INSTITUTE OF INTERNATIONAL FINANCE

Chinese Internet Finance: Explosive Growth, Challenges Ahead

November 11, 2014

- **Chinese internet finance companies have seen exponential growth over the past five years, and now provide a growing range of financial services.**
- **E-finance holds great promise for improving financial inclusion and may help accelerate the process of interest rate liberalization. Government policies are largely supportive.**
- **However, concerns remain about consumer protection, the regulatory environment and the long-term viability of internet finance firms' business models.**
- **Further development of the internet finance sector is likely to be accompanied by substantial gains in innovation and productivity, and could help China rebalance its economy toward a more consumption-based growth model.**

Zeynep Elif Aksoy
SENIOR FINANCIAL ECONOMIST
Capital Markets and Emerging Markets Policy Department
1-202-857-3647
zaksoy@iif.com

Sonja Gibbs
DIRECTOR
Capital Markets and Emerging Markets Policy Department
1-202-857-3325
sgibbs@iif.com

Feng Guo
SENIOR ECONOMIST
Asia/Pacific Department
1-202-857-3654
fguo@iif.com

Fiona Nguyen
SENIOR RESEARCH ASSISTANT
Capital Markets and Emerging Markets Policy Department
1-202-682-7443
fnguyen@iif.com

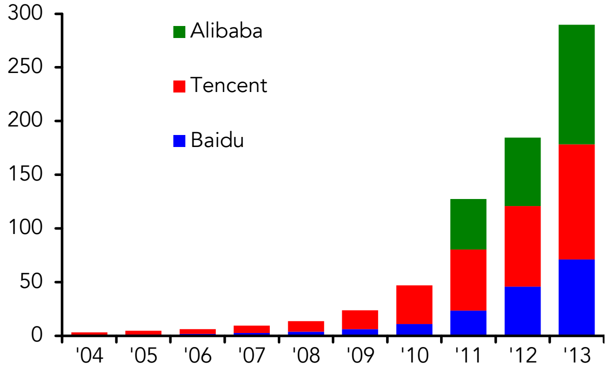
Na Yang
RESEARCH INTERN
Capital Markets and Emerging Markets Policy Department

Zoe Keating
ADMINISTRATIVE ASSISTANT
Capital Markets and Emerging Markets Policy Department
zkeating@iif.com

Chinese internet companies have seen exponential growth over the past five years, and now provide a growing range of financial services—from payments to loans and distribution of financial products. The assets of the three largest Chinese internet companies more than doubled between 2011 and 2013 (Chart 1) to some RMB 275 billion (about $45 billion), while the total volume of internet finance transactions in China rose to more than $1.6 trillion in Q1 2014—sharply higher than the $660 billion estimated by Chinese internet giant Tencent for 2012. Alibaba's online money market fund Yu'E Bao, launched in June 2013, became the fourth largest money market fund in the world in less than a year. Given the substantial potential for further growth, rapid evolution in Chinese internet finance could alter the landscape for the Chinese financial services sector more broadly in the long run.

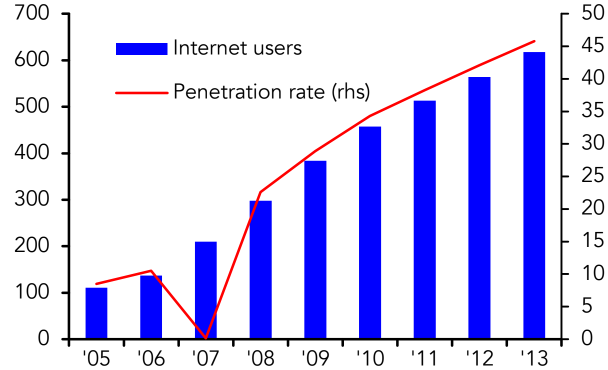
Given the rapid growth in internet penetration in China, e-finance—by lowering the cost of transactions—is already helping to improve financial inclusion. The number of internet users in China increased six-fold between 2005 and 2013, bringing the internet

Chart 1
Total Assets of Top Chinese Internet Companies
RMB billion



Source: Bloomberg, IIF.

Chart 2
Chinese Internet Users and Penetration Rate
millions of people *percent*



Source: CNCC.

penetration rate to almost 45% (Chart 2). Nearly 75% of these users are mobile phone users. These trends have helped improve access to formal financial services: for example, Yu'E Bao gained 150 million customers in just 15 months. Moreover, many SMEs which had not been eligible for bank loans have now gained access to credit via alternative lending channels such as P2P platforms. Given its rapid growth, e-finance is set to continue to support financial inclusion in China as the sector grows and broadens its product range.

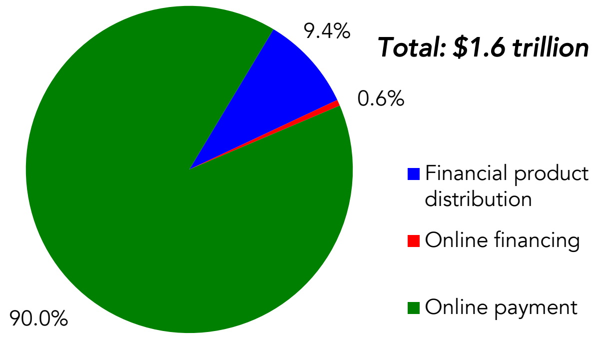
Internet finance companies could ultimately be a source of competition for traditional banks in China. In addition to entering the banking arena directly, internet-based firms create competition indirectly by generating structural change. Customer behavior is one example—a new generation that conducts most transactions on mobile phones will increase pressure on traditional banks to adapt to changing customer preferences. Moreover, online providers have some distinct cost advantages in risk assessment and client acquisition, as they have better access to "big data," e.g. to conduct behavioral analysis. However, concerns about consumer protection, the regulatory environment, and the long-term viability of their business models remain, hence considerable uncertainty remains as to how the sector will evolve.

MAINLY USED FOR ONLINE PAYMENTS—FOR NOW

Most of the services provided by Chinese e-finance firms—some 90%—are related to online payments (Chart 3). Chinese third-party online payment volume amounted to RMB 5.4 trillion (about $900 billion) in 2013—five times the volume in 2010. Data provider iResearch estimates that Chinese online payment volume will continue growing by some 35% per year, topping RMB 18 trillion (almost $3 trillion) by 2017 (Chart 4). At present, the online payments sector is highly concentrated, with Alibaba (via Alipay, its online payment service), Tenpay (Tencent's online payment service), and China UMS accounting for almost 80% of transaction volume. Alipay—now part of Ant Financial Group, rebranded in October 2014 to comprise six financial services providers affiliated with Alibaba—alone clears 80 million transactions per day—more than half through the Alipay Wallet mobile app.

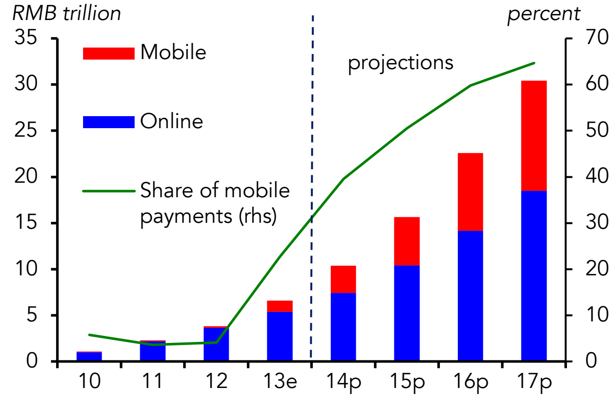
Mobile payments have grown even faster than regular online payments—from less than RMB 60 billion (about $9 billion) in 2010 to more than RMB 1.2 trillion (about $200 billion) in 2013. Mobile payments are expected to grow more than 80% per year on average reaching almost RMB 12 trillion (some $2 trillion) in 2017 (Chart 4). If mobile payments continue growing at this rate, the

Chart 3
Volume of Internet Finance in China
percent, Q1 2014



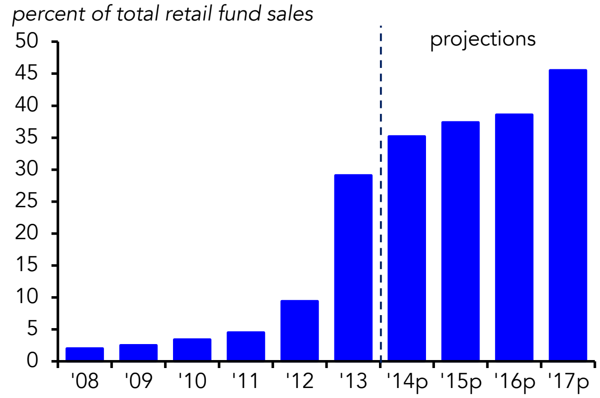
Source: Tencent, IIF.

Chart 4
Chinese Online and Mobile Payments
RMB trillion



Source: iResearch, IIF.

Chart 5
Share of Online Retail Fund Sales
percent of total retail fund sales



Source: iResearch.

volume of mobile payments could exceed that of online payments by 2020. The mobile payments sector is even more concentrated, with Alipay alone accounting for more than 80% of payments volume.

GROWING ONLINE SALES OF FINANCIAL PRODUCTS

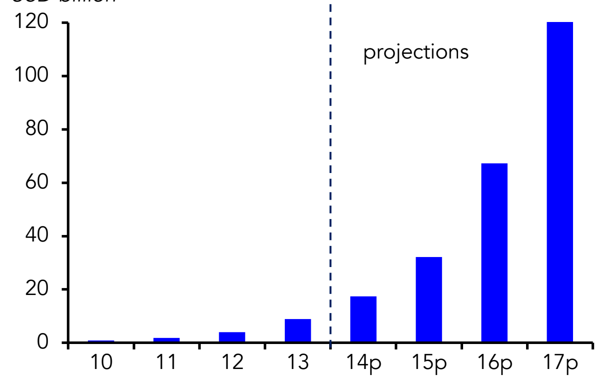
Although payments currently dominate the mix of services provided by Chinese internet finance firms, other types of e-finance have been gaining momentum. Online sales and distribution of financial products (mainly mutual funds and insurance) is the second largest segment of Chinese internet finance, accounting for about 9% of total transaction volume. Although sales of mutual funds to institutional clients remain dominated by traditional banks, penetration of internet-based firms in mutual fund sales to retail investors has been remarkable. Chinese online mutual fund sales to retail investors were RMB 530 billion in 2013 (about $85 billion), amounting to almost 30% of all retail fund sales—compared with less than 10% in 2012. The success of Alibaba's Yu'E Bao money market fund has been the most important contributor to this trend—Yu'E Bao, launched in June 2013, became the fourth largest money market fund in the world, after U.S.-based Vanguard Prime, Fidelity Cash Reserves, and J.P. Morgan Prime, in less than a year. With the rapid pace of growth set to continue, the share of online retail fund sales is expected to top 45% of all retail fund sales by 2017 (Chart 5).

Although much smaller in scale than online sales of mutual funds, online sales and distribution of insurance reached RMB 9 billion (about $1.5 billion) in 2013, compared with just RMB 820 million ($120 million) in 2010. This amounts to only 0.5% of all insurance sales. However, it is estimated that online insurance sales will continue growing at triple-digit rates and reach more than RMB 120 billion ($19.5 billion) with a market share of 5%, by 2017 (Chart 6).

ONLINE LENDING GAINS MOMENTUM

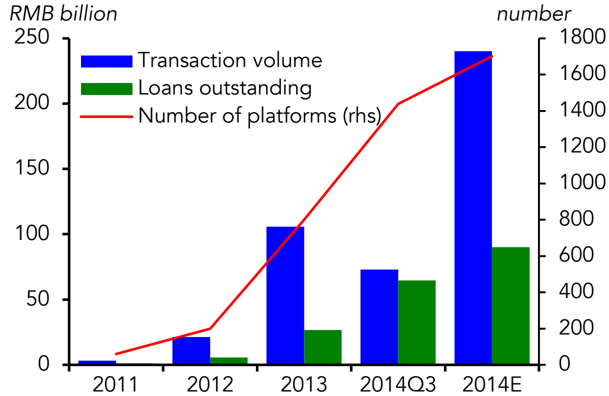
Chinese internet companies also provide loans, mostly in the form of peer-to-peer (P2P) lending. Currently, these services amount to less than 1% of Chinese internet finance but the growth potential for this sector is widely perceived to be very substantial. The number of P2P platforms has increased from 800 at the end of 2013 to more than 1400 in Q3 2014 (Chart 7). More than one million investors and borrowers are currently using these platforms (Chart 8). P2P loans outstanding are expected to rise to RMB 90 billion (about $15 billion) by the end of 2014 (Chart 7)—more than triple their level at the end of 2013.

Chart 6
Chinese Online Insurance Premium
USD billion



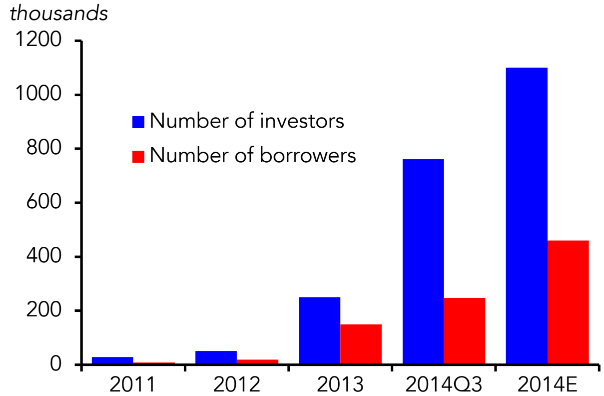
Source: iResearch.

Chart 7
Chinese P2P Loan Volume, Outstanding and Platforms
RMB billion *number*



Source: Wangdaizhijia.

Chart 8
Chinese P2P Investors and Borrowers
thousands



Source: Wangdaizhijia.

Other P2P platforms have partnered with real estate developers and other financial institutions to provide short term loans to refinance mortgages or downpayment loans to circumvent the 30% downpayment requirement for commercial real estate loans. Hence although currently small in scale, P2P lending has the potential to play more of a role in Chinese real estate markets.

CROWDFUNDING ON THE RISE

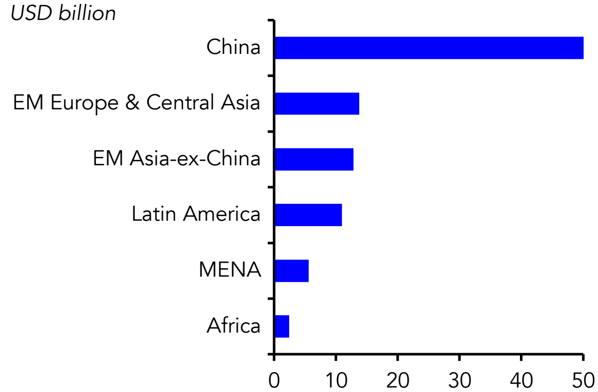
Chinese internet firms also facilitate the provision of equity finance to companies via crowdfunding platforms. The first Chinese crowdfunding site, DemoHour, was established in July 2011, and is currently the largest of the approximately 30 crowdfunding platforms in China. Initially, the company charged a 10% fee for funding raised, but canceled this fee last year in an attempt to gain market share. According to the World Bank, crowdfunding investing (CFI) in emerging markets will reach $90-95 billion over the next 10 years, over half of which is expected to come from China (Chart 9). Most of this investment is expected to be channeled to smaller firms--SMEs and start-ups.

SUPPORT FOR FINANCIAL INCLUSION, SME LENDING

Although online lending and financial product distribution are currently among the smallest segments of Chinese e-finance, they have contributed the most to financial inclusion. Given their rapid pace of growth, online lending and financial products distribution have great potential to enable new groups of individuals and businesses to access financial services.

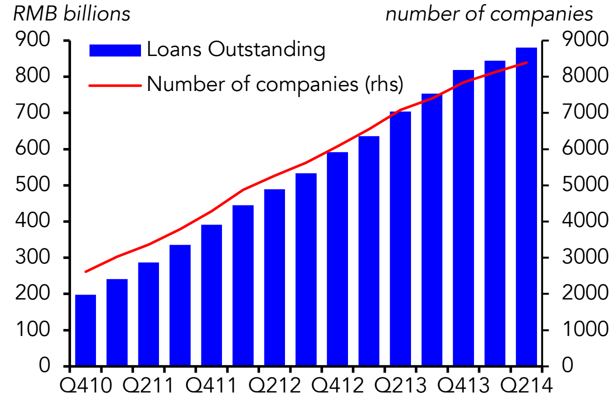
To illustrate, Chinese SME lending overall has quadrupled since late 2010, to almost RMB 900 billion (about $150 billion) in Q2 2014 (Chart 10). Online SME loans provided by traditional Chinese banks and trust companies contributed significantly to this boom. However, Chinese internet companies have been increasingly active in the SME lending market. For example, Chinese internet companies are providing loans to SMEs with which they have a business relationship, such as the merchants on their web platforms. The existing transaction records that internet firms have with these SMEs help establish credit scores, decreasing the cost of providing such loans. P2P platforms targeting SMEs specifically are also supporting the SME lending boom in China. In addition, crowdfunding platforms—which are currently free of charge—offer another channel for funding to small businesses and start-ups.

Chart 9
Estimated Crowdfunding Investing in EM Countries by 2017
USD billion



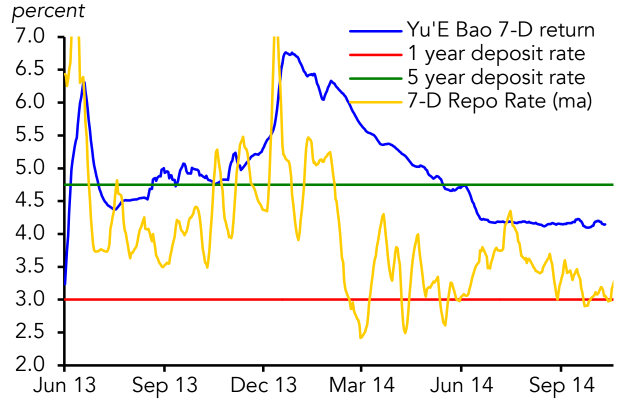
Source: World Bank.

Chart 10
Chinese SME Loans
RMB billions *number of companies*



Source: PBoC

Chart 11
Yu' E Bao Return vs. Benchmark Rates
percent



Source: www.fund.fund123.cn, Bloomberg.

A SPUR FOR FURTHER INTEREST RATE LIBERALIZATION

Alibaba, China's largest internet company, launched Yu'E Bao in June 2013. Yu'E Bao allows Alipay customers to invest the cash in their account balances in a money market fund with a minimum investment of just RMB 1 ($0.16). The money raised is invested in the Zenglibo Money Market Fund, managed by China's largest asset manager, Tian Hong Asset Management (itself majority-owned by Alipay). Taking advantage of the fact that banks offer higher interest rate bearing products to fund management companies than to retail customers, Yu'E Bao was generally able to offer more than the 5-year deposit rate, from its inception until this past June. Although Yu'E Bao returns have declined somewhat since then, interest rates on Yu'E Bao account balances are still significantly higher than the 1-year deposit rate of 3% (Chart 11). Ultimately, this type of competition for deposits could accelerate the process of interest rate liberalization in China. Similarly, P2P loans could contribute to this process, as they create alternatives for investors that offer higher returns—P2P loans have averaged an interest rate of around 20% year to date.

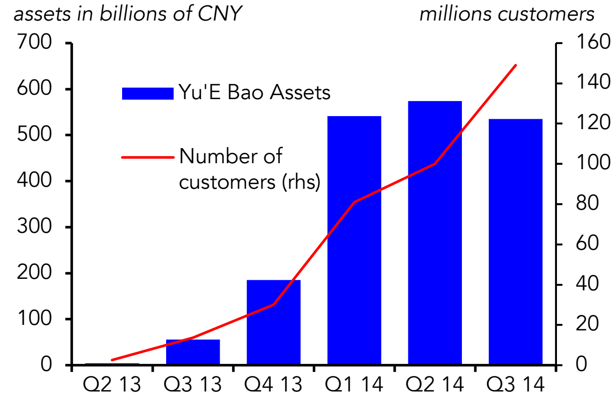
E-FINANCE EXPANDS ACCESS TO INVESTMENT

Aided by its user-friendly functionality and high returns, Yu'E Bao has become one of the largest fund product offerings in China, gaining almost 150 million customers and RMB 535 billion (just under $90 billion) in assets from its inception through Q3 2014 (Chart 12). Yu'E Bao also became a model for other internet companies, at least twenty of which have partnered with asset management companies to create similar products. For example, Baidu launched Baifa in December 2013, and Tencent has launched a mobile asset-management product platform, Li Cai Tong. Tencent's platform—leveraging the 600 million user base of its social networking website WeChat—enables users to buy money market fund shares on WeChat through Tenpay.

LONGER-TERM COMPETITION FOR CHINESE BANKS

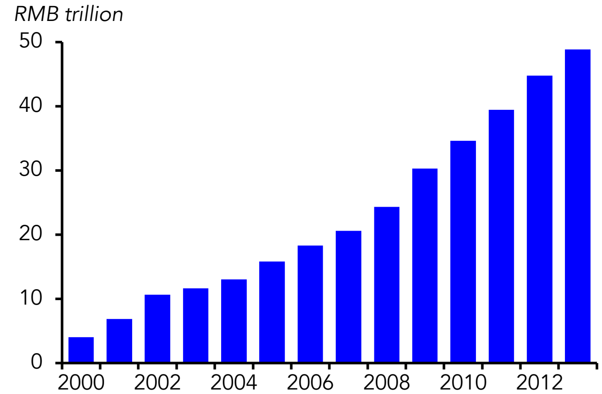
In the long run, Chinese internet companies may create competitive pressures for Chinese banks. Even now, some internet companies are already in direct competition with banks. For instance, Alibaba and Fosun Group have jointly created a private bank called MYBank, which was approved by the China Banking Regulatory Commission (CBRC) in September 2014. The bank, in which Alibaba owns a 30% stake, was established primarily to serve small businesses. Tencent also received approval from the CBRC in July to establish Webank, while Baidu's application for a banking license is still pending. Direct competition with banks, however,

Chart 12
Yu' E Bao Assets and Number of Customers



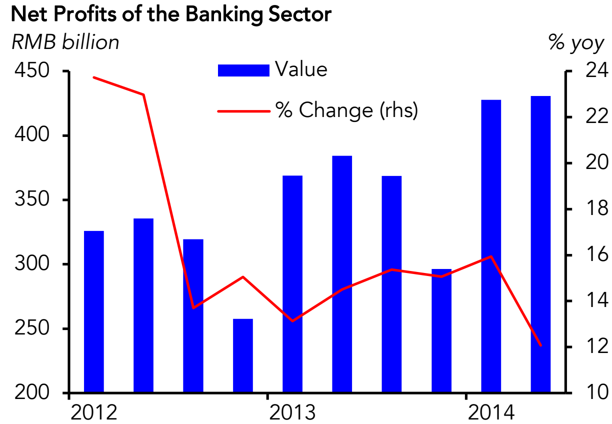
Source: Tianhong Asset Management.

Chart 13
Assets of the Largest Three Chinese Banks



Source: Bloomberg, IIF.

Chart 14
Net Profits of the Banking Sector



Source: CEIC, IIF estimates.

would subject Chinese internet companies to the same regulatory constraints banks are subject to, and therefore would reduce their competitive advantages.

In addition to entering banking directly, internet companies may create indirect competition for Chinese banks simply by generating structural change in the industry. For example, internet finance has been changing customer behavior: a new generation that conducts most of their transactions on mobile phones will increase pressure on traditional banking business models to adapt to changing customer preferences. In addition, internet companies have a number of cost advantages in risk assessment and client acquisition, because they have better access to "big data" to conduct behavioral analyses.

Chinese internet companies have a number of cost advantages in risk assessment and client acquisition

That said, significant competition for Chinese banks from internet finance providers appears unlikely near-term. Despite rapid growth, the volume of Chinese internet finance is tiny compared with activity in the traditional banking sector. Total assets of the three largest internet companies were only about RMB 300 billion in 2013 (under $50 billion), and financial services is only a minor business for them (Chart 1). Chinese banks, in contrast, are giants—strong, steady expansion of the top three Chinese banks has left their total assets at some RMB 50 trillion (over $8 trillion—Chart 13). Although the recent moderation in economic activity is weighing on asset quality (non-performing loans, while still just over 1% of total loans, were up almost 30%yoy in Q2 2014) and more stringent regulatory requirements are impacting profitability, Chinese bank profits continue to grow at a double-digit pace (Chart 14). Moreover, Chinese banks have increased their international presence significantly in recent years, creating additional sources of revenue (see our March 2014 IIF research note, International Expansion of Chinese Banks). In short, the rise of internet finance has not yet had much of an impact on the Chinese banking sector.

However, significant competition for Chinese banks from internet finance providers appears unlikely near-term

To a large extent, Chinese banks and providers of internet finance have been operating in different spheres. Financial services currently offered by Chinese internet companies, such as online payments, P2P loans, crowdfunding, and financial product distribution, have not been significant revenue sources for banks. To illustrate, online payments constitute less than 5% of Chinese bank revenue, and the customer profiles of Chinese internet companies tend to be different than those of banks. For example, in SME financing, internet companies serve very small SMEs that are not even targeted by Chinese banks. That said, while internet finance is still mainly a niche product, the potential for the sector to change the landscape is significant, and new competitors are determined: as noted by Ant Financial Group Chairman Lucy Peng, "*...we have an opportunity to use internet methods, internet technology, internet thinking to disrupt traditional finance*." Nonetheless, China's internet finance sector must overcome a number of challenges before it can provide serious competition for Chinese banks.

CHALLENGES AHEAD FOR CHINESE E-FINANCE

Despite the tremendous potential that Chinese internet finance offers, including for financial inclusion, concerns remain about the long-term viability of business models, consumer protection, and the regulatory environment.

To a large extent, Chinese banks and providers of internet finance have been operating in different spheres.

Although Chinese internet companies provide a range of appealing financial products, analysts question whether the high returns on offer are sustainable, given the ease of entry into the market for internet finance. A case in point: Yu'E Bao returns have declined since competitors began offering similar products (Chart 11, page 4). Nonethless, Yu'E Bao's success has prompted banks to enter the online fund distribution market as competitors. In fact, most of the deposits channeled from banks to funds have been eventually flowing back to banks.

According to preliminary Chinese Securities Regulatory Commission (CSRC) regulations, Chinese money market funds can invest only in bank deposits, bonds, bond repurchases, central bank notes, and other money market instruments with good liquidity and a maturity of less than a year. In line with this, Yu'E Bao invests 85% of its funds in so-called negotiable term deposits in the interbank market to take advantage of the higher returns that banks provide to fund management companies (but which are unavailable to retail investors) (Chart 15). In order to compete for deposits, banks have rolled out their own online platforms. For example, China Minsheng Banking Corp., the country's first national bank founded by private capital, started a mobile phone application which allows fund investments with a minimum of just RMB 1 ($0.16) and same-day redemption. ICBC recently introduced Tian Tian Yi, or "everyday return," with similar features.

Despite the tremendous potential that Chinese internet finance offers, concerns remain about the long-term viability of business models, consumer protection, and the regulatory environment.

Moreover, banks have aggressively expanded their wealth management products (WMPs) to compete for deposits as well as help meet regulatory requirements. Outstanding WMPs have surged 20-fold from RMB 500 billion (about $65 billion) in 2007 to RMB 12.6 trillion ($2.1 trillion) in June 2014 (Chart 16). The implicit guarantees on WMPs offered by state-owned banks could create a source of competition for Yu'E Bao and similar products if their WMPs can deliver similar rates of return.

CONCERNS ABOUT CONSUMER PROTECTION

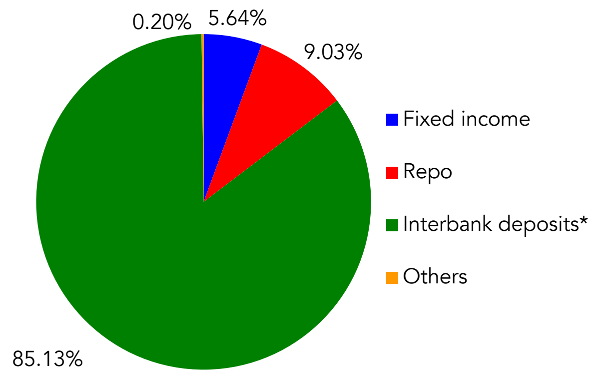
Although major players in Chinese internet finance have achieved a high level of customer trust in a relatively short time, further steps are needed to firmly establish customer trust in the industry as a whole. Just in H1 2014, 233 cases of internet finance fraud were reported with total losses of almost $1500 per customer. P2P loans are especially susceptible to fraud (Chart 17), as transactions take place between private parties online. The fact that there is no third-party credit ratings system in China makes it is difficult for lenders to evaluate borrowers in P2P loan transactions; P2P fraud is thus difficult to prevent for both private parties and regulators. Some cases have involved online funds disappearing after attracting investors with very high returns; Ponzi schemes are also common in online financial product distribution.

RECENT REGULATORY DEVELOPMENTS

The Chinese government has been supportive of the development of internet finance in general as key elements, such as third-party payment, big data, and cloud computing, are in line with the "financial infrastructure" section of the Third Plenum reform blueprint. The challenge for regulators is to keep pace with change and strike a balance between encouraging innovation and mitigating risk. Rising consumer protection concerns have prompted the authorities to step up oversight, against a backdrop of broader worries about potential disruptions in the shadow banking system (see our April 2014 research note, Seeking to Curb Shadow Banking Risks). In December 2013, the State Council included unlicensed internet finance companies in its definition of shadow banking, while also recognizing its positive role in the economy.

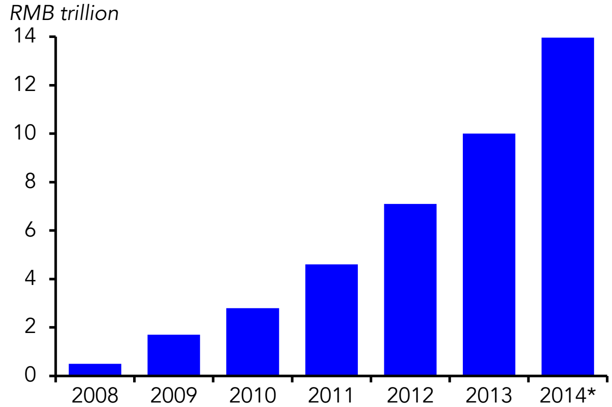
In April 2014, the People's Bank of China (PBOC) outlined in its Financial Stability Report five major principles in the oversight of booming internet finance. According to the report, any internet finance regulation should serve the real economy, act in line with the country's monetary policies and ensure financial stability, protect the legitimate interests and rights of consumers, maintain fairness and order of the market, and impose self-discipline. While the report acknowledges the benefits of internet finance, it also warns about fraud in P2P loans and crowdfunding.

Chart 15
Allocation of Yu' E Bao Funds by Asset Type



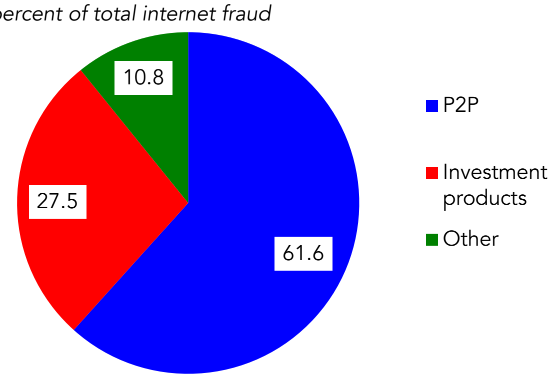
Source: Tianhong Asset Management. *Interbank deposits are part of banks' wholesale business and offer higher rates than retail bank deposits. These deposits are also not subject to 20% reserve requirement and therefore are attractive to lenders.

Chart 16
Chinese Banks: Wealth Management Products Outstanding
RMB trillion



Source: IIF estimates. *includes trust loans, entrusted loans and BAs.

Chart 17
Estimated Fraud in the Chinese Internet Finance Industry
percent of total internet fraud



Source: I360 Center for Internet Security.

Although the regulators have yet to implement across-the-board regulations for the internet finance sector, PBOC officials have called for online money market funds to set aside reserves to meet liquidity shortages—effectively making them adhere to similar regulations as banks. They also reaffirm that the industry must prohibit misuse of consumer information, ensure adequate risk disclosure for internet-based investment products, and prevent illegal fundraising activities. In this regard, in March 2014, the PBOC suspended plans by Alipay and Tenpay to offer virtual credit cards and mobile phone payments using so-called Quick Response codes. The PBOC is also considering caps on online third-party payments to RMB 5,000 (about $815) per transaction and RMB 10,000 (about $1,635) per month per person. In April, the CSRC announced that it will take a tougher stance on online fund sales offering high returns to prevent fraud.

Regulators have been in discussions with the Chinese internet finance industry to improve transparency of the sector and formalize its role in the economy

Regulators from both the central government and local governments have engaged in discussions with the Chinese internet finance industry to improve the transparency of internet finance and formalize its role in the economy. In July 2014, the central government invited several P2P lending companies, third-party payment service providers, and banks to discuss guidelines for sound development of the internet finance industry. In August, the Shanghai Municipal Government unveiled a set of rules to develop and promote the city's internet in order to foster economic growth, while curbing financial risks by cracking down on fraud. The city also encourages banks, securities companies, and insurers to develop internet-based products and services.

The Chinese internet finance industry has taken initiatives to self-regulate as well

While general guidelines on internet finance are expected to be released in the near future, the central bank has worked with other regulators to assign responsibility for different types of activity. For instance, the central bank will regulate third-party payment firms, the CBRC will oversee P2P lending companies, and the CSRC will cover crowdfunding. Also, in April, the State Council approved the formation of the China Internet Finance Association under the central bank to strengthen discipline of the industry.

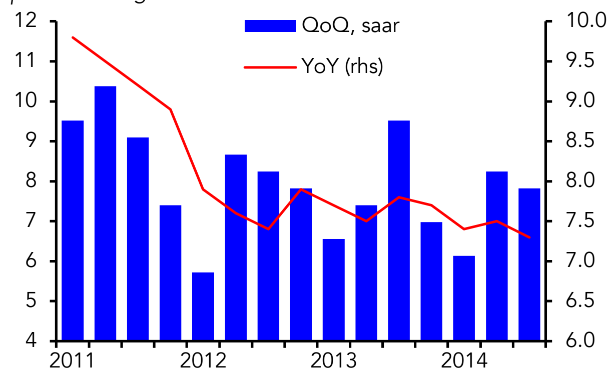
The Chinese Internet Finance Alliance, founded in November 2013, has issued the *Beijing Declaration on Internet Finance*, including principles of self-regulation, to promote the healthy development of the industry. In addition, Baidu has been monitoring internet finance websites to detect problems and give early warnings to users.

INTERNET FINANCE—AN IMPORTANT ROLE IN THE CHINESE ECONOMY

More stringent regulatory requirements, increasing competition from traditional banks, and the economic slowdown (Chart 18) suggest that the internet finance industry could have difficulty sustaining its success. Nevertheless, the rapid expansion of internet finance in recent years highlights the industry's important role and enormous potential. As China's future economic growth model is likely to shift, with consumption and services being sources of exponential growth, internet penetration is expected to deepen. More importantly, development of internet finance could help the country shift toward an economic growth model based more on productivity, innovation, and consumption, in line with the government's goal of rebalancing (Chart 19). A recent McKinsey report suggests that the internet sector could add 0.3 to 1.0 percentage points to China's GDP growth and enable 7-22 percentage points of incremental GDP growth through 2025.

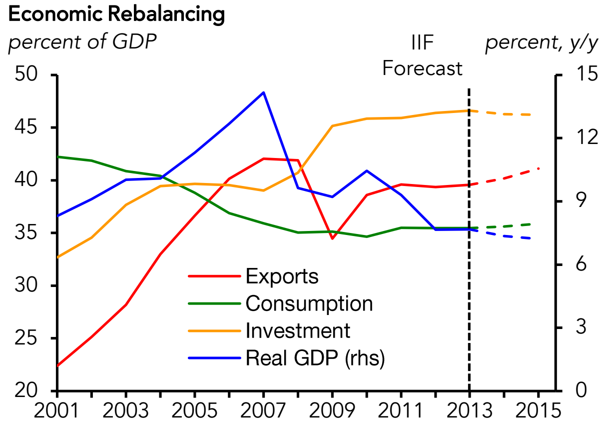
The rapid growth of internet finance could also help address fundamental structural shortcomings in the financial system. Large state-owned banks have dominated capital allocation, with resources being disproportionately directed towards state-owned enterprises at the expense of households and private firms. This has led to overcapacity in some industries, while rapidly expanding SMEs have difficulty meeting strong credit demand. At the same time, growing ranks of wealthy individuals seek higher returns on investments. The development of internet finance can eliminate information asymmetries and make resource allocation more efficient; it could also prompt change in banks' business models and spur financial liberalization.

Chart 18
China: Real GDP
percent change



Source: National Bureau of Statistics, IIF.

Chart 19
Economic Rebalancing
percent of GDP



Source: IIF.