Analysis of Current Issues in the Chinese Economy
–Focusing on Debts, Property and Shadow Banking

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Summary

1. Introduction

- In order for the Chinese economy to become advanced, the country needs to resolve various issues that have emerged in the process of pursuing rapid investment-led quantitative growth.
  - Since the 1978 Chinese economic reforms, China has achieved an annual growth rate of 9.5% on average over the past 40 years by implementing economic policies such as agricultural reform, enhancement of management independence of state-owned enterprises (SOEs), decentralization and infrastructure development at the local government-level, as well as the introduction of market economic principles in the financial and foreign exchange markets.
  - With the aim of guaranteeing qualitative growth, China has been implementing supply-side structural reform measures since 2016, characterized by a restructuring of industries with overcapacity and deleveraging of corporate debts and the financial sector.
  - The Chinese economy is expected to witness a slowdown in growth while uncertainty in the financial market is expected to increase externally, affected by the acceleration of the US' interest rate hikes as well as China's exchange rate and trade conflicts with the Trump administration.

- This report examines the potential risk factors faced by China and how they affect the real economy, with a focus on recently emerged issues such as China's debt problem, property market and the shadow banking system.

- The first risk factor that warrants attention is China's debt problem which has been on an excessive upswing, expanding mainly in the private sector.
  - The investment-led growth strategy pursued by China via credit expansion during its period of rapid growth has incurred redundant investments, over-investment and excessive debt problems.
  - Concerns have been raised since 2015 about China's economy falling into a long-term low growth trajectory due to excessive debt or developing into a financial crisis similar to that of the sub-prime mortgage crisis in the US.
  - The private sector carrying an increased burden of excessive debt and the creation of a bubble in asset prices can weaken market confidence, imposing a negative impact on the real economy; while a potential spiral towards a financial crisis cannot be ruled out if credit costs rise and asset prices suffer a sudden dive, incurring capital leakage from emerging markets like China.
- The second subject of analysis is the risk factors associated with China's property market.
  - The Chinese property market is an asset market that has a significant impact on the overall economy due to its close correlation with household credit expansion, local government debts and the banks' role in credit creation.
  - A sudden fall in the property market is likely to be followed by a contraction of related construction investments, leading to a slowdown in the real economy.
  - Also, in the financial sector, a slowdown in the property market can trigger a surge in non-performing household and corporate loans, causing a deterioration in the financial soundness of banks. This may lead to compound risks involving local governments, shadow banking and banks, incurring a crisis in the overall financial system.
- The final subject that was examined in this report is the risk factor asso-

ciated with the shadow banking system which has recently been expanding significantly.

- Although the total debt-to-GDP ratio has recently been more or less decreasing, non-banking financial institutions and small-and medium-sized banks have been leading the expansion of shadow banking outside of the regulatory framework set by the supervisory authorities.
- Funds sourced in the short-term are being injected into long-term projects such as SOC development and real-estate development, which pose high risks of a maturity mismatch; and a failure to recoup the invested capital may trigger a credit crisis among regulated banks and trust funds.

2. China’s Debt Problem

❑ China’s total debt (household+corporate+government) reached 255.7% (203.4 trillion yuan) of GDP as of end-2017.

○ The debt-to-GDP ratio of each economic unit was 47.0% (38.8 trillion yuan) in government debt, 48.4% (40.0 trillion yuan) in household debt and 160.3% (132.4 trillion yuan) in corporate debt.

○ Total debt in major countries worldwide has increased while overcoming the recession triggered by the dual shocks of the 2008 global financial crisis and 2012 European debt crisis.

- This is because efforts toward credit expansion were maintained through expansionary monetary policies and proactive fiscal policies in order to ease the credit crunch incurred by the financial crisis and escape the recession through a boost in aggregate demand.

○ However, total debt in China and major countries unfolded in different ways due to varying economic conditions, fiscal space and direction of economic policies; in terms of their pace of increase and changes exhibited among each economic unit.

- China's debt-to-GDP ratio increased at a much higher rate than other major economies. While the total debt-to-GDP ratio in advanced and emerging economies increased by 36.1%p and 86.9%p, respectively from 2008 through 2017, the ratio in China increased by 114.4%p during the same period.
- The total debt increase in major advanced countries was led by government debt affected by active fiscal policies such as the issuance of sovereign bonds, while the total debt increase in China was characterized by significant expansions in private credit led by corporate debt.
- Over the period from 2008 through 2017, the Chinese corporate debt-to-GDP ratio increased by 64.0%p, from 93.6% to 160.3%.

❑ Above all, the sudden increase in Chinese corporate debts stems from the investment-led growth strategy via credit expansion, which has been pursued by government authorities.

- ○ Since the Chinese economic reforms, China, through its 1983 local government reform, gave local governments a right to a portion of the income gained through the sale of land use rights, and increased their authority to approve fixed asset investments and foreign investments.
  - Accordingly, local governments spearheaded efforts related to social infrastructure establishment and fixed asset accumulation.
- ○ Since the global financial crisis and European debt crisis, China's efforts to actively enhance investments as part of its economic stimulus policy in response to the recession led to a sharp increase in corporate debts, mainly in SOEs.
  - Affected by the large-scale economic stimulation led by debt-dependent corporate investments since the global financial crisis, total fixed capital investments in China increased by 20.2% annually on average from

2008 through 2011, before and after the crisis.

- In particular, SOEs' corporate debts increased excessively as fixed capital investments became more concentrated in social infrastructure and property development, rather than in production equipment.
- Consequently, SOEs increased their debt ratio at a rapid pace as they were able to procure policy funds at low interest with government support, reaching 99.7 trillion yuan as of 2017 which accounted for 75.3% of total corporate debt (132.4 trillion).

○ Not only is China's system of external capital procurement centered around bank loans due to its immature capital market, but as companies' profitability deteriorated since the global financial crisis and their dependency on external capital procurement increased, it became a major factor contributing to corporate debt increases.

❑ China's household debt-to-GDP ratio remains lower than that of major advanced countries, at 48.4% as of end-2017, but has been steadily increasing since the global financial crisis.

○ China's household debt-to-GDP ratio increased 30.5%p from 17.9% to 48.4% from 2008 through 2017, increasing by the highest rate of any major economy.

- While the household debt-to-GDP ratio in advanced countries nearly topped 76.0% in 2008, the figure dropped 0.2%p to 75.8% in 2017 due to debt adjustment.

○ The main cause of China's household debt increase lies in mortgage loans spurred by the low costs of loans and a continued increase in property prices.

- Backed by abundant liquidity and low interest rates, Chinese property prices recorded a high increase rate of 9.3% YoY, beginning with the global financial crisis, the European debt crisis and the beginning of

2018 up to September of the same year.

- Although the bank loan interest rate (1-year maturity) was 7.0% in 2008, this figure dropped to 4.4% in 2017 due to the financial crisis and the liberalization of loan interest rates.

○ The volume of household loans totaled 31.5 trillion yuan as of end-2017, representing 78.9% of the total household debts of 40.0 trillion yuan, among which 24.0 trillion yuan accounts for mortgage loans representing 76.0% of household loans and 59.9% of total household debt.

- While the weight of household loans among total new lending was only 14.3% in 2008, the weight increased significantly to the 36% level in 2010. In 2017, the weight of household loans reached 52.7% among the total volume of new lending, 13.5 trillion yuan.

❑ Concerns have been raised since 2015 that the Chinese economy may fall into a long-term low-growth pattern or spiral into a financial crisis, due to its excessive debts.

○ Professor Michael Pettis of Peking University indicated that there is a possibility that the Chinese economy, due to its debts, falls into a recession by around 2020 and enters a prolonged low-growth period as experienced by Japan.

○ In a commentary for the New York Times, Professor Kenneth Rogoff of Harvard University argues that the Chinese economy is likely to experience a "hard landing" due to its excessive debt risks.

○ Jonathan Anderson[1]) warned that China's debt-dependent economic stimulus has reached its limits, and that the Chinese economy is facing an imminent Minsky Moment[2] as the sudden increase in excessive debt incur a

1) Anderson, J, *China's Impending Minsky Moment* (China Economic Quarterly, Vol. 20, 1, Mar 2016)

2) A Minsky Moment, a theory based on a hypothesis by American economist Hyman Minsky on financial instability, refers to the point in time where asset bubbles burst to mark the beginning of a financial crisis as debtors begin to sell even sound assets, to make debt adjustments after pursuing economic stimulus initiatives based on the expansion of excessive debt.

deterioration of the banking sector.

- ○ On the contrary, there are some views that a high savings rate leads to a sustainable situation encouraging corporate investment, driving economic growth and generating corporate profits.

❑ When corporate profitability significantly deteriorates, corporate debt becomes insolvent beginning with marginal firms, and the related financial institutions may experience a deterioration in their financial soundness.

- ○ In particular, if the recession persists due to internal and external shocks and external export conditions deteriorate, the profitability of exporting manufacturing sectors and local SOEs may weaken, exposing them to the risk of bankruptcy.
- ○ Since 2013, the profitability index in the manufacturing sector has seriously deteriorated, and the volume of losses in deficit-hit manufacturing industries is exhibiting a significantly increasing trajectory since the financial crisis.
  - – The total loss volume in companies with a deficit has significantly increased since the financial crisis, reaching 684.4 billion yuan in 2017.
  - – Thus far, the ratio of non-performing loans (NPL) in the banking sector incurred by the rise in corporate debt remains generally low, reaching 1.85% in 2017.
- ○ Since most investment projects are implemented through provincial SOEs on behalf of local governments, insolvency of such SOEs may lead to the fiscal deterioration of local governments.
  - – Among the total fixed investment volume of 63.2 trillion yuan as of 2017, 60.8 trillion yuan (96.3%) was spent on local government investment projects.
- ○ The Bank for International Settlements (BIS) warned that the credit-to-GDP gap in China's private-sector debts was 29.0% in March 2016,

the only country among major economies to have reached a level nearly three-times higher than the BIS threshold (10%).

- Credit-to-GDP gap refers to the gap between trends and actual domestic credit-to-GDP ratios, and is used as an indicator for countercyclical capital buffers. When shocks occur in which an increased gap is associated with higher deterioration of economic conditions, the financing power to address this situation weakens, increasing the potential of a credit crisis.
- The private-sector debt-to-GDP ratio of Chinese corporates and households reached 208.4% in the second quarter of 2016, recording a 29.0%p higher rise than the long-term trend (180.2%).
- Conversely, countries such as the US, Korea and Greece had 10% or higher ratios around the global financial crisis and European debt crisis but have all significantly reduced the ratio to well-below 10% as part of debt adjustments.

○ An interest rate change following an increase in the private-sector debt ratio may lead to increased private-sector vulnerabilities and burdens for those who lack the ability to redeem their debt; as well as incur significantly enhanced sensitivity in the financial status of the private sector due to tightened funding, financial conditions and an economic slowdown.

- China's debt service coverage ratio (DSCR)[3] of private-sector debt as of end-2017 reached 19.8%. Approximately 20% of household and corporate income is spent on debt redemption, which is a higher rate than that of major advanced countries.

○ According to a recent empirical analysis conducted by the IMF[4], while an excessive increase in household debt supports economic stimulation in the short-term, it exerts a negative impact in the medium-term on the macro-economy and financial stability, incurring a slowdown in private con-

3) DSCR refers to the ratio of debt service against income.
4) IMF, *Household debt and financial stability* (Global Financial Stability Report, Chap. 2, Oct 2017)

sumption and economic growth.

- In the short term, an increase in the household debt-to-GDP ratio has a positive impact on higher economic growth and private consumption, but the effects appear to be reversed in three to five years.
- Too much debt may increase the frequency of booms and busts in the capital market because of greater risk taking and leverage, and may leave countries ultimately with lower economic growth.

❑ The Chinese government debt remains lower than other major advanced countries, having increased by a relatively small rate even after the global financial crisis.

○ China's GDP-to-government debt totaled 47.0% as of end-2017, lower than major advanced countries such as the US (99.0%), UK (112.1%), Japan (212.9%) and Germany (69.4%).

○ By pushing forward with economic growth via SOE-led active investment expansionary policies, China has been maintaining a relatively gradual increase trajectory in government debt.

- An expansionary fiscal policy trend has been maintained as part of an economic stabilization policy since 2013, while fiscal deficits gradually increased from 1.5% (0.9 trillion yuan) against GDP in 2011 to reach 2.9% (2.4 trillion yuan) in 2017.

○ Local government debt was lower than that of the central government up to 2009, but overtook the latter to reach nearly twice the size of the central government debt in 2017.

- Among the total government debt of 38.8 trillion yuan in 2017, central government debt represents 13.5 trillion yuan and local government debt represents 25.3 trillion yuan of the total.
- Should the financing environment for local governments continue to deteriorate, this may trigger a reduction in infrastructure investment

which has been spearheading the post-crisis recovery trend of the Chinese economy, potentially slowing economic growth.

- Considering the fact that SOE debts are implicitly guaranteed payment by the government as is the case in a socialist economic system, the government debt-to-GDP ratio has already reached the level of advanced countries.
  - As of 2017, the Chinese debt-to-GDP ratio - the sum of government debt-to-GDP ratio (47.0%) and SOE debt-to-GDP ratio (122.8%) - is 169.8%, which is higher than that of major advanced countries, excluding Japan (212.9%).

❑ Even though there is little chance of China's debt problem developing into a deterioration of financial institutions or a financial crisis, it is high time for financial reforms in order to drive long-term sustainable growth and minimize negative impacts on the economy.

- However, the external conditions pose a difficult dilemma for the Chinese authorities in terms of the immediate implementation of policies to rapidly adjust private-sector debt via fiscal tightening and financial as well as monetary reforms.
  - A slowdown in economic growth is inevitable as the increase rate of the working age population slows down due to an aging society; limitations exist in terms of the export and investment-led growth strategy; and a transition is happening toward strengthening economic fundamentals with a focus on the services sector and domestic demand.
  - Externally, since the Trump administration took office, the trade dispute with the US has escalated, increasing uncertainty and leading to a deterioration in export-related manufacturing industries.
  - According to the OECD (2014), China's potential growth rate recorded an annual average of 8.1% over 2011 to 2015 but is expected to drop

to 5.9% over 2016 to 2020 and 4.0% over 2021 to 2030.

- ○ In the long term, the development of an accountable and market-centered credit rating system as well as the Chinese government's achievements in the structural reform of SOEs are expected to become key factors in reducing risks incurred by increased corporate debt.
  - – Increased capital procurement through short-term financing and shadow banking can increase the vulnerability of Chinese banks and aggravate systemic risks in the financial sector.
  - – In this regard, policy efforts must be continuously pursued to enhance risk management and the transparency of the banking system, and to reduce the accumulation of risks associated with maturity mismatches and the liquidity transformation of shadow banks.
  - – In order to designate the companies to be saved and enable capital procurement through fair market evaluation, the ultimate task is to establish an accountable credit rating system.
  - – So far, the current measures taken by the Chinese authorities are not comprehensive and systematic but are instead focused on making headway in reducing overcapacity, and financial system reform measures are regarded as mediocre.
- ○ In conclusion, an excessive increase in the debt burden within the private sector and an asset price bubble can weaken market confidence, exerting a negative impact on the real economy; and an increase in credit costs and a sudden decrease in asset prices may lead to capital flight from emerging economies such as China, developing into a financial crisis.

3. Risk of a Property Price Fall

❑ The Chinese property market exhibits fluctuations in housing prices and sales volume according to the Chinese government's regulatory policies.

- During the 2008 global financial crisis, the Chinese government implemented measures to stimulate the property market to underpin the economy, such as an increase in the maximum loan-to-value (LTV) ratio, lowering of mortgage loan interest rates, providing a prime rate for affordable housing suppliers as well as tax incentives related to property acquisition tax and capital gains tax.
  - Consequently, property prices which had fallen by 1.9% YoY in 2008 began to exhibit signs of overheating from the second-half of 2009.
- In response, policymakers began to introduce various regulatory policies from 2010 onwards to prevent an excessive rise in housing prices, which reverted to a downward trend in 2012.
  - Such policies include a rise in the percentage of down payments on second homes, a restriction on housing purchases under which home buyers must confirm that they do not own two or more homes, an extension of the period individuals must own their homes to be eligible for capital gains tax exemption, and a strengthened property tax system.
- When the prices reversed course again and started to increase in 2013, the authorities announced a set of stronger regulations on property.
  - In February 2013, then Chinese Premier Wen Jiabao announced the "five national articles (*xin guo wu tiao*, 新国五条)" that included a restriction on speculative property sales, enlarging the range of "experimental units" (allowing experiments to be carried out in more cities) for imposing property taxation, and taxation on capital gains.
- However, as the property market began to exhibit signs of a slump such as a slowdown in the price growth trend, reduced sales volume and an accumulation of vacant housing inventory starting from the second-half of 2014, policies were implemented to revitalize the property market from September 2014.

- Property prices returned to a rising trajectory due to deregulation policies implemented in 2014, and concerns increased about the overheating of the property market, mainly in Tier 1 cities.
  - The housing prices in Tier 1 cities have exhibited an increasing trend of over 10% since August 2015, and the rate surpassed 20% YoY each month in 2016.
    - The housing price increase led by Tier 1 cities spread to Tier 2 and 3 cities, spearheading the price hike.
  - As concerns escalated about a property bubble, the Chinese government started implementing region-specific policies from the second-half of 2016.
    - Measures to take effect in second-half 2016 included a restriction on purchases and loans, expansion of small-and medium-sized residential housing and strengthening oversight of 22 regions witnessing sky-rocketing housing prices among Tier 1 and 2 cities.
    - Tier 3 and 4 cities are provided with support measures in terms of property demand aimed at stimulating sales to reduce vacant housing inventory.

- Amid rapid urbanization as Chinese household income increases at a steady pace, real residential demand continues to rise, spearheading the increase in housing prices.
  - As the increase in national income due to China's economic growth gave rise to a stronger desire for residences, housing demand surged as people began to recognize property as a means for asset accumulation.
    - From 2004, when property prices started to increase at a high rate, to 2017, the per-capita disposable income of urban Chinese households annually increased by 11.0% on average, surpassing the country's GDP growth rate.
  - In addition, as the population from China's rural farmlands migrated to

the cities due to the rapid urbanization, the demand for urban housing surged significantly.

 – The rate of urbanization (ratio of urban population against the total population) rose from 17.4% in 1970 to 58.2% in 2017.

○ In terms of demographics, analyses suggest that the rise in housing demand for the Baby Boom generation born between 1960 and 1979 has led to a housing price increase.

 – The population aged 30 to 55, who are the main demand group for housing, increased from 28.7% of the total population in 1990 to 39.7% in 2017.

❑ The overheating of the property market since the financial crisis is due to the abundant liquidity flowing into the property market, such as through the monetary easing policy, the increase in property investments by local governments and funding via shadow banking.

○ As the economic downside pressure mounted since the second-half of 2014 due to the decline in potential growth rate, a persistent slump in the property market and restructuring, the People's Bank of China took measures to address the economic recession such as a reduction in savings and loan interest rates and the Cash Reserve Ratio, as well as liquidity injections via various monetary policy tools.

○ As a result, M1 including monetary base and demand deposits increased significantly in the markets, and the increased liquidity flowed into the stock and property markets instead of the real economy, incurring a significant hike in stock prices and housing prices.

○ In addition to the monetary easing policies, the increase in local governments' property investments is also pointed out as a cause of property market overheating.

 – Since direct issuance of municipal bonds is prohibited and financing via the capital market is restricted for local governments, funds procured via indirect loans through local government financing platforms (LGFPs) found their way into the property markets through large-scale infrastructure construction projects.

- Moreover, as local governments and property developers that have limited sources of financing borrow funds through the shadow banking system, such funds leak into the property market and overheat the markets.

❑ The sudden slowdown of the Chinese property segment is expected to have a negative impact on the real economy in the form of weakened infrastructure investment and a contraction in property-related industries following reduced household consumption and construction investment as well as a fiscal deterioration of local governments.

- Because Chinese household assets are characterized by a higher weight of property compared to advanced countries, a negative wealth effect following a slowdown in the property market is likely to weaken consumption.
- China's real estate is a key source of funding in terms of local governments' fiscal revenues, so a slowdown in the property market is likely to aggravate the fiscal burden of local governments.
  - As of 2017, Chinese local governments' revenues from the sale of land use rights account for 86.7% of all local government-managed funds and 23.3% of total revenues, while property-related tax revenues accounted for 30.1% of local government tax revenues.
- Considering the high weight of property investment in fixed asset investments and the fact that the majority of fixed asset investments are conducted by local governments, a property market slump is likely to lead to a slowdown in China's growth rate due to weakened local government investments.
  - As of end-2017, property investments account for 22.1% of total fixed

asset investments, 96.3% of which are conducted by local governments.

- Since the Chinese property market is closely intertwined with banks, the shadow banking system and local governments, a shock in the property market could potentially bring about instability throughout the financial system.
  - In China, not only has the weight of mortgage loans among household bank loans continued to increase, but there is also the practice of requiring property as collateral for corporate loans, indicating that corporate loans are also directly or indirectly linked to properties, creating significant exposure to the property market.
    - The increasing number of NPLs in Chinese banks also escalates the risks in the banking sector upon a real estate market shock.
    - Furthermore, a financial risk can be incurred if it becomes difficult to pay back LGFP loans due to a property market slump or if local governments and property developers, having loaded up on debt through shadow banking, become insolvent.

- Housing prices in China are high considering the nation's income level, and prices are extremely high in major cities.
  - China's price-to-income ratio (PIR) reached 9.3 (average of 35 cities as of 2017), higher than the level considered reasonable by the United Nations (UN) or the World Bank.
    - Major cities that experience high population influx from other cities, such as Shenzhen, Xiamen, Beijing and Shanghai, recorded 30.6, 18.7, 18.2 and 13.2, respectively.
  - The ratio was higher than in other major cities, indicating that China's property prices are relatively high.
    - In terms of China's median income, the country recorded a PIR of

10.2, the second highest after Hong Kong (18.1).

- Although mortgage loans have recently increased at a significant rate in the Chinese property market, the risk levels are not considered as high in terms of housing finance, given the volume of loans-to-GDP or LTV level.
  - China's mortgage loan balance totaled 23 trillion yuan as of September 2017, having increased by more than 20% YoY since the second-half of 2015 when property prices reverted to a rising trend, reaching 35.4% YoY in the fourth quarter of 2016.
  - Calculations of the weight of new mortgage loans against the amount of property sales conducted to estimate China's LTV ratio resulted in a rate of 48.5% as of 2016, which is not high compared to the average LTV in major economies.
  - Also, the household debt-to-GDP rate was 48.4% as of 2017, lower than that of major economies.

- In terms of supply, the recent decrease in oversupply exhibited through the reduction in vacant housing inventory and unsold space has eased concerns about a sudden slowdown in the property market.
  - While sales soared as China's property prices increased, the recent comprehensive enhancement of regulations caused a slowdown in the rising trend of housing investments and groundbreaking of new homes, gradually reducing housing inventory and unoccupied space.
    - Unsold residential property in China reached 466.35 million㎡ at its peak as of February 2016, before declining to 260.10 million㎡ in September 2018.
    - The housing inventory increase rate turned negative since 2016, with the housing inventory in 30 cities falling to their lowest levels since

2013 in August 2018.

- Despite concerns about a reduction in the housing demand group due to the working age population decline in the medium-to long-term, parallel implementations of the National New-type Urbanization Plan and Hukou (household registration system) Reform are expected to boost housing demand in urban areas.
  - According to UN population estimates, the Chinese population of working age people between 15 and 64 began to decrease after reaching its peak in 2015, giving rise to expectations of a reduction in the housing demand group due to the declining trend.
  - However, since China is continuing to implement urbanization policies aimed at increasing income among rural-urban migrant workers (*nongmingong*, 农民工) as well as enhancing domestic demand, the population inflow to urban cities is expected to continue.

4. Shadow Banking Risks

- Whereas there is no clear and unified standard for defining the meaning and scope of shadow banking because of the varying financial systems and status of financial development in each country, the Chinese authorities define shadow banking as follows:
  - According to the State Council of the People's Republic of China, shadow banking refers to 1) unlicensed credit intermediation conducted in regulatory blind-spots; 2) credit intermediation operated by a credit agency that has not acquired financing licenses and has insufficient oversight; and 3) licensed financing without sufficient oversight.
    - Examples include underground finance, online finance, P2P lending,

pawn shops, credit guarantee companies, microfinance companies, wealth management products (WMPs) and money market funds (MMF).

- ❑ For convenience, the analysis of China's shadow banking is generally classified into a broad measure of shadow banking and a narrow measure of shadow banking.
  - ○ The narrow measure of shadow banking refers to financing that is outside of the authorities' oversight or is relaxed, generally including entrusted loans, loans by trust companies and bankers' acceptances (BA).
  - ○ The broad measure of shadow banking encompasses all credit intermediation conducted outside of the banking system including WMPs and private lending by non-banking financial institutions.

- ❑ On international terms, the most widely recognized definition of shadow banking is by the Financial Stability Board (FSB).[5)]
  - ○ The FSB defines the broad measure of shadow banking as credit intermediation that involves entities and activities fully or partially outside the regular banking system.
  - ○ The FSB's definition of the narrow measure of shadow banking is those parts of non-bank credit intermediation that may pose financial stability risks and/or pursue regulatory arbitrage.

- ❑ The development of shadow banking in China was backed by credit rationing led by state-owned banks, suppressive financial regulations, an imbalance in the market supply-and-demand of funds, under-

5) At the November 2010 Seoul Summit, the G20 Leaders warned of a potential risk in the shadow banking system and requested that the FSB develop recommendations to strengthen the oversight and regulation of the shadow banking system. The FSB developed the concept of shadow banking and began to publish relevant reports in 2011.

development of the financial markets and newly increased demands for higher returns.

- ○ From the supply side, licensed banks and non-banking financial institutions emerged as the two major suppliers in the shadow sector—the banks in the process of seeking new high-yield opportunities while avoiding rigorous government regulations, and the non-banking institutions in making up for the imbalance in market funds.
  - – As licensed Chinese banks faced difficulty in generating profits due to rigorous regulations such as lending restrictions as part of government efforts to reduce the side-effects of its economic stimulus policy implemented since the global financial crisis, they began to conduct off-balance sheet financing such as through entrusted loans and loans via trust companies to pursue various fund management objectives and generate high returns while avoiding regulations.
  - – Non-banking financial institutions that were unregulated or subject to weaker regulations than banks such as trust companies and microfinance companies complemented the imbalance in the market supply-and-demand of funds by providing credit to individuals, small-and medium-sized enterprises (SMEs) and micro enterprises who had limited credit access and opportunities to borrow funds from licensed banks.
- ○ On the demand side mainly among households, corporates and local governments, the demand for shadow banking increased due to the rising demand for investments in high-return products, the slow pace of development in China's financial markets and the need to secure resources for increased investment.
  - – The demand for shadow banking increased among households as they experienced negative real interest rates due to the low bank deposit interest rates and high inflation, and increased investments in high-yield

products such as WMPs.

– The demand for shadow banking increased among corporates, mainly SMEs, who had limited means of funding due to the underdeveloped direct financial market in terms of equity and bond issuance, and were excluded to some degree from credit allocation compared to SOEs and large conglomerates.

– The demand for shadow banking increased among local governments to secure investment resources as they added traction for growth, while the central government tightened control of local government debt. In particular, LGFVs were widely used as a channel for investment funding.

❑ The size of shadow banking in China, according to its definition, is assumed to be around 33 to 76% against GDP, as of end-2017.

○ Based on the sum of entrusted loans, loans by trust companies and BAs handled by licensed banks led by SOEs among total social financing, the size of the narrow measure of shadow banking is estimated at 32.6% against GDP as of end-2017.

– The size of the narrow measure of shadow banking increased from around 3 trillion yuan at end-2007 to 26.9 trillion yuan as of end-2017.

– Taking a closer look at the weight of narrow measure of shadow banking-to-GDP, the figure remained at 11% at end-2007 but rapidly increased since the global financial crisis to reach a peak at 33.3% at end-2014, and stagnated since 2015 when shadow banking regulations were enhanced.

○ Although the size of the broad measure of shadow banking varies depending on its scope and is difficult to identify accurately, global investment banks (IBs) and Chinese securities companies provide the following estimates:

- The estimated figure by JP Morgan, a global IB, is a maximum of 46 trillion yuan as of end-2013, 81.0% against GDP.
- The estimated figure by Haitong Securities, a Chinese securities company, is 63 trillion yuan as of end-2017, 76.2% against GDP.
- According to Haitong Securities, loans from non-banking financial institutions are highest at 30 trillion yuan, followed by 13.2 trillion yuan in entrusted loans, 8.4 trillion yuan in loans by trust companies, 4.2 trillion yuan in BAs, 1.2 trillion yuan in P2P loans and 1.0 trillion yuan in loans by microfinance companies.

❑ The FSB, which is an international financial institution, estimated the narrow and broad measures of shadow banking at 65.2% and 89.0% of GDP, respectively.

- ○ China's narrow measure of shadow banking estimated by the FSB in terms of US dollars as of end-2016 is around $7 trillion, accounting for 65.2% of GDP.
  - This figure is second largest after the US ($14.1 trillion), representing 15.5% of the total size of the narrow measure of global shadow banking, the largest after the US (31.3%).
  - In terms of the size-to-GDP, China's narrow measure of shadow banking is similar to the global average (73.0%), falling behind major advanced countries (Switzerland 111.7%, Canada 91.6% and the US 76.1%), but higher than most emerging countries (Brazil 39.5%, Chile 25.9% and Mexico 20.0%).
- ○ The FSB estimated that the size of the broad measure of China's shadow banking totaled $9.6 trillion in terms of US dollars in 2016, representing 89% of the country's GDP.
  - The size of the broad measure of China's shadow banking against GDP is lower than that of Canada, the UK, Switzerland, the US and

Korea which are within the 100 to 300%-range, but is higher than most other emerging economies as well as advanced economies such as Germany and Spain.

- In particular, the pace of increase is the highest compared to other countries, witnessing an above-40% rise annually on average from 2011 through 2016, exhibiting sudden growth that far exceeds the average global increase rate of 5.0%.
- Meanwhile, the rate of the broad measure of shadow banking in China among its total financial assets was merely 4.0% in 2008, whereas it rose rapidly to 19.5% in 2016.

❑ In terms of supply, risks in Chinese shadow banking are relatively higher in non-banking financial institutions such as trust companies than in licensed banks.

- ○ Although licensed Chinese banks' involvement in shadow banking in increasing, their financial circumstances including NPL ratio and capital adequacy ratio are relatively stable.
  - Among China's total social financing, the size of the narrow measure of shadow banking (sum of entrusted loans, loans by trust companies and BAs) annually handled by licensed banks reached 25.9% on average from 2008 through 2017, surpassing the 18.2% total asset increase rate during the same period.
  - The rate of NPLs which indicate the financial stability and soundness of licensed banks increased from below 1.0% in 2011 to 1.8% in 2017 but remains low as it is below 2.0%, with capital adequacy ratio also stable at 13.7% in 2017.
  - However, since the size of WMPs linked to non-banking financial institutions is significant, exposure to the potential risks of such institutions may be transmitted to licensed banks.

- Among non-banking financial institutions, trust companies witnessed rapid growth through WMP sales, with the potential of triggering a crisis in the financial system from a maturity mismatch and liquidity risks.
  - As the assets of trust companies surged from 2.4 trillion yuan in 2010 to 26.3 trillion yuan at end-2017, they have grown to have the second highest influence in the financial market after licensed banks, emerging as potential key players in increasing shadow banking risks.
  - Trust funds handled by trust companies have short-term maturity, incurring a sudden surge in debt balance at a certain time period. When investment return rates and asset turnover rates fall in times of economic trouble, there is a high risk of trust companies going bankrupt.
  - In particular, risks are transmitted to banks when problems occur in WMPs linked to banks, which becomes a factor aggravating systemic risk.

❑ The shadow banking risks in terms of demand are relatively higher in corporates and local governments than in households.

- The debt-to-GDP ratio of Chinese corporates reached 160% (as of 2017), above the 150% criteria set by international organizations such as the OECD to determine the level of risk.
  - In particular, since the underwriting process for SME loans and the risk management system of shadow banking entities is vulnerable, there is a high chance of credit default when credit risks or economic deterioration occur.
- In terms of the size of shadow banking activities associated with local governments, the size of untracked loans is estimated to be much larger than the figures actually reported.
  - While the Chinese Ministry of Finance announced that the debt volume of local governments reached 18.3 trillion yuan as of September

2018, this figure excluded debts drawn through LGFVs, and when adding these, the total sum is expected to be much higher than the official statistics.

- Funds procured by local governments via shadow banking are characterized by high interest rates and short-term maturity, degrading the quality of debts; and there is the potential for them to become risk factors when property prices fall or the economy deteriorates, such as when problems occur in paying back the principal and interest.

○ Regarding the household sector, there is low potential for risks incurred by shadow banking, considering the low rate of financial debt against total assets and GDP.

- As of 2013, the most recent documented records, household financial debts accounted for only 9% of total assets and 35% against GDP, well below the rate in advanced countries where shadow-banking is well developed (82% in the US).
- Also, while the household sector has a high weight of investments in property and WMPs, there is little chance of an occurrence of loss spreading throughout the entire financial sector because according to their investment propensity, the primary source of investments is savings rather than leveraged investments.

❑ China's shadow banking risks are escalating due to its rapid expansion amid weak supervision by the financial authorities.

○ According to FSB estimates, the size of the broad measure of China's shadow banking against GDP is between 65 and 89%, lower than that of advanced economies which are within a 100 to 300%-range, but developing at a faster pace than any other country.

○ In addition, there are doubts about the uncertainty and accountability of the published statistics because the shadow banking sector acknowledged by the Chinese government exhibits a wide gap with international standards.

- ❑ Meanwhile, the Chinese government is aware of the problems associated with shadow banking and is strengthening regulations as part of risk prevention efforts, but side-effects appear to be inevitable in the process.
  - ○ Since 2016, the Chinese government made the prevention of financial risks its top priority, introducing the Marco Prudential Assessment framework to measure off-balance sheet transactions and reinforce capital requirements.
  - ○ In April 2018, the Chinese financial supervisory authority and the State Administration of Foreign Exchange jointly launched the "Guidance Opinions Concerning Standardization of Asset Management Operations by Financial Institutions," which introduced strengthened regulatory measures focusing on the containment of shadow banking including by imposing a ban on guaranteed principal by banks and a ban against products with guaranteed returns.
  - ○ However, such strengthening of shadow banking regulations create a risk of weakened investment and a slowdown in the real economy due to the aggravated pressure on corporate financing and an increased number of bankruptcies among marginal firms.
    - − Regarding banks, the accrual of provisions and capital expansion can result in less space for new loans and deteriorated profitability, in the process of transforming off-balance sheet transactions into market-based finance.

- ❑ Overall, while there is little possibility for China's shadow banking to evolve into a systemic crisis, the critical challenge lies in the Chinese government's ability to mount policy responses.

- Moving forward, China's shadow banking is expected to further expand in line with financial sector advancement, which will lead to the development of various new financial products and the gradual opening of the financial market.
- Still, such risks are unlikely to spiral into a systemic financial crisis, considering the government's control over the banking sector which serves as the main supplier of shadow banking services, risk-preventive regulatory measures and the low level of securitization due to the underdevelopment of the financial market.
- The realization of shadow banking risks mainly depends on the Chinese government's efficiency in the regulation and oversight of shadow banking, as well as how well policy objectives can be achieved by mitigating the negative impacts on the economy during the process.