and reach puttable date



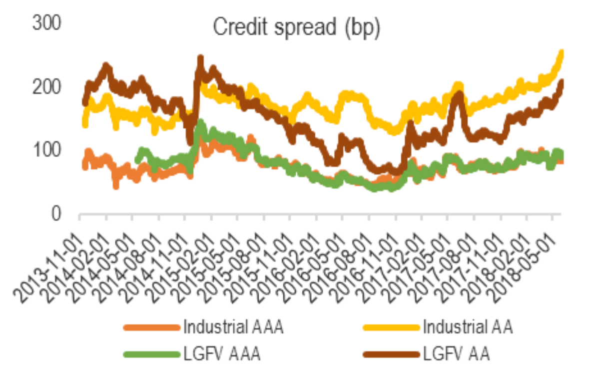
Source: WIND

Figure 63: China – US 10yr treasury spread significantly narrowed



Source: WIND

Figure 64: China onshore credit spread likely to continue widening

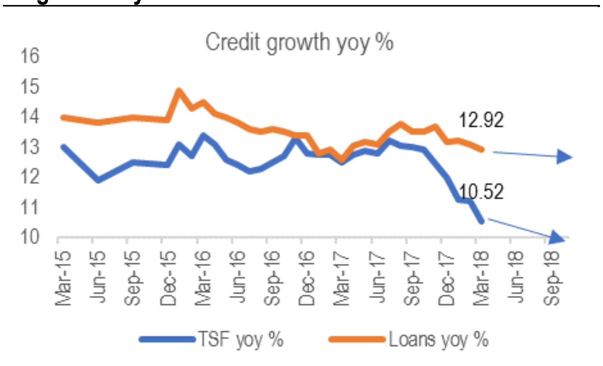


Source: WIND

GDP growth may be affected by slow credit growth

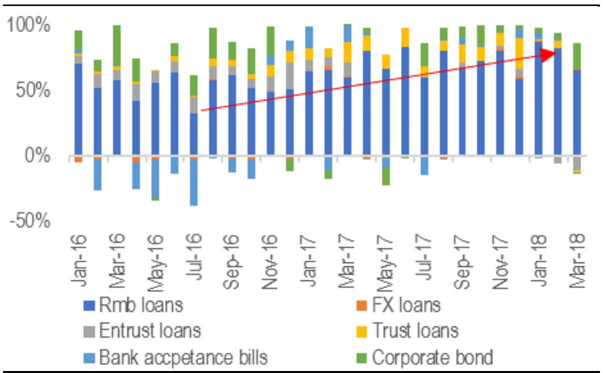
We expect the broad credit growth as measured by Total Social Financial growth will continue to trend down with a significant drop in non-standard credit such as entrust loans and trust loans while bank loan growth likely to be stable to absorb the unwinding non-standard credit. Overall real estate developers and LGFVs are likely to find it very hard to refinance onshore and their funding cost is likely to significantly increase in 2018.

Figure 65: Credit growth likely to trend down; total social financing growth likely to slow down significantly



Source: PBOC, WIND

Figure 66: New total social financing mix will shift heavily towards bank loans in 2018



Source: PBOC, WIND

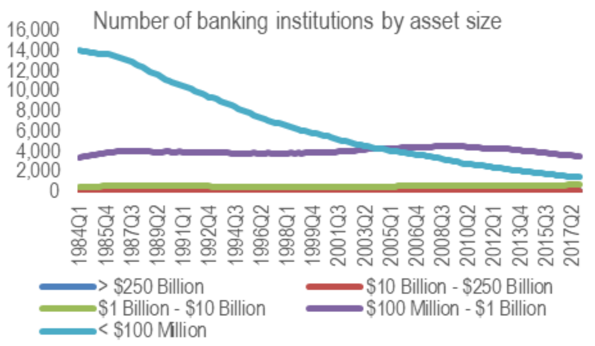
Regional banks in the US

We analyze the FDIC's banking system operation data grouped by asset size of banks. The top 82 US regional banks are in the US$10-250bn group (in total 114 banks), and accounted for 61% of total assets of this group. We can see while the market share of this group has been gradually declining, their profitability and asset quality have been comparable to the >US$ 250bn category which contains the 9 largest banks in the US.

We believe this is attributable to their higher asset yield, competitive retail business, relatively strong funding base, lower employee cost and good asset quality. The regional banks in the US remain competitive compared to the bigger national banks despite their more traditional business model that relies on loans and deposits. Even the smaller banks in the US$ 1-10bn and US$100m-1bn group have maintained good ROAs and ROEs. However, the smallest community banks have been dragged by their high operating cost due to small scale.

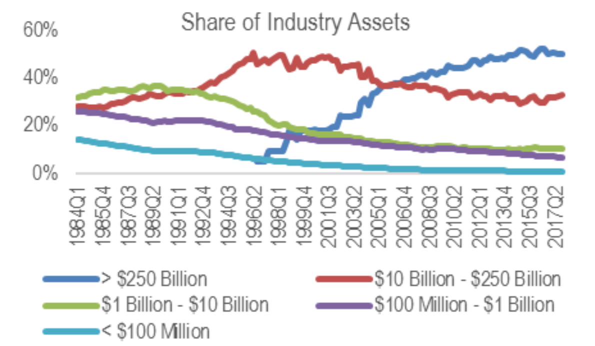
We believe for the regional banks to remain competitive, the key is to have a competitive retail business, stable funding base, strong risk pricing capability and good operating efficiency. However, selection bias may exist as weaker and smaller banks got acquired by larger banks.

Figure 67: Number of banking institutions by asset size – number of regional banks (<$250bn) significantly reduced since 80s'



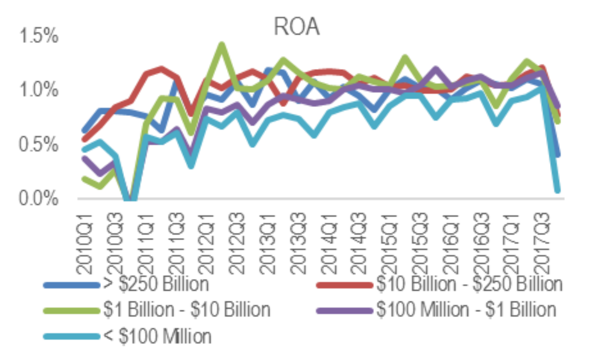
Source: FDIC

Figure 68: Smaller regional banks market share declining



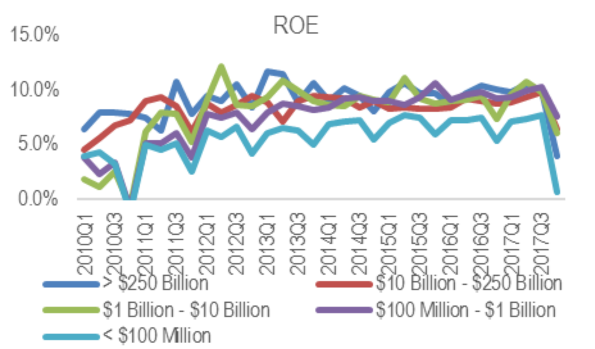
Source: FDIC

Figure 69: The $10bn-250bn group recorded competitive ROA



Source: FDIC

Figure 70: The $10bn-250bn group recorded competitive ROE

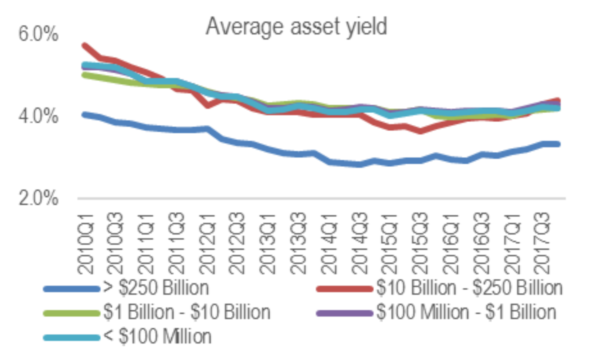


Source: FDIC

Asset concentrated in loans while funding mainly relying on deposits

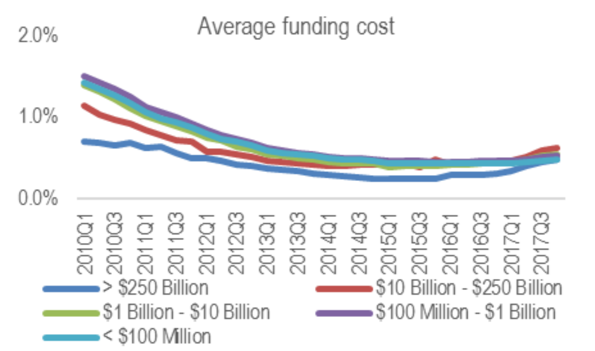
The US$10-250bn group tends to have higher asset yield but also higher funding cost than the bigger national banks. The $10bn-250bn group has around 100bps higher asset yield than the bigger national banks but only 15-20bps higher funding cost. As a result, their net interest margins have been 70-100bps higher than the bigger national banks.

Figure 71: The $10bn-250bn group has around 100bps higher asset yield than the bigger national banks



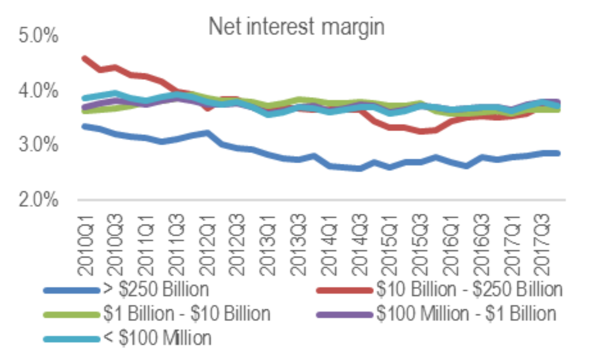
Source: FDIC

Figure 72: The $10bn-250bn group has 15-20bps higher funding cost than the bigger national banks



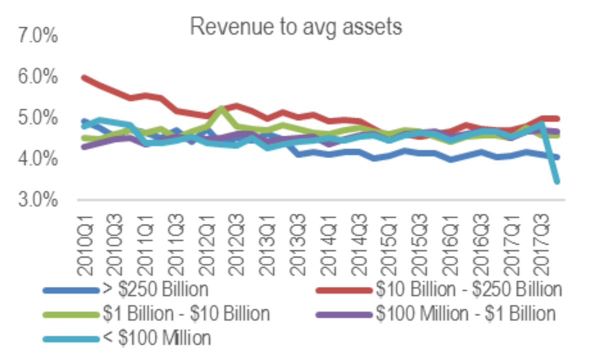
Source: FDIC

Figure 73: The $10bn-250bn group's net interest margins have been 70-100bps higher than the bigger national banks



Source: FDIC

Figure 74: Revenue to avg assets - the $10bn-250bn group has been at the top

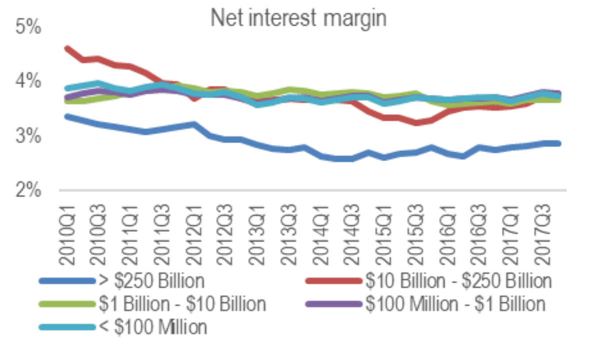


Source: FDIC

Operating efficiency

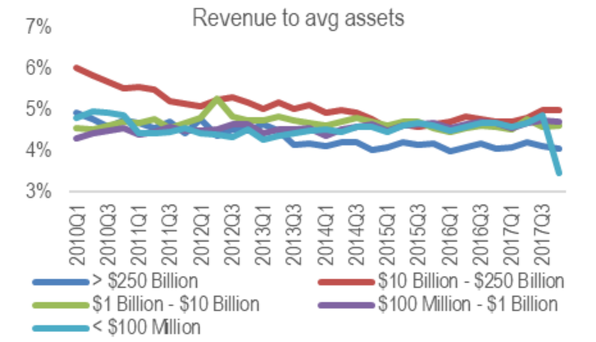
Despite that regional banks tend to focus on labor intensive SME and retail business, their cost-income ratio is much lower than other type of banks. This is likely due to their less involvement in trading and investment banking business which tend to have higher employee cost than simple commercial bank business.

Figure 75: The $10bn-250bn group's net interest margins have been 70-100bps higher than the bigger national banks



Source: FDIC

Figure 76: Revenue to avg assets - the $10bn-250bn group has been at the top

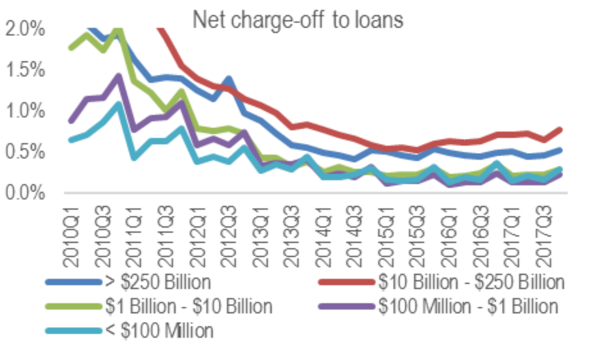


Source: FDIC

Asset quality

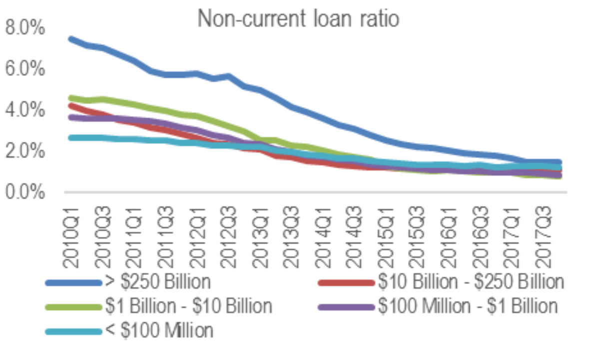
The US$10-250bn group has been maintaining a high charge-off rate to keep non-current loan ratio relatively low. Since 2015, their charge-offs picked up more notably than other banks.

Figure 77: Net charge-off to loans



Source: FDIC

Figure 78: Non-current loan ratio

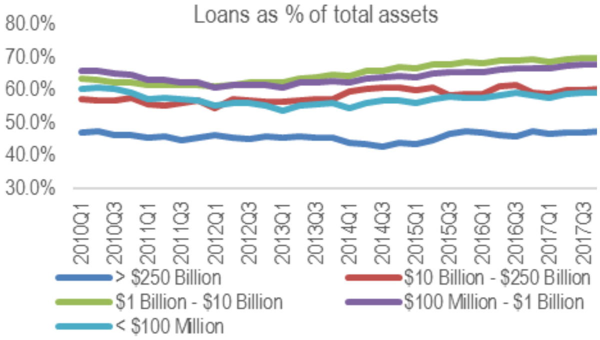


Source: FDIC

Asset allocation and funding source

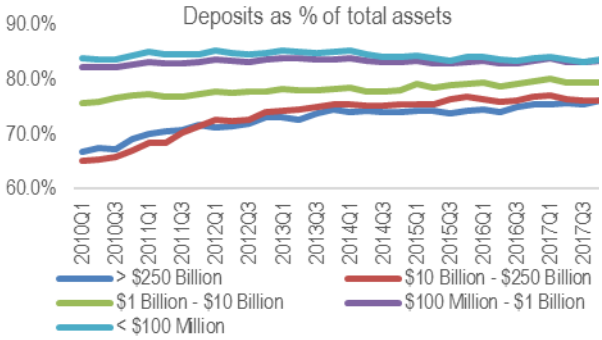
The US$10-250bn group has a much higher allocation to loans than the bigger national banks. On the funding side, the US$10-250bn group's reliance on deposits has been similar to that of larger national banks.

Figure 79: Smaller banks tend to have higher portion of loans on balance sheet and lower portion of investment and trading assets



Source: FDIC

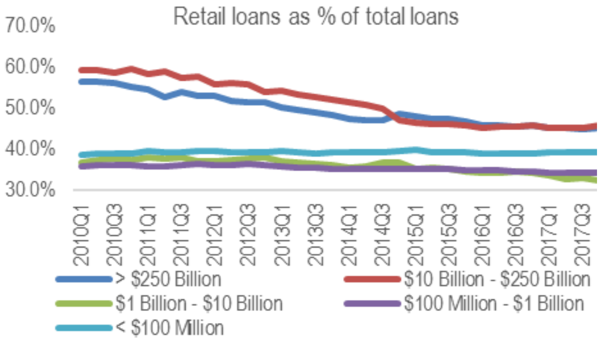
Figure 80: Larger banks tend to have more bond and interbank funding



Source: FDIC

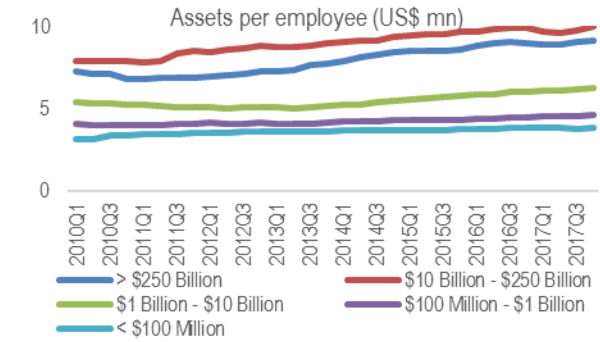
Retail business of the US$10-250bn group has been equally competitive as larger national banks, as measured by retail loans as % of total loans. Interestingly, this does not translate to a lower ratio of asset per employee. In fact, the US$10-250bn group has the highest ratio of asset per employee. With higher asset yield and lower average cost per employee ratio, this translates to a lower cost-income ratio than the larger national banks.

Figure 81: Retail loans account for close to half of loan book, similar to larger banks



Source: FDIC

Figure 82: US$10-250bn group assets per employee highest among all banks



Source: FDIC

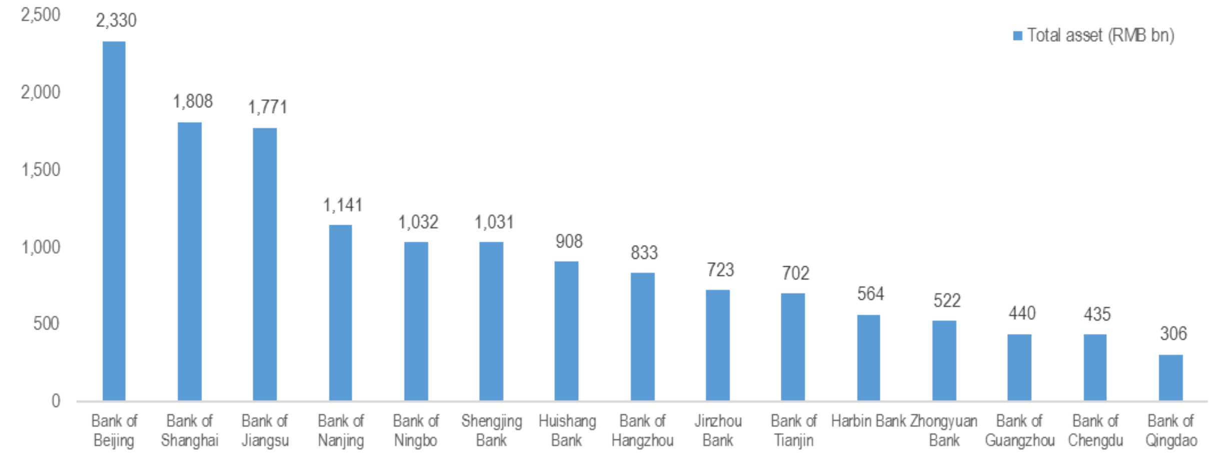
Top 15 city commercial banks in China

Leading city commercial banks in China – profitability diverged

Most of the top city commercial banks are listed in stock exchanges. Therefore, we are able to obtain up-to-date financial information till the year end of 2017. We listed the top 15 city commercial banks in China, ranked by total assets as at 31 December 2017. All of the top six city commercial banks' assets have exceeded RMB 1,000bn and their ROE are in the range of 12-17%. The 7th – 15th banks' profitability are more diverged ranging from 8% - 18%.

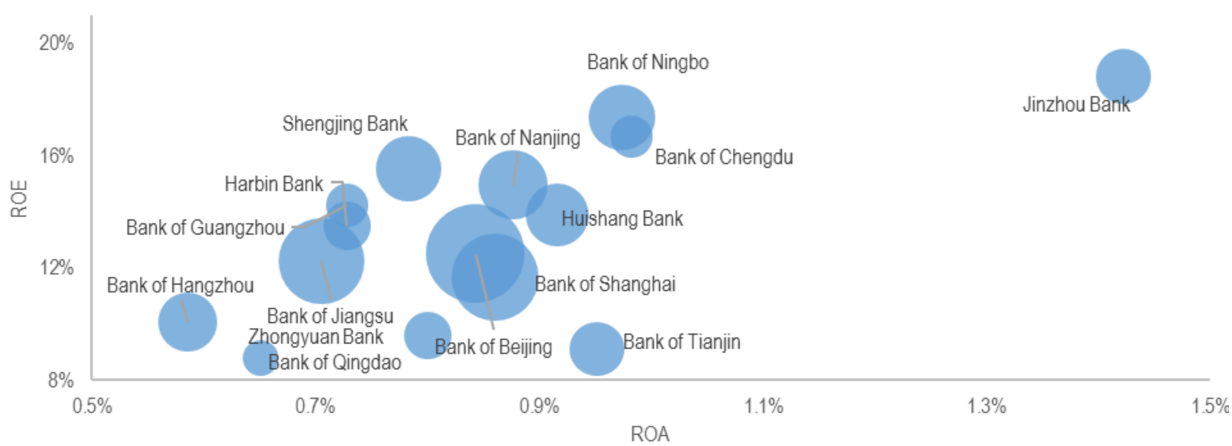
The ROAs also showed variance ranging from 0.6% - 1.4% with Jinzhou Bank showing the highest ROA. We will explore the drivers behind this divergence later.

Figure 83: Top city commercial banks in China, ranked by total assets (2017)



Source: Company data

Figure 84: Top city commercial banks in China, ROA v ROE v Asset (2017)



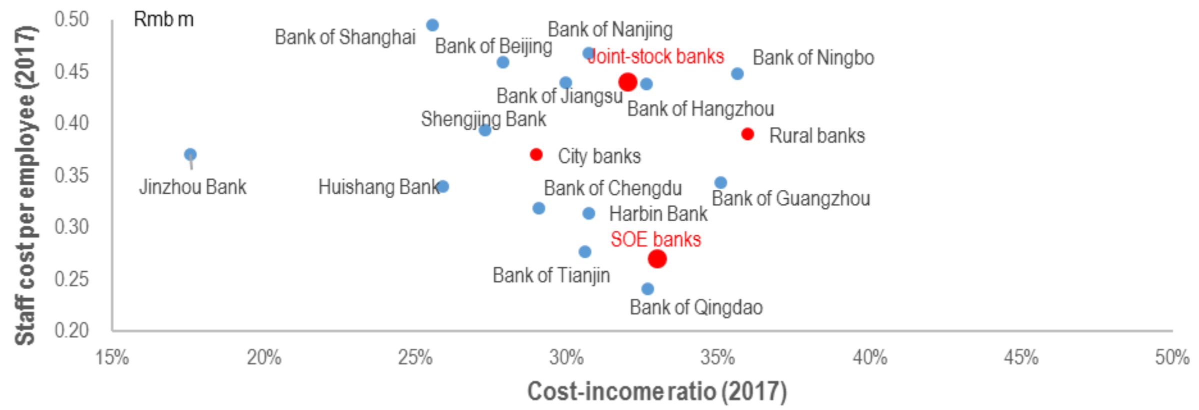
Source: Company data, AMTD Research; Note: Bubble size represents relative asset size

Productivity and cost efficiency

Staff costs normally account for 50-60% of operating cost for a bank. Therefore, staff cost is an important determinant regarding a bank's cost efficiency. Naturally banks that operate in more developed regions tend to have higher cost-income ratio. However, a bank's branch productivity as measured by asset per branch or revenue per branch is also an important determinant of a bank's operating efficiency. We can see that city commercial banks and joint-stock banks are within the same group as having relatively low cost to income ratio but high staff cost per employee as the expenses of human capital in cities are more expensive than rural areas.

The majority of city banks with relatively high staff cost per employee ratio are located in tier 1 or 2 cities such as Beijing, Shanghai and other southeast coastal areas. These banks normally have a staff cost per employee at Rmb 0.4-0.5 million in 2017. In the meanwhile, city commercial banks' cost-income ratio ranged from 18% - 36%.

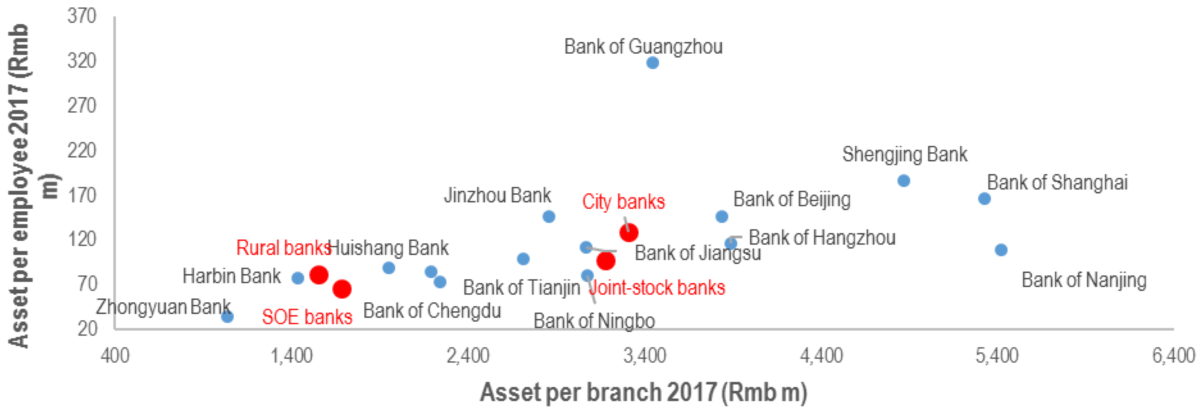
Figure 85: Cost-income ratio vs staff cost per employee



Source: Company data, AMTD Research

Branch productivity is another important driver for cost-income ratio. The branch productivity and employee productivity varied significantly from bank to bank. Most banks in southeast coastal areas perform above average with high asset per branch and asset per employee ratio.

Figure 86: Asset per branch vs asset per employee (2017)

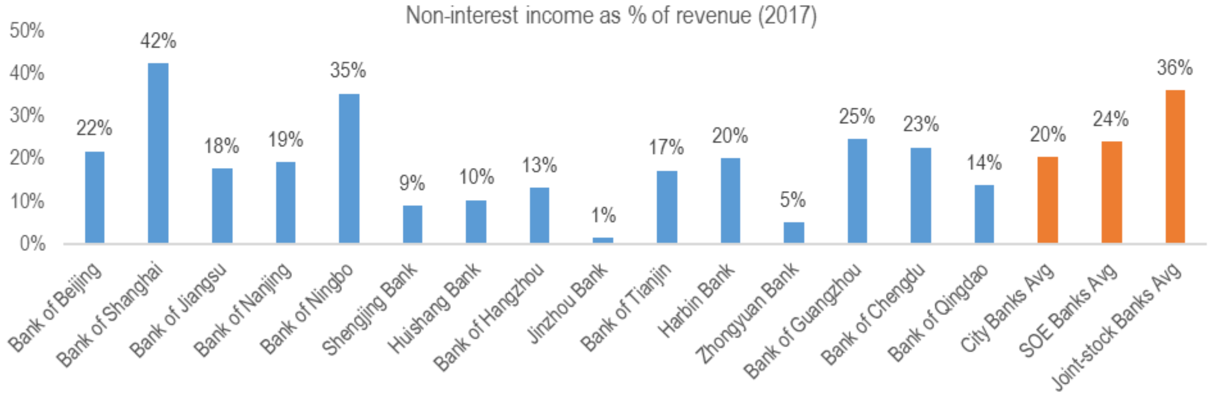


Source: Company data, AMTD Research

Intermediary business

In general, city commercial banks tend to have lower revenue contribution from fee income business compared with SOE banks and joint-stock banks. However, banks in Beijing, Shanghai and other southeastern cities tend to earn a larger proportion from fee income and trading gains than peers. We believe this is attributable to a better developed wealth management product (WMP) market in these areas thus higher fee income from WMPs and wide use of cards thus higher fee income from cards and related value-added services.

Figure 87: Lower contribution from fee income and other incomes of city commercial banks' income portfolio

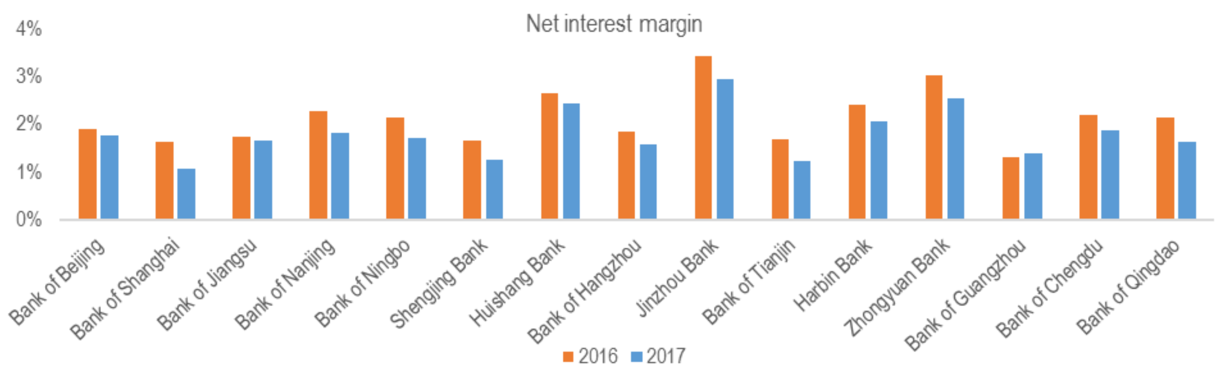


Source: Company data, AMTD Research

Net interest margin (NIM) trend

The overall trend of commercial banks' NIM was decreasing during 2017. In a slow credit growth environment, the banks' NIM performance is likely to further diverge. City commercial banks are likely to face bigger NIM pressures as they have weaker deposit base. Regarding absolute level of net interest margins, Jinzhou Bank maintained the highest margin among peers even though it has suffered a decline of around 50 bps. On the contrary, Bank of Shanghai has the lowest NIM in 2017 at 1.07%. The difference reflects different banks' asset pricing capability and the capability to source stable and low-cost funding.

Figure 88: Net interest margin trend

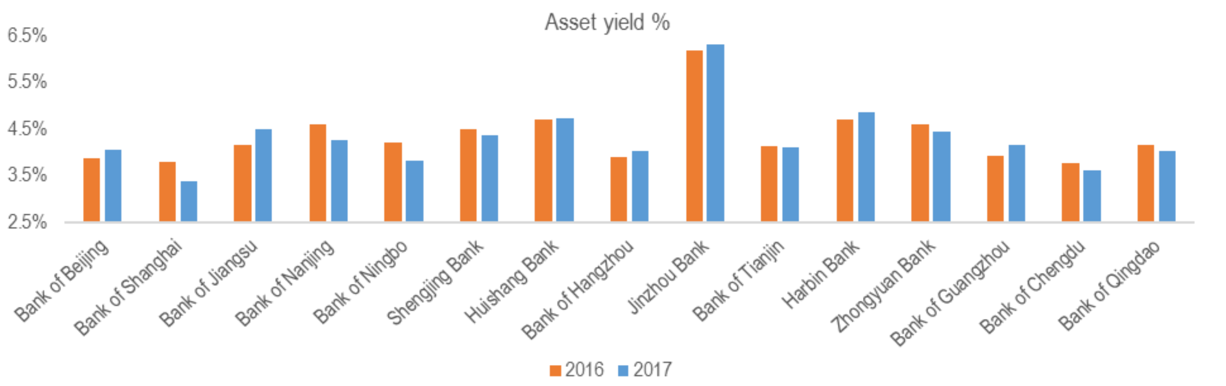


Source: Company data, AMTD Research; Note: Net interest margin is calculated as net interest income divided by simple average of total assets.

Asset pricing

Trend of assets yield of different banks has been varied in 2017. Jinzhou Bank has the highest asset yield, which is consistent with its high NIM. However, asset yield of banks in tier 1 and 2 cities tend to be lower than their peers due to existence of bigger corporates and lower risk appetite.

Figure 89: Asset yield trend

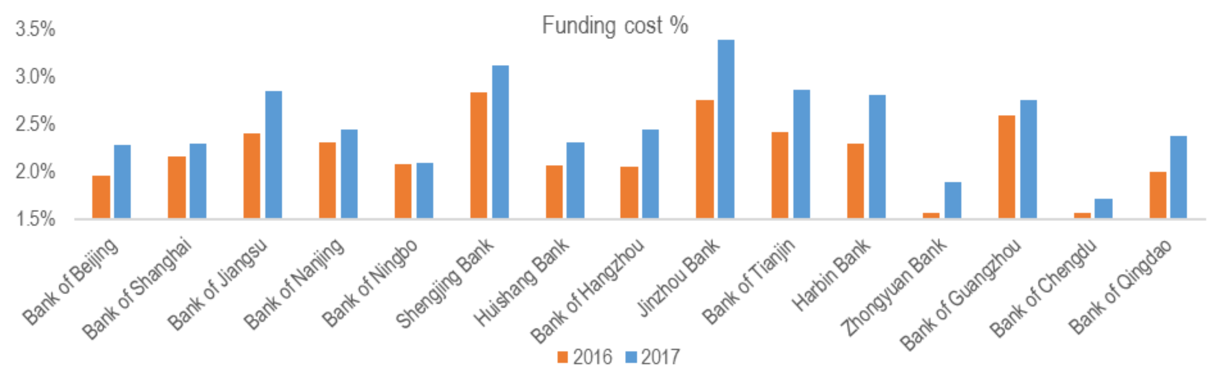


Source: Company data; Note: Asset yield is calculated as gross interest income divided by simple average of total assets.

Funding cost

In general, city banks' funding costs are on a rising trend in 2017. This may continue into 2018 given the tight liquidity condition. The absolute level of funding costs is an important driver of a bank's NIM. Banks with higher funding cost tend to have lower NIMs, vice versa. For example, Shengjing Bank and Bank of Tianjin have funding cost at the high end in the sector, as a result, their NIMs are also at the lower end in the sector. However, Jinzhou Bank keeps its NIM high due to its high asset yield.

Figure 90: Funding cost trend



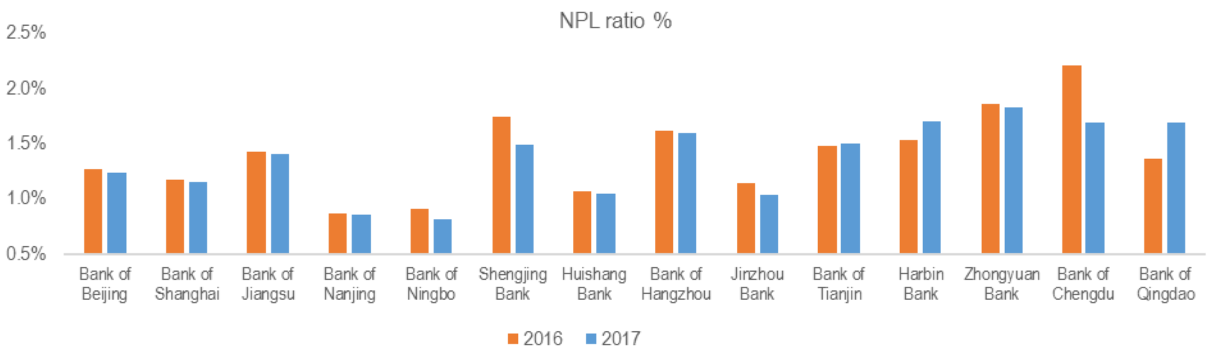
Source: Company data; Note: Funding cost is calculated as gross interest expense divided by simple average of total assets.

Asset quality

NPL ratios remained stable for most city banks in tier 1 or tier 2 cities while some banks' NPL ratio suffered a slight increase during 2017. Their NPL ratio as of 2017 ranged from 0.82% to 1.70%. The impairment charge level of banks in top tier cities performed better than that of other cities.

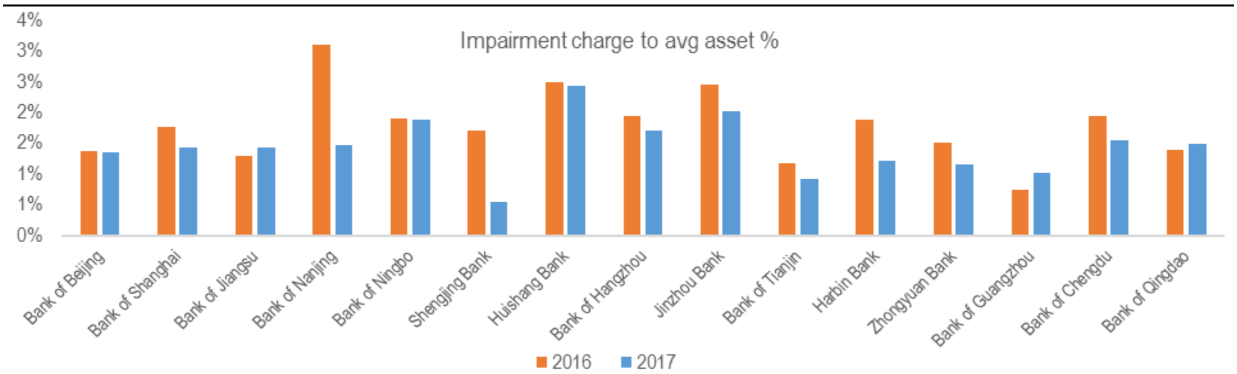
In the meanwhile, a bank's provisioning level as measured by impairment charges to total assets ratio could vary according to a bank's asset quality trend, sufficiency of provision allowance, strength of pre-provisioning profit, as well as expectation of future asset quality trend.

Figure 91: NPL ratios remained relatively stable



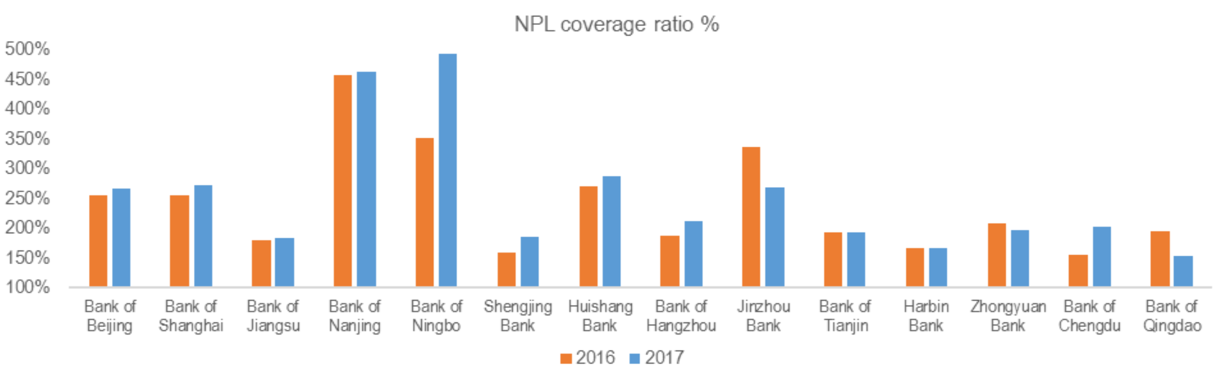
Source: Company data, AMTD Research

Figure 92: Impairment charge levels varied among different banks



Source: Company data, AMTD Research; Note: Impairment charges include bad debt charge on loans as well as other assets such as securities investment and interbank assets.

Figure 93: NPL coverage ratio relatively high, with a few outliers

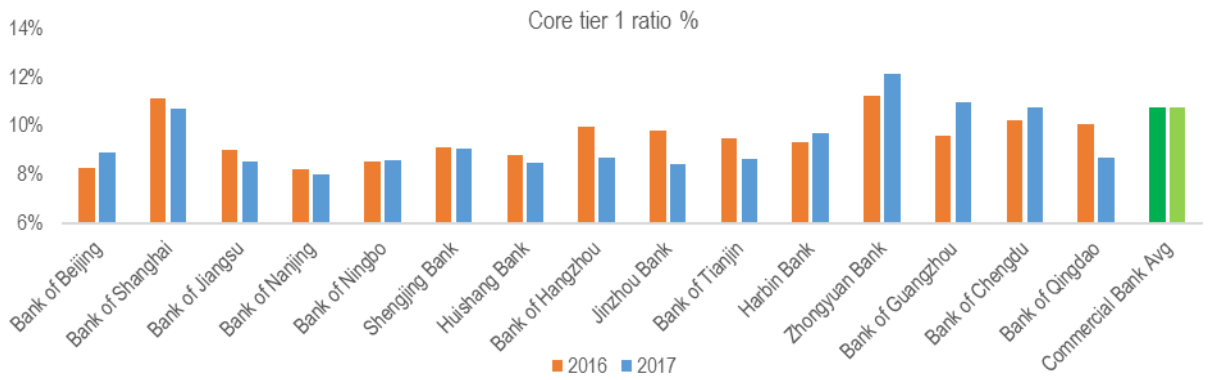


Source: Company data, AMTD Research

Capital adequacy

Due to their fast balance sheet expansion and relatively low profitability, city commercial banks' core tier 1 ratios are mostly in the range of 8%-9%. This may imply city banks are likely to face shortage of capital in light of reducing shadow credit and put them back to loans. Several city commercial banks have employed tools such as issuing preference shares to increase capital ratio in 2016 and 2017.

Figure 94: Core tier 1 ratio of city commercial banks is at the average level



Source: Company data, Wind, CBRC, AMTD Research

Figure 95: Listed city commercial banks valuation comparison

	Ticker	P/BV			ROE			P/E			Dividend yield %	
		2017	2018e	2019e	2016	2017	2018e	2017	2018e	2019e	2017	2018e
Huishang Bank	3698.HK	0.68	0.61	0.53	14.77%	13.90%	14.40%	5.17	4.58	4.18	1.6%	2.7%
BOCQ	1963.HK	0.62	0.42	0.38	15.53%	14.95%	14.05%	4.35	3.17	2.94	5.4%	5.7%
BOTJ	1578.HK	0.78	N/A	N/A	12.10%	9.13%	N/A	8.71	N/A	N/A	3.3%	N/A
BOZZ	6196.HK	0.84	N/A	N/A	20.46%	18.74%	N/A	4.79	N/A	N/A	5.4%	N/A
BOZY	1216.HK	0.95	N/A	N/A	9.93%	9.60%	N/A	10.19	N/A	N/A	N/A	N/A
BOJZ	416.HK	0.93	N/A	N/A	25.16%	21.03%	N/A	4.81	N/A	N/A	2.3%	N/A
Shengjing Bank	2066.HK	0.58	N/A	N/A	15.77%	15.55%	N/A	3.94	N/A	N/A	4.6%	N/A
Harbin Bank	6138.HK	0.54	0.34	0.30	14.01%	13.50%	13.33%	4.22	2.68	2.37	5.1%	6.6%
BOQD	3866.HK	0.96	N/A	N/A	12.20%	8.78%	N/A	12.94	N/A	N/A	3.1%	N/A
BOSH	601229.SS	0.87	0.81	0.73	13.75%	12.63%	11.19%	7.23	7.12	6.55	2.7%	3.3%
BOBJ	601169.SS	0.96	0.70	0.64	15.09%	12.79%	11.64%	7.22	6.05	5.70	2.9%	4.4%
BONB	002142.SZ	1.79	1.38	1.18	17.72%	19.02%	18.77%	9.89	7.69	6.35	1.5%	2.7%
BONJ	601009.SS	1.14	0.96	0.83	16.20%	16.88%	15.69%	7.10	5.94	5.14	2.4%	4.5%
BOGY	601997.SS	1.24	0.93	0.78	20.83%	19.76%	20.04%	6.78	5.11	4.39	1.9%	3.2%
BOJS	600919.SH	0.93	0.71	0.63	14.36%	13.66%	12.18%	7.14	5.73	5.17	2.4%	3.3%
BOHZ	600926.SH	1.01	0.83	0.75	11.42%	11.32%	9.77%	9.30	8.10	7.26	1.9%	3.0%
BOCD	601838.SH	N/A	0.97	0.86	12.24%	16.68%	14.79%	N/A	7.21	6.32	N/A	2.8%
	H-share avg	0.76	0.45	0.40	15.55%	13.91%	13.93%	6.57	3.48	3.16	3.8%	5.0%
	A-share avg	1.14	0.91	0.80	15.20%	15.34%	14.26%	7.81	6.62	5.86	2.3%	3.4%
	City banks avg	0.93	0.79	0.69	15.38%	14.58%	14.17%	7.11	5.76	5.13	3.1%	3.8%

Source: Bloomberg, AMTD Research; Note: Priced as of 6 July 2018

Potential impact from stricter NPL classification standard

In June 2018, according to news report, CBRC has required the commercial banks to strengthen their NPL classification standard and include all loans overdue for more than 90 days as NPLs. As of YE17, we found most of the state banks and larger joint stock banks classified all >90day overdue loans as NPLs. Some smaller joint-stocks, city commercial banks and rural banks, especially smaller ones have weaker classification standards. Our sensitivity analysis on potential impact on the top 15 city commercial banks suggest only a selective few would need to provide additional provision under this rule and the impact on capital ratios ranged from 4bp – 99bp.

Figure 96: Potential impact on NPLs, profit and capital ratio if all >90day overdue loans need to be classified as NPLs and a 150% NPL coverage ratio

Rmb m	2017	Bank of Beijing	Bank of Shanghai	Bank of Jiangsu	Bank of Nanjing	Bank of Ningbo	Shengjing Bank	Huishang Bank	Bank of Hangzhou	Jinzhou Bank	Bank of Tianjin	Harbin Bank	Zhongyuan Bank	Bank of Chengdu	Bank of Qingdao
Reported	NPL balance	13,371	7,644	10,554	3,345	2,839	4,156	3,300	4,519	2,247	3,737	4,037	3,643	2,519	1,659
	NPL ratio	1.24%	1.15%	1.41%	0.86%	0.82%	1.49%	1.05%	1.59%	1.04%	1.50%	1.70%	1.83%	1.69%	1.69%
	NPL coverage ratio	266%	273%	184%	463%	493%	186%	287%	211%	269%	194%	167%	198%	201%	154%
	Total provisions	35,527	20,830	19,445	15,472	14,001	7,731	9,486	9,537	6,036	7,243	6,751	7,194	5,074	2,547
	PBT	22,820	16,082	13,790	11,884	10,163	8,229	9,613	5,004	12,053	4,883	7,128	5,028	4,650	2,370
	Net profit	18,882	15,337	12,016	9,761	9,356	7,574	7,812	4,550	9,090	3,943	5,309	3,906	3,913	1,904
	Core tier 1 ratio	8.9%	10.7%	8.5%	8.0%	8.6%	9.0%	8.5%	8.7%	8.4%	8.6%	9.7%	12.2%	10.5%	8.7%
	Total capital ratio	12.4%	14.3%	12.6%	12.9%	13.6%	12.9%	12.2%	14.3%	11.7%	10.7%	12.3%	13.2%	13.7%	16.6%
	Overdue loans	20,556	6,979	13,876	5,065	2,707	5,312	6,793	6,311	3,096	6,801	9,329	10,554	4,680	3,513
	Up to 3 months	6,618	1,640	3,686	1,316	488	1,244	2,637	914	873	2,192	4,684	2,497	1,387	1,551
	>90 day overdue loans	13,938	5,338	10,190	3,749	2,219	4,068	4,156	5,396	2,222	4,608	4,644	8,057	3,294	1,962
	>90day overdue/NPL	104%	70%	97%	112%	78%	98%	126%	119%	99%	123%	115%	221%	131%	118%
Potential impact assuming 100% >90 day overdue loans classified as NPLs	Additional NPL	567	-	-	404	-	-	856	877	-	871	607	4,415	774	303
	Adjusted NPL	13,938	7,644	10,554	3,749	2,839	4,156	4,156	5,396	2,247	4,608	4,644	8,057	3,294	1,962
	Additional NPL ratio	**0.05%**	**0.00%**	**0.00%**	**0.10%**	**0.00%**	**0.00%**	**0.27%**	**0.31%**	**0.00%**	**0.35%**	**0.26%**	**2.22%**	**0.52%**	**0.31%**
	Adjusted NPL ratio	1.29%	1.15%	1.41%	0.96%	0.82%	1.49%	1.32%	1.90%	1.04%	1.85%	1.96%	4.05%	2.22%	2.00%
	Required provision @ 150% coverage ratio	20,907	11,465	15,830	5,623	4,258	6,234	6,234	8,095	3,370	6,912	6,966	12,086	4,940	2,942
	Additional provisioning	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**215**	**4,892**	**-**	**396**
	% impact on PBT	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**-3%**	**-97%**	**0%**	**-17%**
	Impact on net profit	-	-	-	-	-	-	-	-	-	-	(161)	(3,669)	-	(297)
	% impact on net profit	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**-3%**	**-94%**	**0%**	**-16%**
	Impact on core tier 1 capital	-	-	-	-	-	-	-	-	-	-	(161)	(3,669)	-	(297)
	Impact on core tier 1 ratio	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**-0.04%**	**-0.99%**	**0.00%**	**-0.15%**
	Adjusted core tier 1 ratio	8.92%	10.69%	8.54%	7.99%	8.61%	9.04%	8.48%	8.69%	8.44%	8.64%	9.68%	11.16%	10.47%	8.56%
	Adjusted total capital ratio	12.41%	14.33%	12.62%	12.93%	13.58%	12.85%	12.19%	14.30%	11.67%	10.74%	12.21%	12.16%	13.66%	16.45%

Source: Wind, Company data, AMTD Research

IMPORTANT DISCLOSURES

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