

Dagong's 2017 Credit Outlook for the Global Banking Industry

In 2017, the rise of global financial uncertainties will cause the banking industry's overall credit risk to face an upward trend, as the difference in credit risks of banking industries amongst major countries is increasing. In 2017, low interest rates continue to be the main factors affecting the credit risks of developed countries; these countries' banking industries are characterized by low-profit and high-risk tendencies. However, it is anticipated that the U.S. banking industry will continue its steady pace of recovery, rendering credit risk to decrease; the European banking industry is suffering from a lack of profitability due to ultra-low interest rates, with some countries showing signs of a credit crisis. Rising global interest rates caused by an interest-rate increase from the Federal Reserve and its resulting domestic macroeconomic downturn will have an impact upon the banks of more emerging-market countries in 2017 in terms of asset quality, profitability, liquidity and other aspects. Specifically, the Chinese banking sector's asset quality deterioration and weak profitability will accelerate its credit risk, while other emerging-market countries will face the pressure of asset quality deterioration and liquidity tightening through varying degrees. Some countries with a larger vulnerability may continue to have the chance of a possible emerging crisis.

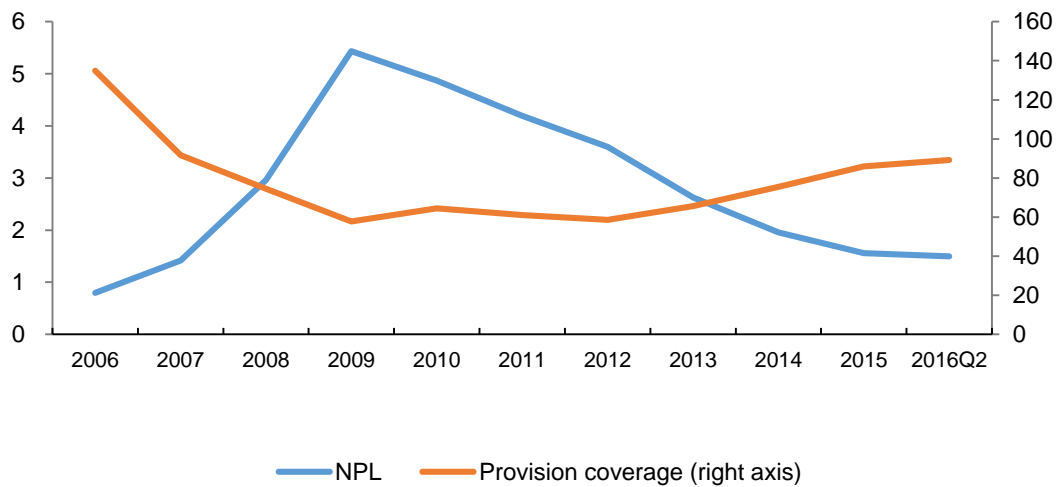
At the same time, the continuation of low interest rate policies and the expansion of shadow banks will pose major challenges to the long-term stability of the global banking industry. The long-term low interest rate environment has not only weakened the profitability of banks in major countries, but also changed their way of participation within financial markets. The continuation of a low interest rate environment will exacerbate the fragility of the banking system and contribute to the development of shadow banking. The over-expansion of shadow banking will lead to the outbreak of a future financial crisis amongst the shadow banking system which has a lack of financial supervision, and at that time, banking industries preserving a close contact with the shadow banking sector will find it difficult to stay aloof. In 2017, this impact will continue to be significant in the U.S., although China will benefit from a certain control due to supervision reform, although the risks remain.

I. With the improvement of asset quality, capital strength, and profitability to varying degrees in 2017, the U.S. banking industry's credit risk will decrease steadily, although long-term potential risks cannot be ignored.

The U.S. banking industry's credit risk will stabilize in the short-term to a large extent due to the continuous and steady improvement of both credit quality and capital strength. The slow recovery in prices of both international energy and commodity will ease the risk of deterioration of credit quality in the energy and resource industry in 2017. As nearly half of the banking sector's credit resources are concentrated in the real estate market, a continuous rebound in the real estate market, the rapid growth of the U.S. economy, and the improvement of the household sector's solvency will continue to be the main driving force towards improving the quality of bank loans. It is expected that U.S. banks' Non-Performing Loan (NPL) ratio will continue to decrease slightly to approximately 1.4% in 2017 (Figure 1-1). Meanwhile, alongside increasingly stricter financial regulation, in the second quarter of 2016 U.S. banks' provision coverage ratio of NPLs reached 89.2%, the highest rate since 2008, greatly improving the bank's risk-

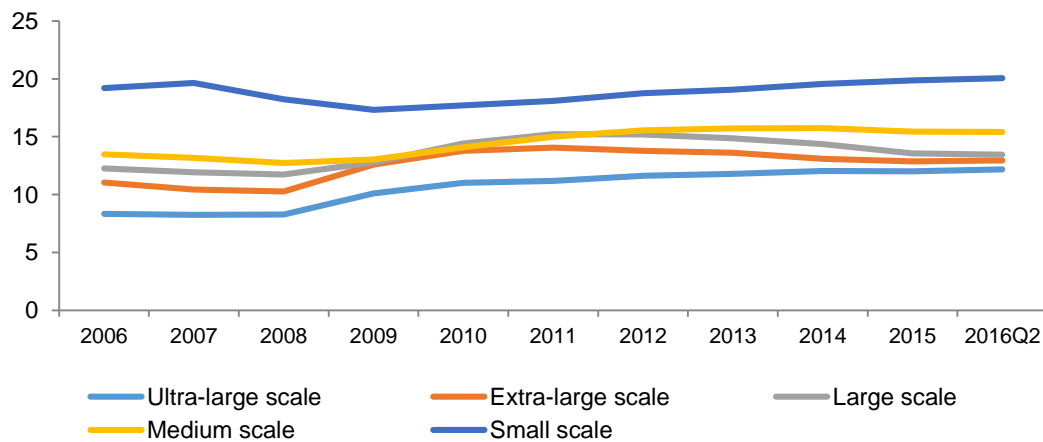
compensating capacity. On the other hand, U.S. banks' capital adequacy ratio has been on the rise under strict supervision following the financial crisis, with the capital adequacy ratio of ultra-large banks greatly improving and the disparity between banks of various scales gradually narrowing (Figure 1-2 and 1-3). By the end of June 2016, U.S. banks' tier-one capital adequacy ratio reached 12.8% while their total capital adequacy ratio reached 14.3%. According to the Basel III transitional arrangements in 2017, the U.S. banking industry will face higher capital assessment standards, which will likewise encourage large banks to reduce high-risk loans, thereby further enriching bank capital. On the whole, the gradual improvement of both asset quality and capital strength will help decrease the U.S. banking industry's credit risk progressively.

Figure 1-1: Loan quality and loss provision amongst the U.S. banking industry (%)



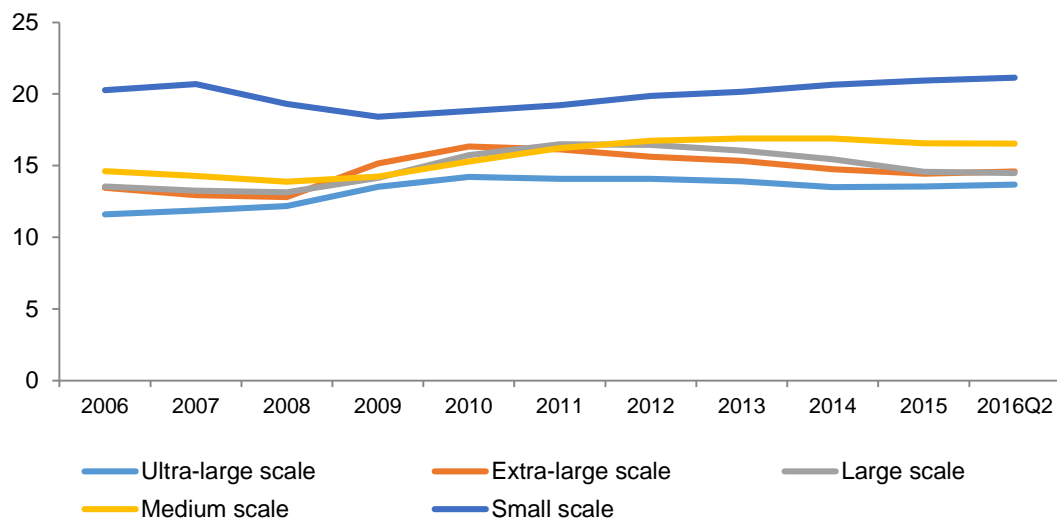
Source: FDIC

Figure 1-2: Tier 1 capital adequacy ratio of U.S. banks (%)



Source: FDIC

Figure 1-3: Capital adequacy ratio of U.S. banks (%)

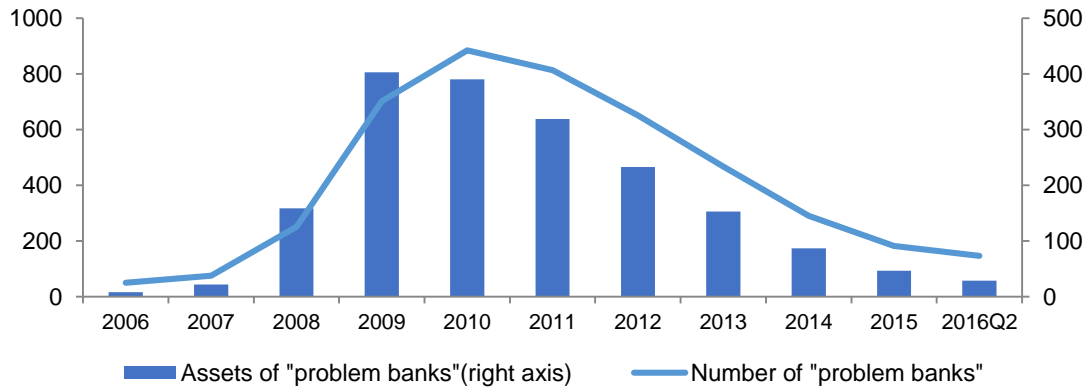


Source: FDIC

The Federal Reserve's accelerating interest rate hike, the possibility of financial deregulation, and the decline in provision pressure will further benefit the U.S. banking industry's profitability to a certain extent in 2017. Although the detailed implementation of the Dodd-Frank Act issued in 2010 has exerted positive effects upon the improvement of the robustness of the U.S. banking industry and thereby both the number and scale of U.S. "problem banks" have declined (Figure 1-4), it is however under the double pressure of an ultra-low interest rate and strict supervision ever since the global financial crisis that the U.S. banking industry's profitability has been seriously weakened and net interest margin has declined year by year (Figure 1-5). However, these above-mentioned factors will change in 2017, thereby rendering a slight improvement in banking profitability. First, alongside rapid economic growth and rising inflation expectations, the pace of the Federal Reserve's interest rate hike in 2017 will be slightly faster than in 2016, and treasury yields will become steeper, which will alleviate downward pressure upon U.S. banks' net interest margin to some extent. Second, the Republicans have succeeded in controlling both the U.S. Senate and House of Representatives in the 2016 parliamentary elections, and a basic consensus upon easing financial supervision amongst the Republicans will facilitate President Trump to promote banking deregulation - in particular, deregulation concerning engagement in proprietary trading, which is conducive to the expansion of banks' scale of business and revenue sources. Third, in 2017, with the gradual relaxation of financial supervision and an increase in regulatory costs, the pressure of banks' provision for litigation and penalty will be alleviated, despite the fact that U.S. banking litigation and penalty provision remains at a high level due to legacy problems. However, the recent increase in global financial uncertainty will limit the extent to which U.S. banks can improve their profitability. Forced by the long-term low interest rate policy, the U.S. banking industry has increased its overseas business and alternative investment in recent years to ease the pressure of declining interest income upon profitability. However, in 2017, the depreciation pressure of non-dollar currencies caused by the Federal Reserve's interest rate hike will cause the overseas revenue of the U.S. banking industry to face the greater risk of exchange losses. Meanwhile, considering that U.S. banks' overseas

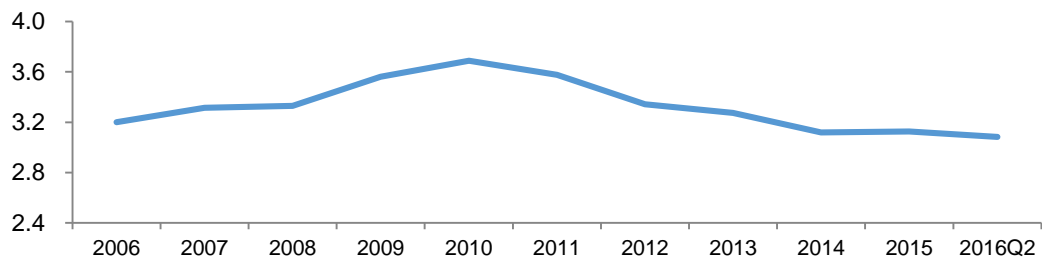
revenue is mostly comprised of non-interest income, non-interest income will likewise suffer from the double negative impacts of decreasing demand and a rising risk in 2017 due to sluggish global economic recovery and aggravated financial market volatility. Taken altogether, in 2017 the U.S. banking industry's profitability will remain improved slightly as in recent years (Figure 1-6).

Figure 1-4: Status of "problem banks" in the U.S. banking industry (billion USD)



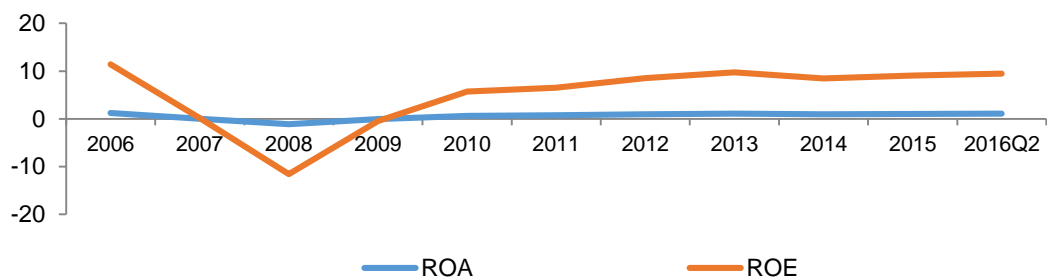
Source: FDIC

Figure 1-5: Net interest margin of U.S. banks (%)



Source: FDIC

Figure 1-6: Profitability of U.S. banks (%)



Source: FDIC

In the long run, a prolonged loosening monetary policy and financial deregulation will cause the U.S. banking industry to continue to face greater challenges in the future. Although quantitative easing has provided ample liquidity support for the self-repair of the banking industry for as long as 6 years, the accumulated federal government debt risk, high yield bond risk, and stock market bubble risk will limit the progress and magnitude of the Federal Reserve's rate hike in the future. The Federal Reserve is typically expected to remain cautious with possible interest rate hikes in the medium-term, and thus lower interest rates will continue to challenge the profitability of banks' credit business in the medium- and long-term. In a prolonged low interest rate environment, once the U.S. government gradually promotes financial deregulation (e.g. extending banks' proprietary business scope), banking risk appetite will increase and non-interest business scale will expand more rapidly. Consequently, their closer connection with financial markets will render the banking industry as a whole to have difficulties avoiding the ripple effects triggered by an outbreak of risk from the stock or bond market, and therefore, the U.S. banking credit will face greater challenges in the future.

II. Low profitability and high NPLs will continuously impede the improvement of credit amongst the European banking sector whose future credit risk will remain high.

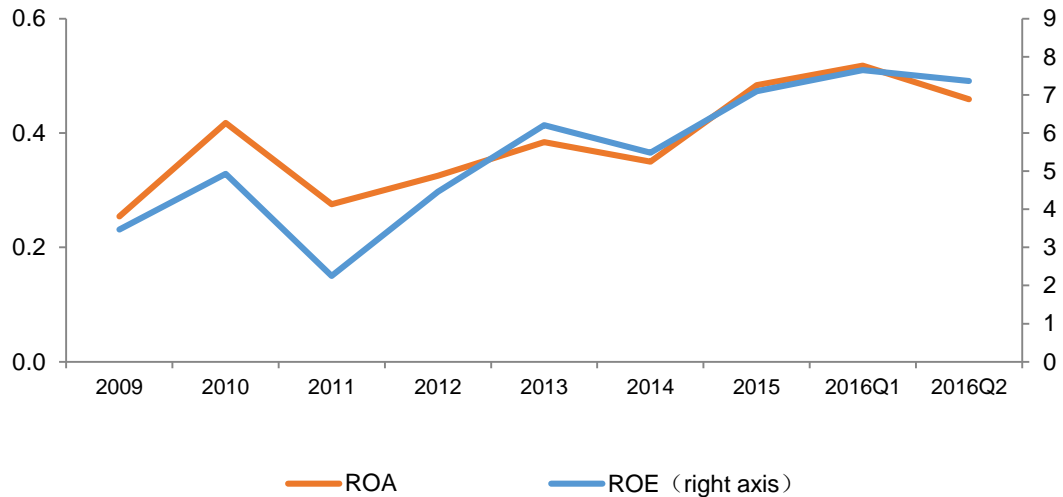
With the quantitative easing monetary policy, persistently low profitability will be adverse to the risk-mitigation of the European banking sector¹. Although the European private sector credit has showed sign of improvement, a decline in loan interest rates caused by the quantitative easing policy has significantly inhibited the profitability of the banking sector. As of the second quarter of 2016, the return on equity of the European banking sector was 7.4%, slightly lower than the first quarter (Figure 2-1). In 2017, a slight increase in credit delivery will help promote the growth of banks' net interest income. However, being constrained by various adverse factors, the European banking sector's profitability is expected to wander around its current low level. Firstly, the European Center Bank (ECB) announced at the end of 2016 that the quantitative easing monetary policy would be prolonged to 2017², which will further depress the net interest income of banks and undermine their profitability. Secondly, in the environment of long-term ultra-low interest rates, some large European banks have increased their overseas investment and credit business, especially credit delivery to emerging markets. In 2017, as affected by the initiation of Brexit, risk hikes of the U.S., and a slowdown in the Chinese economy, the macroeconomics of emerging markets will continue to deteriorate, which is detrimental to the profitability and asset quality of European banks' overseas business. Thirdly, under stringent regulation, banks spun off their high-risk business to meet regulatory requirements on capital (Figure 2-2), which limits their sources of non-interest income. Fourthly, banks stepped into somewhat of a "slimming tide", in which they saved themselves through restructuring, layoffs and an increased investment in financial technologies such as e-banking. Through these measures banks can cut their operational costs in the long-run, although

¹ Eastern European countries' banks are excluded from this section, but will be covered in the section of emerging market countries.

² According to the ECB, quantitative easing will be extended to December 2017 and interest rates are expected to remain at current levels or below.

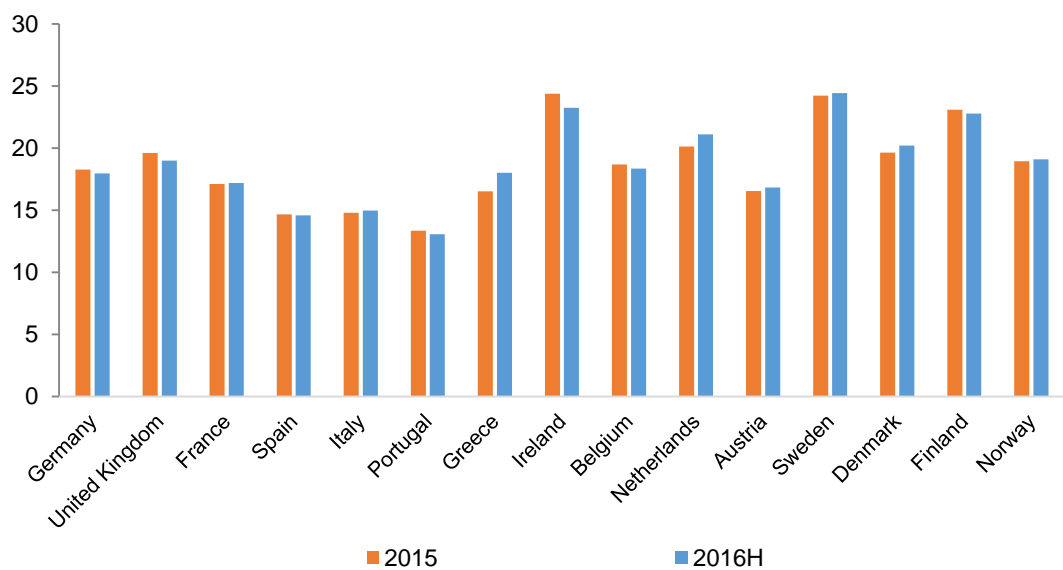
the corresponding restructuring fees, employee compensation, and technology investment will push up their short-term expenditures. Finally, litigation penalties arising from irregularities and provision for asset impairment will further erode the profitability of banks. In general, factors favorable to the profitability of the European banking sector are scarce and the prospect for improving profitability is foggy, which is adverse to mitigate the credit risk of the banking sector in 2017.

Figure 2-1: Profitability of European banks (%)



Source: World Bank , IMF

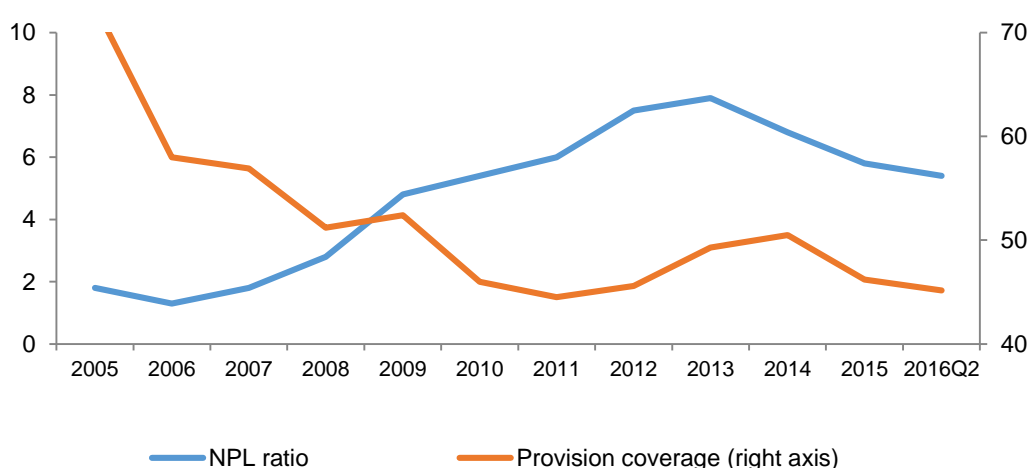
Figure 2-2: Capital adequacy ratio of major European countries' banks (%)



Source: IMF

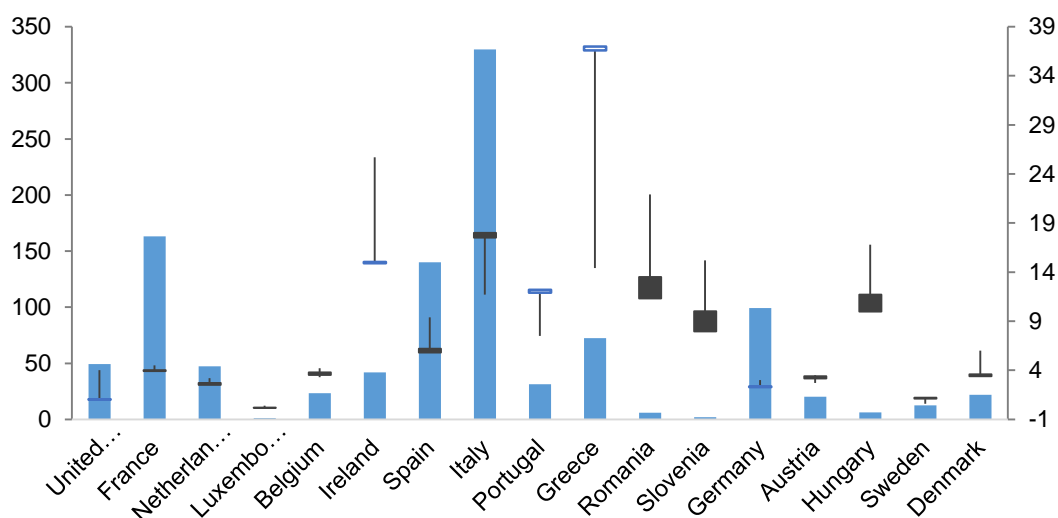
The high NPLs problem will continue to hurt the credit profile of the European banking sector, although the internal divergence trend is more evident. In 2017, the credit risk of the European banking sector will continue to be severe, making it difficult for banks to improve their asset quality. Divergence in credit quality of the European banking sector is directly caused by divergent economic recovery trends in European countries. Since credit provided by European banks is concentrated in the real estate, construction, and home mortgage sectors, countries such as Ireland and Spain, where the real estate market has recovered and debt repayment ability of the home sector has improved as the economy has picked up, have seen the NPL ratios of their banks showing a rapidly declining trend. High political risk in countries such as Italy, France and Greece may encumber their economic development, posing pressures upon the asset quality of banks in these countries. For some Northern European countries, as supported by their low interest rate policies, high and slowly rising domestic real estate prices will not endanger the credit quality of their banking sector in the short-term. However, considering that the housing index and the home sector's debt are all at historically high levels, the real estate bubble will be the biggest potential driver of the banking industry's credit risk in the future. On the other hand, inadequate loss provision and regulatory obstacles will continue to hinder European banks from tackling the problem of NPLs. The provision coverage ratio of European banks is generally low (mostly between 40% and 70%), weakening their ability to offset risks (Figure 2-3). The provision coverage ratio of countries with high NPLs is even lower, which seriously limits these banks' ability to deal with NPLs. Meanwhile, regulatory obstacles are an important reason for the high credit risk within the European banking sector. This is reflected not only in the cumbersome and complex legal procedures and political risks of Italy, France and Greece, which constrain government bail-outs for banks, but also in the increasingly strict regulations directly restricting government bail-outs for banks. In addition, for European countries with high NPL risk (Figure 2-4), their high sovereign risk renders it additionally difficult to have space to solve the problem of bank asset quality.

Figure 2-3: Loan quality and loss provision in the European banking industry (%)



Source: World Bank, IMF

Figure 2-4: Loan quality analysis of main European countries' banks (billion Euro, %)



Source: consolidated data from each central bank

Note: histogram shows the NPL scale of each country's banking system (Unit: billion Euro, left axis); Candlestick shows the range of NPL rates during the past 5 years, the hollow means the NPL rate rose and the solid means the NPL rate declined (Unit: %, right axis)

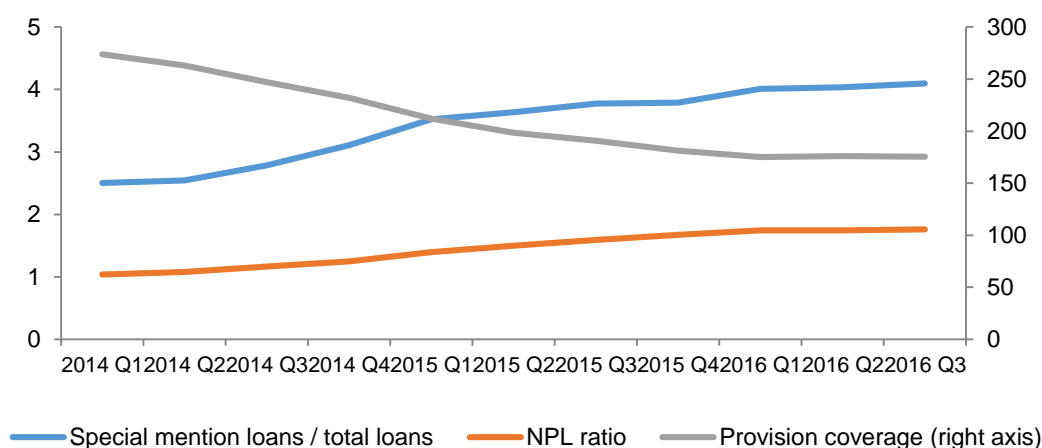
The processes that the European Banking Union has carried out have been slower than planned, and reform activities to banks have been less effective than expected. Although the consensus for establishing the Banking Union has been basically reached and the ECB has formally acted as a single regulatory function, frictions occurred soon afterwards. For example, in the implementation of the single resolution mechanism and the deposit insurance scheme, some detailed rules have been objected to by countries such as Germany since they do not want their depositors to pay for other countries' bad debt. In 2016, although the ECB provided liquidity guarantees several times, it did not solve the fundamental problems of Italian banks, and the single supervisory mechanism's core bill "The Bank Recovery and Resolution Directive (BRRD)" has hence been questioned. In 2017, political differentiation within the EU will intensify, and the process of the Banking Union's legislation and banking supervision reform will be affected or will continue to slow down, to a certain extent hindering or slowing down the timely assistance of some countries. Countries such as Italy will continue to be stuck in a prominent credit risk situation, alongside accelerated domestic political fragmentation and a declined stability of the government, and therefore the probability of applying the special clauses of the BRRD become increasingly likely and a government bail-out might become unavoidable. Besides, the effectiveness of measures such as the bank's disposal of NPLs, the major banks' stress tests, and asset valuations are far from expected. In the future, the rise of global financial uncertainties is more likely to be transmitted to European financial markets, which may worsen the credit risk of the European banking industry.

III. Rising NPLs, declining profitability and poor liquidity will increase the credit risk of China's banking industry, although overall risk remains controllable.

In 2017, the asset quality of Chinese banks will continue to be under pressure due to the downward economy. Influenced by the slowdown of the Chinese economy and the

adjustment of industrial structure, the NPL ratio and the proportion of special focus loans have continued to rise over the past few years, whilst the provision coverage ratio has continued to decline, to nearly 150% of the regulatory red line. Nevertheless, the NPL ratios have remained stable during the first three quarters of 2016 (Figure 3-1), mainly due to the active write-off of bad loans, the promotion of diversified NPL disposal (e.g. non-performing asset securitization, debt-equity swap, and a deregulation upon requirements for the establishment of local asset management companies), as well as a serious “renewal” phenomenon. In 2017, China will continue to deepen its supply side reform and accelerate the clearance of excess capacity industries, as the credit risk of Chinese companies will thus become more prominent. Against this background, continuously depressed profitability will impair banks’ write-off capacity for bad loans. Considering that there are many uncertainties concerning the details of these NPL disposal methods and given the continuously declining solvency of Chinese companies which renders it more difficult for them to renew loans from banks, China’s banks are expected to face increasing credit risk in 2017.

Figure 3-1: Loan quality and loss provision in the Chinese banking industry (%)

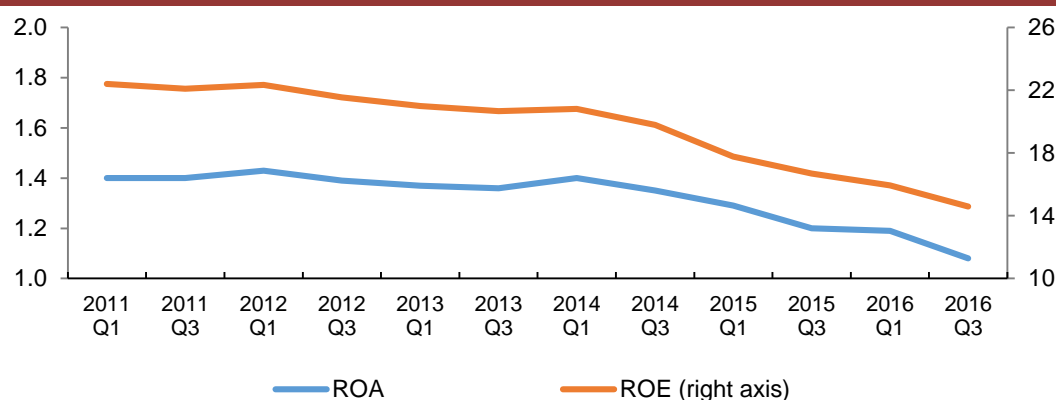


Source: CBRC

Increasing competition and pressure of NPL disposal will continue to impair banks' profitability and generate new liquidity risks. As of the third quarter of 2016, the ROA and ROE of China's banking industry fell to 1.1% and 14.6%, respectively (Figure 3-2). The main reasons for the continued decline in profitability are as follows: the net interest margin of banks has been narrowed due to the liberalization of interest rates (Figure 3-3); an increase in the impairment of bank credit assets has further reduced profit due to depressed business operations under the new macroeconomic conditions. In 2017, under the continued impact of these factors, China's banking sector will continue to face downward pressure upon profitability. On one hand, under the influence of interest rate liberalization, the increasingly fierce competition in the financial market will further compress the net interest margin of banks, and the space for net interest income improvement remains rather limited. On the other hand, a rise in the risk of asset quality deterioration in 2017 will increase pressure on more impairment provisions. Under the weak profitability environment, it is the expansion of bank’s asset scale and development of non-interest-related businesses which have become the primary means for maintaining banks’ level of profitability. In the second

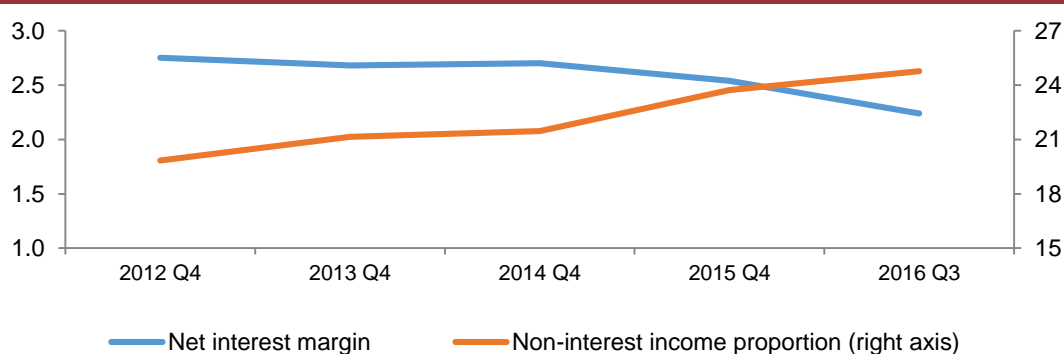
quarter of 2016, the balance of bank wealth management products increased by 15.5 times compared with that of 2009, and the aggravated problem of mismatched maturity of assets and liabilities had worsened liquidity risk. Once the market liquidity tightens, some small and medium banks with serious mismatch issues are more likely to suffer from rapid liquidity depletion, triggering a liquidity crisis.

Figure 3-2: Profitability of Chinese banks (%)



Source: CBRC

Figure 3-3: Net interest margin and non-interest income proportion of Chinese banks (%)

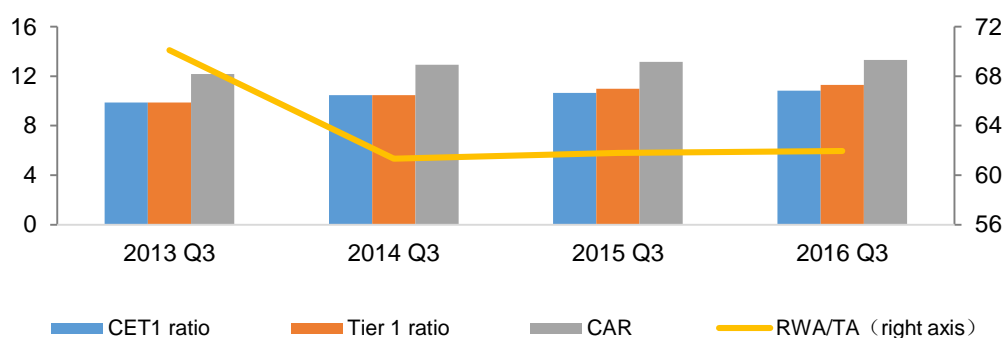


Source: CBRC

However, with financial supervision gradually put into place, the overall credit risk of China's banking sector is under control. First, under the guidance of a new capital management approach, Chinese banks' capital remains sufficient and capital adequacy indicators all present an upward trend (Figure 3-4). Second, owing to the strong macro-adjustment capacity of the Chinese government, a high deposit reserve ratio enables the central bank to have certain space to carry out monetary policy adjustments. In 2017, it is expected that the central bank will continue to use a variety of monetary policy tools to regulate the market liquidity, thus the outbreak of systemic liquidity risk for banks is quite small. Finally, since 2016, the central bank has introduced a series of rules and regulations related to wealth management products and Internet finance, and the expansion of macro-prudential assessment for banks' off-balance sheet assets. Affected by this, the growth of shadow banking decreased in 2016 (Figure 3-5). During the Central Economic Work Conference at the end of 2016, the main tasks for 2017, which

are to prevent systemic financial risks and curb asset bubbles, had once again been mentioned. It is expected that in 2017 measures to maintain financial market stability and prevent financial systemic risk will be successively introduced. With the continuous improvement and strengthening of financial supervision, the overall credit risk of China's banking sector is expected to be under control in 2017.

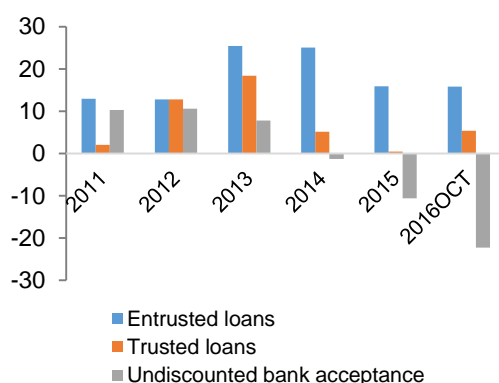
Figure 3-4: Capital adequacy of Chinese banks (%)



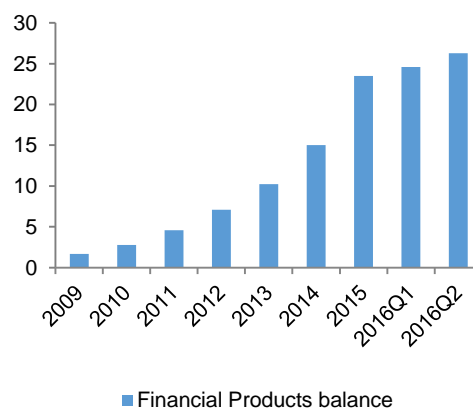
Source: CBRC

Figure 3-5: Main components of China's shadow banking sector

Shadow banking in social financing incremental scale (trillion RMB)



Balance of Financial Products (trillion RMB)



Source: People's Bank of China, Chinawealth.com

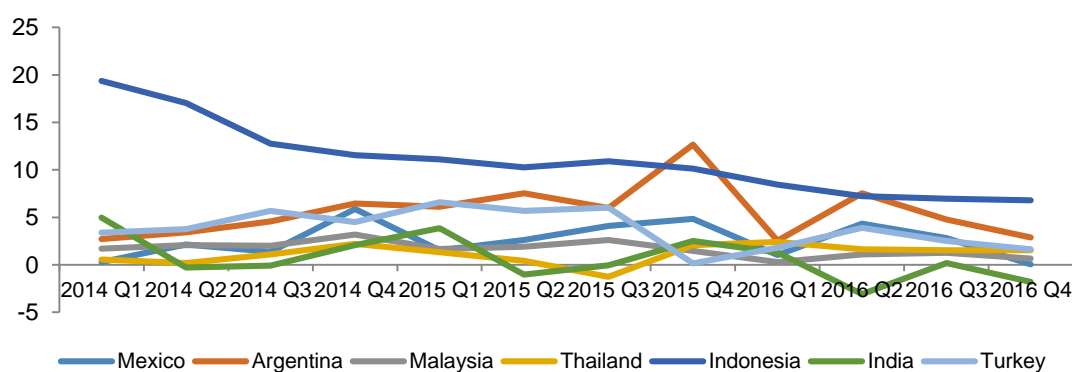
Note: Main components of China shadow banking: entrust loans, trust loans and undiscounted bank acceptance in social financing; non-breakeven financial products (about 75% proportion of total financial products); non-observed loans, for example, private lending, peer-to-peer lending (data usually unavailable).

IV. Banks in emerging market countries are subject to the dual adverse effects of the prolonged downturn in macroeconomic and capital outflows triggered by the raising of the U.S. interest rate; the credit risk of these banks is on the rise.

In 2017, the credit risk of banks in emerging market countries will be pushed up to

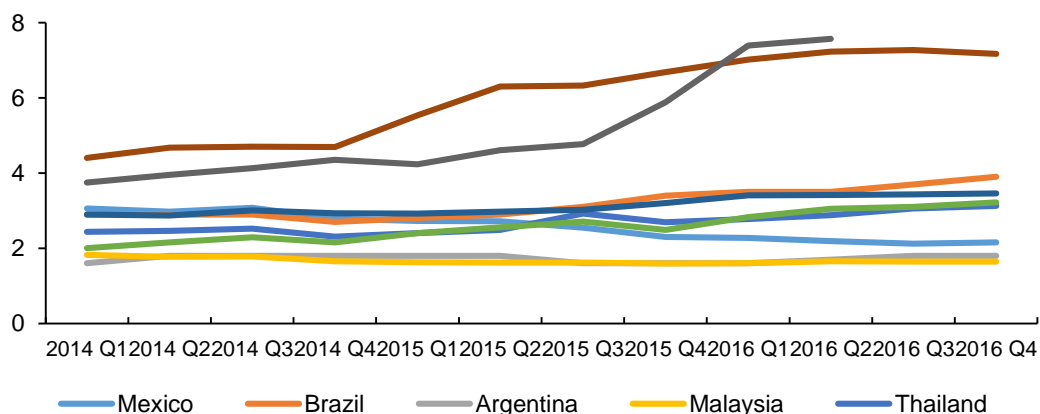
varying levels due to the increasing pressure in macroeconomic downward and the tightening of international liquidity. The U.S. interest rate hike in 2017 and the expectation of a further raise in the near future will enhance the trend that capital flows from emerging markets back on down to the United States. The resulting capital outflows and currency devaluation will further drive up the external financing costs of banks and exacerbate the fluctuation in domestic financial markets. The liquidity risk of the banking industry will rise. In response to the pressure of capital outflows and currency devaluation, some countries raised their central bank benchmark interest rates in 2016. With the further tightening of international liquidity in 2017, in addition to countries such as Russia and Argentina with relatively serious inflation, the interest rates of other major emerging market countries will face an upward pressure. The increase in financing costs and prolonged downturn in the economy will slow down the credit growth rate of the banking industry in emerging market countries (Figure 4-1) and undermine the repayment capability of companies. The asset quality of banks is thus facing the risk of deterioration (Figure 4-2) and credit risk will increase significantly. The credit risk of the banking industry in different regions will be described in the following.

Figure 4-1: Loan growth trend of major emerging market countries (%)



Source: consolidated data from each central bank, Bloomberg

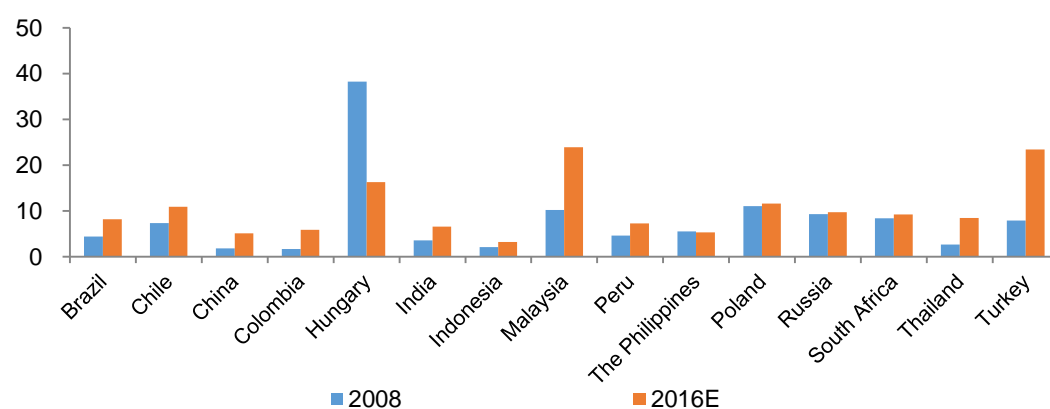
Figure 4-2: Non-performing loans of major emerging market countries (%)



Source: consolidated data from each central bank, IMF

In 2017, a heavier foreign debt burden will force the banking industry in Central and Eastern Europe to face capital outflows, currency devaluation, and various other pressure; some countries have prominent credit risks in the banking industry. Banking industries in countries of Central and Eastern Europe, particularly Turkey, Hungary, Poland and Russia, have a heavier foreign debt burden (Figure 4-3), although the difference in foreign debt burden structure makes their bank credit risk vary significantly. Foreign banks account for a large proportion in most developing countries in Central and Eastern Europe (e.g. Poland), and parent banks are mainly located in Western Europe, Northern Europe and other developed countries. The continued quantitative easing monetary policy which the ECB will conduct in 2017 shall provide adequate liquidity support and stabilize credit in the banking industries of these countries. However, some countries, such as Turkey and Hungary, are more vulnerable to the challenge presented by currency devaluation and the tightening of international liquidity in comparison to other countries due to the fragility of their economic structures and the large proportion accounted for by the US dollar debt in the outstanding foreign debt of their banking industry. Currency devaluation increases the interest expenses of the banking sector, and combined with the impact of increased provision for NPLs, the return on assets of the banking industry decreases year after year. Credit risk will continue to rise in 2017. In 2016, the asset quality of the Russian banking industry deteriorated significantly due to the impact of the economic downturn and a decline in the repayment capability of companies and households. With economic recovery due in 2017, the pressure on asset quality is expected to be alleviated.

Figure 4-3: External debt of banking sector/GDP in major emerging market countries in 2008 and 2016E (%)



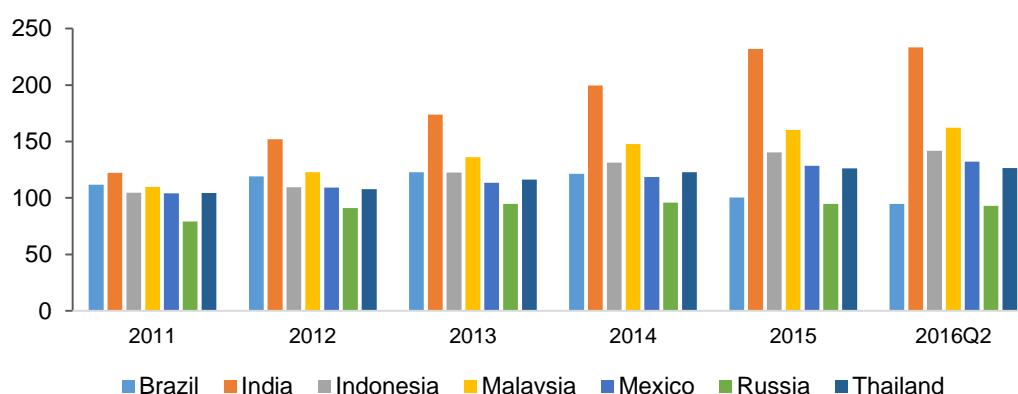
Source: World Bank, IMF

The prominence of external vulnerability will increase the credit risk of the banking industry in Latin America, which already sits at a high level. In 2017, countries in South America are generally trapped in stagflation, resulting in a significant rise in domestic interest rates and a deterioration in the asset quality of banks. Brazil in particular, due to a prolonged downturn in its economy, an increasing unemployment rate, and deteriorative financial situations for companies and individuals, is facing a continued increase of NPLs in the banking sector. The country's credit risk thus remains at a high level. In consideration of the increasing U.S. interest rate and the rise of trade protectionism in the United States, Mexico will face up to the pressure of both inclining internal and external financing costs, as well as declining export trade. Thus, the credit

demand of banks will be reduced and the repayment capability of companies will be weakened. It is predicted that the asset quality of the banking industry in Mexico is about to deteriorate and that credit risk will increase in 2017.

The downward pressure of asset prices will increase threat to the stability of the banking industry in Southeast Asia. Following the global financial crisis, the overflow of global liquidity has spawned asset price bubbles in some Southeast Asian countries. Influenced by the rate hike of the Federal Reserve, 2016's housing price index growth slowed significantly in Thailand, Malaysia and Indonesia (Figure 4-4), and the real estate NPL ratios of 5.1% and 3.4% respectively in Thai and Malaysian banking sectors are higher than their countries' average NPL ratios. With the further tightening of global liquidity in 2017, downward pressure upon asset prices will become more apparent, and economic growth will slow down. It is expected that the quality of banking assets will be further deteriorated in 2017. At the same time, high external debt in some countries (e.g. Malaysia and Thailand) will increase banks' exposure to a strong dollar exchange rate risk, leading to the accumulation of credit risk.

Figure 4-4: Housing price index of major emerging market countries (2010=100)



Source: BIS

The operating level of the banking sector and the NPL level of the public sector will be the bottleneck restricting the development of the banking industry in South Asia. South Asia is at a period of rapid economic development, as India's economic growth rate achieved 7.4% in 2016. It will maintain such growth levels over a period of time, and the banking industry's credit growth will likewise maintain rapidly increasing. However, due to serious corruption and the ineffective operation of public sector banks, the NPL ratio of the Indian banking sector reached 7.6% at the end of June 2016, and the NPL ratio of nationalized banks even reached 20.5%. This high NPL rate and a lack of management experience has directly affected the profitability of India's banking sector and pushed up its credit risk. Due to relatively limited financial reform in India, there is no sign of any significant improvement in the short-term. In addition, the Indian market is not unified. This is another major problem hindering the development of the banking industry. Although November's "waste notes" incident was a government trial in order to promote the establishment of a unified national market, the lack of matching measures to stabilize market liquidity limited the development of the banking sector in the short-term, and will ultimately adversely affect the liquidity of banks.