

Yi Gang: China's monetary policy framework - supporting the real economy and striking a balance between internal and external equilibrium

Lecture by Mr Yi Gang, Governor of the People's Bank of China, at Chang'an Forum, held by the Chinese Economists 50 Forum, Tsinghua University, Beijing, 13 December 2018.

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It is a great pleasure to attend Chang'an Forum held by the Chinese Economists 50 Forum in Tsinghua University. The title of my speech today is "China's Monetary Policy Framework: Supporting the Real Economy and Striking a Balance between Internal and External Equilibrium." The major task of monetary policy is to support the real economy, and meanwhile China is an open economy, so we must give consideration to both internal and external equilibrium in formulating monetary policy. When there are contradictions between internal and external equilibrium, we need to strike a balance between them. This is the overall framework of my speech.

My speech is composed of four parts. The first part is an introduction to China's monetary policy framework, the second part clarifies how monetary policy supports the real economy, the third part is about how to prevent and resolve financial risks, and the last part focuses on how to strike a balance between internal and external equilibrium. As we know, the *Law of the People's Bank of China* explicitly stipulates that the ultimate goal of China's monetary policy is to maintain currency stability and thereby facilitating economic growth. To maintain currency stability has two tiers of meanings: internally it means to maintain prices stable and externally it means to keep RMB exchange rate basically stable at an adaptive and equilibrium level.

Now I'd like to come to the first part, China's monetary policy framework. As we can see, over the two decades since the promulgation of the *Law of the People's Bank of China*, the monetary policy has been generally successful in maintaining currency stability. Throughout the 40 years since reform and opening-up, the inflation rate has remained low with the exception of only a few years. In recent years, the inflation rate has been kept around 2% and 3% on the whole. It was somewhat high in 1988 and 1994, but that was a long time ago. Deflation risks also occurred sometime after the year of 1998. In maintaining currency stability, we need not only to prevent inflation, but also to forestall economic harms caused by deflation. Meanwhile when it comes to maintaining stable prices, it doesn't mean lower prices are necessarily better. Rather, it is the concept of stability that should be emphasized.

Maintaining currency stability also involves exchange rate issues. The RMB exchange rates are the values of RMB quoted against other currencies, which can reflect China's economic strength and the purchasing power of RMB in the world. We have been doing well in maintaining RMB exchange rate basically stable at an adaptive and equilibrium level. The single exchange rate regime of RMB was established in the mid-1990s. Before that, there were both market-based and official RMB exchange rates. In 1994, the dual exchange rates were unified, and then RMB exchange rate against US dollar stood at 8.7. Over the past a few decades, RMB has appreciated against the US dollar and a basket of currencies in terms of both real effective exchange rate and nominal effective exchange rate, and it has been revalued about 20% against the US dollar. With RMB exchange rate maintaining basically stable at an adaptive and equilibrium level, the Chinese people got tangible benefits. By ensuring basic stability of the value of RMB, we can help promote economic growth, and thereby meeting the ultimate goal of monetary policy specified in the *Law of the People's Bank of China*.

It is the ultimate goal of monetary policy to maintain currency stability. But how? To this end, we need to set an intermediate goal. In China, M2 is chosen as the intermediate goal of monetary policy, as it can be measured and controlled. However, international experiences show that with

an economy becoming more and more developed and market-oriented, the correlation between M2 and the real economy will decline. Therefore, in 2012 we adopted aggregate financing to the real economy as a reference indicator, which measures the financing offered by the financial sector to the real economy, covering loans, bonds, stock, trust, etc.

As the correlation between quantitative indicators and economy gradually declines, the monetary policies of major developed countries and market economies are principally aimed at regulating price indicators. Reforms in China were also focused on nurturing a market-based interest rate system and enhancing a price-oriented regulation and transmission mechanism. What is interest rate? It is the price of money. We should give the market a decisive role to play in resource allocation. Then, how does the market allocate resources? It is through prices, which are determined by the supply-demand relationship.

Money is also a resource, a scarce resource. Hence, the marketization of interest rate is very important, and the RMB interest rate, which is determined by the supply-demand relationship of the market, must not be distorted. Only in this way can the resources be allocated in a market-based manner. The interest rate shaped by the supply-demand relationship also reflects risk premium. If your risk is relatively high, then the market will require a higher interest rate. By contrast, if your risk is relatively low, then your risk premium will be low as well, which enables you to borrow at a lower interest rate. There is profound knowledge in market allocation of funds.

Regulation tools are necessary in achieving the goal of monetary policy. The tool system of China's monetary policy is relatively simple. First of all, there is open market operations (OMO) for injecting or withdrawing liquidity; second, the PBC can adjust money supply with central bank lending and central bank discount; third, depository financial institutions can be required to park deposit reserves in the PBC; additionally, we can also supply liquidity to the market with the medium-term lending facility (MLF), the standing lending facility (SLF) and other tools.

Just now I mentioned marketization of the interest rate. You may have heard a phrase called "interest rate corridor". The central bank can adjust and control the interest rate between a floor and a ceiling level, which is called "interest rate corridor". In the times of planned economy, loan quotas were set and resources allocated through administrative measures. After that, commercial banks came into existence, the planned economy was replaced by market economy, and the interest rate determined by market supply and demand came among. At this point, an important question is, "What is the appropriate level of the interest rate?" We can see that central banks in various countries all concentrate on the adjustment and control of the interest rate. The Federal Reserve mainly regulates the federal funds rate by adjusting it to a level deemed as appropriate, which will then affect the interest rates on deposits, loans and treasury bonds and thus forming market interest rates.

At present, the focus of China's monetary policy is gradually shifting from quantity control to price control. You may ask, "currently what is on earth the focus of the PBC, quantity control or price control?" My answer is, we are in a transition from quantity to price control, and both tools are employed during this process. Price control has been more important than it used to be, but at the same time, with the impact of our basis and systems as well as people's thinking pattern, quantity control is not yet discarded and remains very important. Hence at present, both quantity and price controls are playing their part.

This figure is an illustration of interest rate corridor. In the corridor an important interest rate is DR007, namely the seven-day repo rate in the inter-bank market. A repo is a loan secured against collateral, which is a transaction between institutions. Why is it important? Because it involves enormous trading volumes and can affect all market interest rates.

As you can see, the red line of DR007 lies between the blue line on the upper side and the green line on the lower side. The blue line represents the interest rate of SLF and the green one is the interest rate of excess reserves. The interest rate of excess reserves stands at 0.72% now, so

the market interest rate must be higher. Why? Because as an absolute minimum, you can enjoy a 0.72% return by putting your money in the central bank, and this is also the safest way to keep your money — hence this is the lower limit of interest rates. The upper limit is the interest rate of SLF. When financial institutions run out of money, they can borrow from the central bank via SLF, and the interest rate is moderately higher than DR007. Why? Because the incentive mechanism will not work if it is lower than DR007. You can see that the market interest rates fluctuate between the upper and lower limits. You may consider the figure quite simple; but it is not easy to establish such a mechanism in the market, nor is it effortless to keep DR007 between the two limits.

Recently there is a buzzword called “macro-prudence.” We know that the requirement of establishing two-pillar regulatory framework of monetary and macro-prudential policies has been proposed in the report to the 19th National Congress of the CPC. I have just explained the goal, transmission and tools of monetary policy. Then I’d like to explain what is macro-prudential policy. It is mainly aimed at ensuring financial stability and forestalling systemic risks and characterized by counter-cyclical adjustments. The monetary policy can practice both quantity and price control. Quantity control is a simple tool, as quantity can be specified clearly. However, it still has drawbacks, and the biggest problem is that the specified or allocated quantities may be wrong and fail to conform to market conditions. Moreover, the quantities, which are allocated in Beijing, may go wrong when it comes to provincial, municipal and county levels. Also, problems like rent-seeking, tunneling and corruption may also arise in the process. Price control sounds like a fine tool, but sometimes it is not very efficient and may not achieve regulatory goals. Hence in practice, especially following the global financial crisis, countries around the world have been increasingly aware of the importance of macro-prudential policy. This is also why we have decided to establish two-pillar regulatory framework of monetary and macro-prudential policies.

The following four items can give us some direct impression of macro-prudential policies. Firstly, the PBC has established the macro-prudential assessment (MPA) system to assess whether financial institutions work in line with macro-prudential requirements. The MPA system contains a number of indicators, such as capital adequacy ratio and liquidity measures. We all know the Basel Accords, and Basel III has proposed many requirements centered on capital adequacy ratio. The MPA system should assess whether commercial banks have satisfied these requirements.

Secondly, macro-prudential policies shall be in place for cross-border capital flows. Sometimes the inflow and outflow of capital may cause herd behavior or irrational panics among market entities. In such a case, we need to consider employing macro-prudential policies.

Thirdly, macro-prudential policies concerning housing finance. For example, we all know there is down payment ratio of housing loans, and this ratio can be used for counter-cyclical adjustments. It varies from country to country and from stage to stage in the economic cycle. Differentiated measures can also be taken for first-time and second-time homebuyers. All these are effective practices of macro-prudential policies in different countries, and the core is making counter-cyclical adjustments to protect people and ensure security of financial assets.

Fourthly, we are attempting to practice macro-prudential management over financial infrastructure. Financial infrastructure, mostly including clearing, payment and trusteeship systems, also requires macro-prudential mentality in regulation.

The monetary policy includes quantity and price control, and it should be aligned with macro-prudential policy in the regulatory process. As the monetary policy tools and framework are not enough to ensure stability, macro-prudential policies can be implemented simultaneously to maintain financial stability and prevent systematic financial risks. The two-pillar regulatory framework of monetary and macro-prudential policies can provide additional guarantees when the PBC considers and addresses the overall situation. The National Financial Work Conference

has proposed that the Financial Stability and Development Committee under the State Council should be established to enhance the PBC's responsibilities concerning macro-prudential management and systematic risk prevention.

The second part of my lecture is about how monetary policy supports the real economy. I want to talk about the macro-economic situation and the response of monetary policy. Some basic judgments are necessary, for example, we need to have a profound understanding of the “new normal” of the economic development. At present, China's working-age population is decreasing, and labor shortages begin emerging in some industries. The proportion of the service sector in the economy is becoming increasingly larger, growing to exceed 50%. Under this circumstance, China's economy has been transitioning from a phase of rapid growth to a stage of high-quality development. Hence the economy will not grow at double-digit rates as it used to, which is associated with our population structure. Currently, our economy is moving toward high-quality development. China is the second largest economy in the world, with its GDP exceeding USD 12 trillion, which is a large base. Consumption is the major driver of economic growth. Meanwhile, we have been acting on the understanding that “lucid waters and lush mountains are invaluable assets” to enhance environmental protection, as evidence by the increasingly harsh environmental standards imposed on many industries. All these show the necessity to pursue high-quality economic development. The growth rate may be a bit lower than before, but we will be able to achieve sustainable development as long as we can ensure high-quality development, full employment and “lucid waters and lush mountains.” By saying these things, hopefully I can make you understand that while thinking about the monetary policy, we need to take into account the basic feature of economic development: China's economy is moving towards its goal of high-quality development.

China's economic growth is close to the potential output, which means that the former is actually approaching the latter. Hence it is safe to say that resource mobilization and economic mobilization in China are relatively efficient, and our unemployment rate is not high and few resources are left idle. Meanwhile, China's economic growth remains resilient. Over the past 12 quarters, the economic growth rate has ranged between 6.7% and 6.9%. The overcapacity problem has been evidently alleviated, and a basic balance has been achieved between the supply and the demand. As you can see, there is a blue line and a red line in this figure. The blue line represents the y-o-y growth of manufacturing investment, and the red line stands for the y-o-y growth of the GDP. When the y-o-y growth of manufacturing investment is higher than that of the GDP, the production capacity is growing. You can see that the blue line lies below the red line for some time, and this shows that during that period, overcapacity can be alleviated as the growth of manufacturing investment is relatively slow. This can also be reflected by enterprises' profit gains: when enterprises secure satisfactory profits, they tend to invest more; and when they are experiencing profit downturns, they will invest at a slower pace. Private-sector investment is particularly sensitive.

Overall, China's economic growth is strong, stable and resilient. Recently, the downward pressure on the economy has mounted, and the growth of off-balance-sheet financing has slowed down significantly. The blue line and the red line in the figure represent the growth rates of entrusted loans and trust loans, respectively. As we can see, entrusted loans and trust loans grew significantly in 2016 and 2017, but the bar chart indicates that both loans have registered a negative growth since the beginning of this year — which means their increments are decreasing. The green line stands for the y-o-y growth of infrastructure investment, and it can be seen that the decreasing growth of off-balance-sheet financing is highly correlated with the declining growth of infrastructure investment. Infrastructure investment may be partially financed by entrusted loans and trust loans. Therefore, if financing is cut, the construction of these projects and programs will slow down.

In response to the changes in economic operation, we have undertaken forward-looking pre-emptive adjustments and fine-tuning of the monetary policy this year. The PBC reduced the

required reserve ratio (RRR) four times, which freed RMB 3.65 trillion capital in total, and unleashed RMB 1.76 trillion of liquidity in the market via the MLF. All these measures were taken to provide stronger support for the real economy and ease the investment contraction as a result of economic cycle. Meanwhile, regulatory policies and some other management requirements, such as the purge of local government debt, can also give rise to investment contraction. Through RRR cuts and MLF, we can supply liquidity, offset cyclical investment contraction and ensure the stability of economic operation.

Recently, the difficulties that private enterprises are faced with in securing financing become more prominent. Here I'd like to present the statistics of credit, bonds and equity. For example, the loans obtained by private enterprises from the credit market this year has climbed more than 5% from 2017, which is relatively slow. In terms of bonds, this year also saw a decrease in bond financing of private enterprises, which showcases enterprises' difficulty in securing bond financing. Equity financing also registered a decline. Meanwhile, some private enterprises have become bond defaulters. In the first eight months of 2018, there were 22 enterprise bond defaults, 18 of which were made by private enterprises, involving more than RMB 50 billion. These statistics show that it is difficult for private enterprises to access financing.

To deal with this problem, the PBC has introduced a policy mix of "three arrows" targeting at smoothing the three major financing channels I mentioned just now. The first arrow is to enhance credit support for private enterprises. We work to support commercial banks in issuing loans to small and micro businesses (SMBs) and private enterprises by increasing the quota of central bank lending and central bank discount and adjusting the parameters in the MPA system.

The second arrow is aimed at relieving the difficulty faced with private enterprises in issuing bonds. The tool can serve as a guarantee to enable private enterprises to issue bonds. Moreover, the negative effects of the three financing channels, i.e. credit, bonds and equity, may reinforce each other. Why are commercial banks unwilling to purchase bonds issued by private enterprises? That is because they are worried about possible bond defaults. Commercial banks will be held accountable if a private enterprise defaults on the bonds they have purchased. Therefore, people in commercial banks are concerned about the potential risks of private enterprises. However, if private enterprises cannot issue bonds, they will lose access to liquidity, which will then lead to credit problems and further undermine commercial banks' willingness to issue loans. Why? Because commercial banks are aware that such enterprises have run out of money and have difficulty in loan repayments. As a result, they dare not to lend money to these enterprises. Hence if enterprises cannot issue bonds, they will not be able to secure loans. To make matters worse, banks that have issued loans may even accelerate the collection of payments once they find a private enterprise at fault. As we know, failed bond issuance will usually be made known to the public. If a listed company fails to issue bonds, the news will be a blow to its share price. Since many private enterprises use shares as collaterals to borrow money from banks, it will be harder for them to secure loans when their share prices plunge. Meanwhile, in this case, commercial banks will ask them to increase collaterals. Therefore, it can be concluded that the negative effects of the three financing channels can affect and reinforce each other.

Among the three channels, bonds and equity are more transparent than credit. In terms of loan issuance, commercial banks and private enterprises need to sign one-to-one agreements, while, by contrast, the bond and share issuance information of private enterprises is known to the entire market. So we choose bonds to be the breakthrough in a bid to address this issue. What we do is to provide bonds with insurance, so as to help private enterprises issue bonds smoothly. Then the successful bond issuance becomes a piece of good news. After knowing that bonds have been issued, commercial banks will understand that the enterprises have secured money and stop urging them to pay back loans. When the stock market receives the message of bond issuance, the share price of such enterprises will probably take a favorable turn. This is the reason why we have decided to choose bond issuance as the breakthrough in easing the

financing difficulty of private enterprises.

The second arrow is the support instrument for bond financing by private enterprises, which is similar to the credit risk mitigation (CRM) instrument. If you major in finance, you will know a buzzword called CDS (Credit Default Swap), which refers to the insurance against credit default. In the 2008 Lehman crisis, the reason why AIG, an American insurance company, collapsed was that it had issued too many CDSs, and the US Department of the Treasury and the Fed had to bail it out. Consequently, on the financial market, people may turn pale at the mention of the CDS. Will issuing too many CDSs lead to new crisis? In terms of this instrument we introduced, companies issuing CDSs are fairly reliable. At the same time, the design of the entire support instrument is completely market-oriented, and companies would issue the CDSs and create the instrument jointly with lead underwriters including commercial banks and securities companies. Bond buyers can choose whether to buy the CDSs at their own discretion. But with the insurance, the bonds are exempt from credit risks, which is conducive to bond issuance.

Recently we have successfully issued several dozens of private enterprise bonds with the volume reaching tens of billions of yuan. Since November this year, the bond issuance of private enterprises has been restarted. The support instrument for bond financing has raised the credit of private enterprises and relieved market anxiety over potential defaults by private enterprises. Some state-owned commercial banks used to be unwilling to buy bonds of private enterprises as they were anxious about a possible default. Now they can buy with the insurance. For example, the yield of a private enterprise bond is 7%, and 1% of it is the premium. Then, an investor who buys this bond can obtain 6% return on the bond and pay 1% for the premium. If the investor is audacious enough and do not need the insurance, that is also okay. In this case, all of the 7% yield belongs to the investor as the instrument we designed is optional. You can choose to buy or not to buy. Whether the bond is issued at the rate of 6% or 7% is completely determined by the market according to the roadshow bidding and book building. In the past month or so, the lowest premium was only 40 base points, or 0.4 percentage point, which means that this enterprise had a high credit level, so its premium was relatively low. In the meanwhile, the premium of some enterprise was 200 base points, implying relatively high risk of the enterprise. Yet, this enterprise was willing to issue bonds. Why was that? For instance, the bond is issued at an interest rate of 7.5%, of which 2% is the premium. As a matter of fact, the person who buys this insurance can still get a return of 5.5%, which is quite satisfactory for commercial banks.

Therefore, the design of this instrument is market-oriented. When designing the policy, we must take into consideration the decisive role of the market in resource allocation and put power under control. When does power most probably incur problems? One is when you can decide who can issue bonds and who cannot. In fact, we cannot determine who can or cannot issue bonds since the decision should be made by the market. The same case goes with the question of who can or cannot successfully issue bonds. We have adhered to this principle in the design of this instrument by requiring that the competent authorities must not be involved in the selection of the company list. This is aimed at limiting the power. There is no such process as review or approval and no competent authorities determining who can or cannot issue bonds.

The second is when we price the bond issuance and CRM instruments. What should the interest rate be? Is it 6%, 7% or 8%? From the perspective of issuers, the lower the interest rate the better, since they need to pay for interest. Quite the opposite, investors who buy bonds want higher interest rates so as to secure more returns in this way. But the risk is also higher when the interest rate goes up. So investors should not only look at the interest rate as once there is any default, it will be impossible to get their principal back.

Then what is the appropriate level of the interest rate on bonds and the premium? Who should be the decision maker? The answer is the market. Therefore, relevant authorities should not set the interest rate or premium. We all know that there should be a lead underwriter to issue bonds, and it can be a commercial bank or a securities company. After figuring out the financial condition of

the bond-issuing company, the lead underwriter illustrates it to investors through roadshows, and invites bids and builds up the book before deciding the interest rate on bonds and the premium.

The third arrow is to study and set up the support instrument for equity financing by private enterprises, in a bid to alleviate equity pledge risks and stabilize and promote equity financing by private enterprises.

Now I am going to talk about how to support SMBs and private enterprises. There are many examples at hand, and they are all about how to help these enterprises obtain loans. Let me start by presenting a macro quantity-related concept. We have conducted a survey on SMB loans in line with the statistical standards of inclusive finance. By the end of this October, over 16 million enterprises had been granted loans, and this is a rather big number. You can see media reports saying that the Chinese economy is pretty vigorous, and mass entrepreneurship and innovation are prospering. China has a population close to 1.4 billion, but do you know how many enterprises there are in China? I mean those that have officially registered at the industrial and commercial administration. The rough number of China's enterprises (including some public institutions) is 100 million. Currently this number might have exceeded 100 million since it has been growing very rapidly over the past few years.

Why do I mention this? It is fairly easy to register a company and now the cost is pretty low, but it is quite difficult for the company to raise funds. The major financing source of start-ups is relatives as borrowing money from banks or the capital market is very difficult. Moreover, there is a strict selection process for bank loans. At present, there are a total of 1.35 million SMBs in China that have secured loans, 11.03 million self-employed businesses with operating loans, and 4.11 million SMB owners with operating loans. These are all among the 100 million companies mentioned just now. The credit record of companies with loans can be looked up in the credit reporting system of the PBC. SMBs and self-employed businesses are at a relatively disadvantaged position. In view of their loan conditions, we should say that the financial support for them is quite strong.

The average lifespan of China's SMBs is three years. Some achieve success and become big companies while others disappear soon. The average lifespan of SMBs in the US is eight years, and that in Japan is twelve years. When can China's SMBs get bank loans for the first time? On average, four years and four months after their establishment — that is to say, they have to survive the death phase before getting loans. If they can get their first loans, they have a 75% + chance to get the second loans. This is the law of finance. What finance does is to guard against risks by examining whether you have collaterals or not and how big the risk of granting loans to you is. So we can see such a distribution structure.

Now let us go back to the three numbers I mentioned just now. Why do self-employed businesses and SMB owners have more loans than SMBs? It is determined by risks. The registered companies now are companies of limited liability that can go bankrupt. When SMBs apply for loans, banks need to check whether they have collaterals. Otherwise, banks cannot get back the principal once such enterprises go broken. This is the reason why, among so many SMBs in China, only 1.35 million SMBs can secure bank loans as legal persons. Then why are there so many self-employed businesses that have been granted operating loans? This is because although they are companies as well, they apply for bank loans in the name of individuals. If the money is not paid back, their houses and assets bear joint liability, which in nature is unlimited liability. The situation for SMB owners is similar, as they ask for loans in their own names and may have used their houses as collaterals. You can learn about the implications of preventing financial risks. From the perspective of macro economy, as long as a newly established company can create jobs and produce products, it is good to the society — just as the saying goes, it doesn't matter if a cat is black or white so long as it catches mice. No matter the loans are SMB loans, self-employed business loans or SME owner loans, enterprises can increase employment and boost economic growth as long as they get loans. Therefore, what

I care about are the loans of this 16 million plus companies, and we should pay attention to the perspective of inclusive finance in this sense.

With respect to changes in the external environment, the real economy has been impacted by some external shocks. These shocks might be trade frictions or other market turbulences, which have indeed exerted some impacts. In this process, expectation guidance should be enhanced. And we should particularly be alert that risks can transmit across different markets, like the risk transmission among the bond market, the foreign exchange market and the stock market. In the meantime, the monetary policy and macro-prudential policy should be utilized in maintaining market stability.

The monetary policy pays special attention to market liquidity, and one indicator is DR007. This year, the terminal DR007 dropped from 2.8% in the first half of the year to 2.6%, and China's 10-year treasury bond yield also fell from around 4% at the beginning of this year to around 3.3% at present. This is the effect of the prudent and neutral monetary policy, reflecting its support for the real economy. It is safe to say that the financing and interest rate conditions are more relaxed, which can partly ease the problem of enterprises being unable to access loans or having to pay high interest to secure loans.

Looking at aggregate indicators, we just released the growth rates of the M2 money supply and aggregate financing. Currently, M2 grows at a rate of 8%, and aggregate financing around 10%, matching the growth rate of the real economy. The current macro leverage ratio stands at a rather stable level. Over the past 10 years, or 20 years, in particular after the Lehman crisis in 2008, China's macro leverage ratio has been growing rather rapidly. As illustrated in this figure, the blue line, red line and green line represent enterprises, households and the government respectively. It can be seen that the macro leverage ratio has increased by roughly 100 percentage points from 2009 to 2015. The leverage ratio in 2007 and 2008 was around 150%, and then increased to around 250% in 2016, which means that all economic entities borrowed considerably. This has drawn the attention of regulatory authorities and the authorities in charge of macro regulation and control. In recent years, the central government has proposed to facilitate "deleveraging". Consequently, the leverage ratio has been standing at around 250% since last year and has remained stable for almost eight quarters without further rise.

The monetary policy should be flexibly adjusted according to changes in the economic situation, and counter-cyclical adjustments be particularly strengthened. If the leverage ratio is rather high, or bubbles emerge in asset prices, the best strategy is "slow air-bleed" and "soft landing" so as to make smooth adjustments to the economy. When the market or economy is impacted by external shocks, we should take prompt measures to stabilize the financial market and, in particular, to bolster market confidence. This is a fairly good regulation and control strategy. In the next phase, the monetary policy is going to push forward with its continuous support for the real economy.

Just now I talked about two subjects: the framework of our monetary policy and how the monetary policy and finance support the real economy, in particular, how they support SMBs as well as private enterprises. And with regard to private enterprises, my focus was on how the second arrow in the three-arrow policy mix provides support for private firms in their bond issuance.

Here comes the third part: how to guard against financial risks in the process of formulating monetary policy. This calls for consideration of both monetary policy and macro-prudential policy, so the "dual pillar" regulatory framework should be improved to enable the mutual promotion and complementation of monetary policy and macro-prudential policy.

I would first talk about what risks we should guard against. Here are several examples. One of the manifestations of major risks is abnormal market fluctuation and external shocks, for instance, the marked ups and downs in the stock market or the bond market, or market panics

resulting from corporate defaults. Default means that an enterprise can't repay the principal and interest of its debt when time is due, which would cause panics. External shocks may destabilize market expectations. At present, the pivot interest rate of money market stands at 2.6% with the interest rate of excess reserves at 0.72% as the floor and the SLF interest rate at 3.55% as the ceiling. The range of this interest rate corridor is relatively narrow. Why do we say it is not easy to keep the interest rate within a narrow range? For example, when the Asian financial crisis hit Hong Kong in 1998, the interest rates in HK could be as high as 300% plus. Just now I mentioned that the money market rate stands at around 2.6%, the ceiling is over 3% and the floor is 0.72%. External shocks may drive the interest rate up to 10%, 20%, or even several hundred percent. It shows that if stricken by expectation or external shocks, the money market will probably suffer from great fluctuations, so we need to consider preventing risk contagion among different markets when making policies.

The second manifestation of risks is credit risks. What are credit risks? For commercial banks, loans become non-performing assets if they cannot be serviced, which constitutes banks' credit risk. For companies, if they default on bonds issued, the credit risk will emerge. Credit risks should be taken into consideration when thinking about the monetary policy and financial stability. At present, the overall non-performing loan ratio of commercial banks is 1.87%, lower than 2%. In regards to the bond market, we should think about how many defaults there have been this year, what the volume involved is, what the default rate is, and how much the overall credit default risk impacts the market.

The third risk is the so-called shadow banking risk. Shadow banking refers to bank-like businesses such as asset management business, inter-bank business and asset securitization operated by banks and other financial institutions including trust companies, asset management companies and insurance companies. Shadow banking business conducts credit transformation or maturity transformation on assets, which is similar to banking business in nature, but the capital adequacy ratio and other indicators of shadow banks are not as strictly regulated as those of banks, so more attention should be paid to the risks of shadow banking. For example, some institutions circumvent macro policy and financial regulation in the name of asset securitization, but do not actually sell the assets, nor maintain bankruptcy remoteness. This is the risk that should be noticed. Shadowing banking sounds pretty risky, but well-regulated shadow banking business is a necessary supplement to the financial market. Hence shadow banking is not an absolutely negative concept. As long as business operations are conducted in accordance with laws and regulations, all of the business can become necessary supplements to the financial market, be it on-balance-sheet or off-balance-sheet business, trust funds, publicly offered funds or private equity funds.

The fourth risk is illegal financial activities. Some unlicensed institutions and individuals raise funds illegally through the Internet in the name of innovation. And trading-floor products in violation of relevant laws and regulations are also part of illegal fund-raising activities, and should be cracked down on. As for illegal fund-raising in the private sector, there were over 5,000 new illegal fund-raising cases in China involving a large volume and many investors in 2017. In response to illegal financial activities, we must enhance consumer protection, act with greater vigilance and strengthen legal right protection. In particular, we should protect the elderly from being cheated.

Various factors cause financial risks, such as international factors, domestic factors, market factors, institutional factors, moral factors and incomplete regulation. So risk management should be constantly improved. In coping with risks, there should be a unified principle, which is "who the child belongs to shall holds the child." That is to say, the owner shall take the risk. Everyone knows that there are risks in the market and investment practices, so there should be careful considerations before any investment decision is made. This is the law of the market, and we should all keep it in mind.

Ultimately, finance is set to address the issue of credit. Some people have had good credit since a very young age, while some do not even when they are in their later years. Several measures can be taken to address the issue of credit. One is to know about the borrower. If some people do bad things, their reputation will be hit hard. Therefore, they can be trusted since the cost will be too high for them to serve the devil. What does the financial market trust? It trusts money. It trusts capital fund. Why should the owners assume the risk? When you do not know about or cannot distinguish the credit of a person, you can look at how many bets he has made, or how much money chipped in. If he has put his money here or used his house as collateral, you can trust him within the scope of his collateral or the money he has chipped in. In this way, you are able to assume the corresponding risk against his collateral. This is the essence of finance. It is about why I can trust you. I trust you, or your record, or your capital fund. So owners need to assume the risks.

When you start up a business, let's say, how do you distinguish illegal fund-raising from normal and standardized financing? The precondition is risk-assumption by the owners. Assuming that an enterprise comes to control a rural credit cooperative (RCC) or a rural commercial bank, and becomes its owner. If anything goes wrong in this rural commercial bank, it should be the owner's capital fund that bears the brunt. Why do we focus on the CAR? The core of Basel Accords is the CAR. The requirement for it is 8%. If a bank does many other types of business, the CAR requirement will be higher. This is also the case if it is a systemically important financial institution (SIFI). Why is the CAR highlighted? The logic is that the money is really yours, and your money will be lost first if there is any loss made, so I can trust you to a certain degree. I believe that the money that is lost first is your money, and usually you would not easily lose your own money, so I can trust you.

This is also true in our supervision on banks. When we find any RCC or financial institution is at risk, we should remind it of the situation. If it begins to consume its own capital, we should pay attention to it. If its capital fund is almost used up, the money lost later will be that of the depositors. Now we should pay close attention to it. When the loss made reaches a certain degree, we should take it over rather than allowing it to keep operating. Why? Because its capital has been drained, the money of clients or the society will suffer if there is further loss. Then why is it trusted at the beginning? Because at the beginning, it is its own money that is lost, and I believe the capital fund as collateral represents its credit as well as compensation for the risk.

This also applies to bond-related issues. So I am talking about the most fundamental financial issue. It is about why you can trust a person or an institution. You look at either his record, namely his history accumulated in the past; or how much capital fund, how much money he has chipped in. This is a simple judgment of risk.

For monetary policies to forestall and defuse financial risks, it is an important task to impose certain regulations on asset management products, e.g. unified guideline for asset management industry, net value-based management, mark to market principle, among many others. Meanwhile, it is also very important for us to enhance regulation on non-financial enterprises investing in financial institutions. Generally, financial institutions operate on deposits, investors' funds and insurance premiums. Although a non-financial enterprise in bankruptcy causes relatively limited losses and influence, only affecting itself, a financial institution in such a situation may involve depositors, investors and policyholders. Therefore, we shall pay special attention to the qualification and purpose of those non-financial enterprises investing in financial institutions, i.e. why they make such investments. Are they regarding those institutions invested as cash machines at the service of their own enterprises? Therefore, it is necessary to strengthen regulation on such non-financial enterprises investing in financial institutions.

Efforts should be made to enhance regulations on financial holding companies, which include not only banks, but also securities, insurance companies, and trusts. How is the firewall built between these business lines? How to isolate risks? How to consolidate the accounts? It

requires us to enhance regulations on financial holding companies. Meanwhile, we shall tighten regulation of SIFIs, which is of utmost importance. There are totally five global SIFIs (G-SIFIs) in China, among which ICBC, ABC, BOC and CCB are all global systemically important banks. In other words, if problems occur in these four large banks, the influence will be global. How many systemically important banks globally? There are only about 30, and they are mostly based in developed countries, including the US, followed by UK, Switzerland, Germany, France and Japan. Among developing countries, only four Chinese banks are among the list, with Ping An Group being one of the global systemically important insurance institutions.

Efforts should also be made to strengthen regulation of domestic SIFIs. Global systemically important financial institutions are called G-SIFIs, and their domestic counterparts are called D-SIFIs. The reason that we attach particular importance to the regulation of SIFIs in the banking, securities and insurance sectors is that problems in these institutions could bring forth systemic risks. Meanwhile, we should also carry out coordinated regulation of financial infrastructure and promote comprehensive financial statistics.

Lastly, I would like to talk about the relations between internal and external equilibrium. As the “impossible trinity” cited in many literatures shows, since China has been highly integrated with the global economy, we have to take global factors into consideration when designing domestic monetary policies and other policies. The exchange rate and interest rate provides an important perspective. In this figure, the blue line illustrates the interest margin of China’s ten-year treasury bonds, and the red line indicates the exchange rate of the US dollar against the Chinese Yuan. Taking the ten-year treasury bonds as an example, a few years ago, the interest rate of ten-year RMB treasury bonds was 4%, and that of ten-year USD treasury bonds was 2%, with a margin of 200 basis points, which was large. Now, the former has fallen to around 3.3%, and the latter has risen to around 2.9%. Despite a positive margin, the RMB treasury bonds were only moderately higher in rate than their USD counterparts, where the margin narrowed from 200 basis points to 40 basis points. This actually has significant meanings in that people are weighing the pros and cons in holding USD-denominated assets or RMB-denominated ones. How can cross-border capital flow keep balanced given the current situation? In fact, the interest margin reflects expectations for the appreciation or depreciation in local currency. When cross-border capital flow reaches balanced, there will also be a balance between the interest margin and the depreciation or appreciation in the local currency. If such a balance can be sustained, the interest margin will remain at the current level. If not, the margin will continue to change, as reflected by the movement in the exchange rate.

This graph describes the relationship between the exchange rate and the export. China is a large country that depends increasingly on internal demands, and boasts a fairly complete set of categories in manufacturing industries and a relatively sound industrial system. China’s monetary policy should adhere to “self-centeredness”, so that it can effectively support the real economy. Besides, we should also give consideration to international factors and strive for a favorable external environment. When designing exchange rate policy, we should keep the exchange rate flexible to make the balance more robust and resilient, and sustainable in times of shock. Stability can be maintained when both internal and external equilibrium is considered. Otherwise, the equilibrium will be more fragile under shock.

The flexibility of exchange rate comes from the mechanism where the exchange rate is decided by market supply and demand. When the exchange rate becomes flexible, it is capable of adjusting the macro economy and the balance of payments (BOP). This is why a flexible exchange rate is an automatic stabilizer for the BOP. The ratio of China’s current account surplus to GDP was around 10% in 2007, 1.3% in 2017, and possibly only 0.1% to 0.2% in this year, which reflects the changes in China’s BOP. The best economic policy for us is to maintain a general balance in BOP, rather than pursuing surplus. Admittedly, the BOP includes not only the current account, but also the capital account. If the monetary policy and exchange rate mechanism is sound enough to adjust the BOP automatically, then it will serve as a stabilizer;

otherwise, it will amplify shocks and render the economy more unstable. This is why both internal and external equilibrium should be taken into consideration. The figure shows the flexibility of RMB exchange rate which, as we can observe, is stable at an adaptive and equilibrium level.

Some may argue that RMB has depreciated since the beginning of this year. Judging from this figure, we can see that RMB has remained stable this year to date. Throughout the year, the British pound has depreciated by 5.6% against the US dollar, the euro has depreciated by 5.7% against the US dollar, and the RMB has only depreciated by 5.8% against the same reference. Compared with the currencies of other developing countries, e.g. India, South Africa, Turkey and Brazil, ours is also stable. The changes in exchange rate are mainly due to a robust dollar index, with China-US trade frictions particularly impacting on RMB exchange rate. Even in such a situation, the currency remained rather stable, with no major difference from the trends of the British pound and the euro. As is widely known, the British pound and the euro are both important convertible currencies, and we will pay attention to counter-cyclical adjustments to prevent the sheep-flock effect. When necessary, we will adopt macro-prudential policies in dealing with cross-border capital flow, with a view to stabilizing market expectations. In general, with abundant experiences, tools and foreign exchange reserves, we are well prepared for, confident in and capable of maintaining RMB exchange rate stable at an adaptive and equilibrium level.

That's all for my speech today. Thank you!

Moderator: Governor Yi has just given a wonderful lecture by covering the framework of monetary policy, the “two-pillar” framework of monetary and macro-prudential policies, as well as the considerations about the monetary policy framework under the new normal. In particular, Governor Yi talked about the downward pressure facing the economy since this year, and measures we have taken, including supporting the development of private enterprises with “three arrows”. Further, he illustrated risks in different aspects, and finally the internal and external equilibrium. These have made the speech highly profound and comprehensive. Due to limited time, there may be some aspects that are not elaborated on. Now please allow me to ask a few questions.

The second in the three arrows you mentioned, is the support for private enterprises in bond issuance. There is a mechanism in place to insure against credit events, and you also said that the tool will be priced by the market. What are the institutions that issue credit risk mitigation tools in the market, as they are supposed to be competent enough to take such responsibility and deal with possible risks?

Yi Gang: The most important precondition for issuing credit mitigation tools is that the market should trust the institutions that provide credit protection to insure against a credit event. At present, this task is fulfilled by the China Bond Insurance Company (CBIC) under the National Association of Financial Market Institutional Investors, with the support from the PBC; meanwhile, CBIC can launch such products with principal underwriters, commercial banks and securities companies. In addition, local governments, who know best about local enterprises, also actively participate in the process.

Moderator: Is it supported by the PBC?

Yi Gang: Yes. With the PBC's support, the credit protection that CBIC provides won't fail to be fulfilled upon crisis as what happened to AIG, so the payment will be 100% repayable. However, the whole process is market-based and launched with principal underwriters. For example, firms can issue bonds worth of RMB 1 billion, and make them half insured and half not. CBIC might insure for a scale of RMB 100–200 million among the insured bonds of RMB 500 million, principal underwriters another RMB 100–200 million, and other organizations the rest. I heard that a new private enterprise bond was issued today, wholly insured by the principal underwriter itself. It

means that this instrument created by the PBC acts as an igniter introducing market players into the market. Once the market is restored after the introduction, the PBC will gradually step out. When there's no one else to issue bonds or provide such credit protection, the PBC will take the responsibility. Besides, this mechanism is time-bound. We will automatically exit at the due time and avoid competing with market players. We would only take actions when no one is willing to do so.

Moderator: So, other participants also play a big part in pricing?

Yi Gang: Yes, the role they play is decisive. And the pricing is fully subject to book building and bidding.

Moderator: When principal underwriters provide credit protection, does the PBC regulate them? For instance, to review whether the underwriters are competent enough? After they provide such protection, is there any possibility that the underwriters come short of money and fail to repay?

Yi Gang: We have a threshold for capital. In case of a credit mitigation tool default which results in non-payment, they are the same as the bond defaults where the defaulting party shall bear the legal liability and proceed according to laws and bankruptcy procedures at the court. Those principal underwriters could be banks or large securities companies with abundant capital.

Moderator: As for the other two arrows, you just elaborated the second one. To my understanding, bond issuance is actually very important as it is an open message and important signal for the market that the enterprises are capable of issuing bonds without difficulty, and then the bank may follow with loans. The first arrow is to encourage banks to grant loans to private enterprises, especially to small and medium ones. We saw the annual new high of private enterprise bond issuance in November. How about bank loans to private enterprises? Is there any improvement?

Yi Gang: This year, we paid much attention to encouraging RMB loans in macro-economic management. In November, the RMB loans increased by RMB 1.25 trillion and the new RMB loans from January to November exceeded RMB 15 trillion, an increase of RMB 2.14 trillion year on year. This year also witnessed decreased shadow banking and off-balance-sheet financing activities, particularly trust loans and entrusted loans. The important goal of macro-economic management is to increase the on-balance-sheet RMB loans to hedge the decline of shadow banking and off-balance-sheet financing activities. Although the loan growth in this year is not slow, as the increase still goes slightly smaller than the decrease of off-balance-sheet activities, we may find the monetary conditions not that loose. Market needs indeed play a part here, but it is mainly decided by economic factors and economic cycle. When conducting counter-cyclical adjustment, we emphasized both market-based operation and risk prevention and control, so as to fill the financing gap in an optimal way.

By loan structure, the PBC increased the quota of central bank lending and central bank discount by RMB 300 billion, mainly to support small and medium banks who offer loans to SMBs and private enterprises for a large part. I'll skip the figures that all provinces have provided in details. Central bank lending and discount are subject to bookkeeping, so we have a clear picture of which small and medium enterprises are beneficiaries.

Moderator: So, to some degrees, the support from the PBC to commercial banks and the loans from commercial banks to small and medium enterprises is linked up to some extent?

Yi Gang: Yes, they are subject to bookkeeping. It means that commercial banks need to keep accounts when they get the quota of central bank lending, specifying the amount of loans they grant to SMBs and private enterprises and the total loans as well. We put more emphasis on loans to enterprises with a credit line of up to RMB 5 million and RMB 10 million, as they are broadly real SME loans.

Moderator: You mentioned that the third arrow is equity financing. Would you please give us more information? As you have said, it's under research, right?

Yi Gang: Correct. Despite the fact that it is in the research stage, this tool has taken effect, because I've talked about these "three arrows" over a month ago, and market behaviors are often guided by expectations. The first arrow has been in place all the time; and the second arrow, namely the credit mitigation tools for bond issuance of private enterprise started to be massively applied from October and November. The third arrow mainly tackles problems in equity financing: in the event that private enterprises use their stocks for pledged financing, additional collateral supplement resulting from declined stock price may, among other things, lead to the transfer of ownership or other difficulties. Therefore, we are encouraging the market to optimize resource allocation and mitigate the difficulties arising from additional collateral supplement. Many effective innovative tools are created nationwide, so there are numerous ways out.

The key points to alleviate this problem include: Firstly, there must be no irresolution about working to consolidate and develop the public sector; and there must be no irresolution about working to encourage, support, and guide the development of the non-public sector. As we emphasize here the current difficulties for private business, we shall resolutely support the growth of private economy. Secondly, we shall guard against moral hazards. What are the moral hazards? Why did I elaborate on the second arrow today? Designed by the PBC though, this tool takes effect fully based on market-oriented resource allocation. In other words, it is designed to insulate power from resource allocation, and thus prevent moral hazards. The introduction of "three arrows" serves to guide expectations and local authorities are all working to adopt effective measures.

Moderator: Governor Yi, in the speech, you mentioned the internal and external equilibrium at the end, and before that, the uncertainties facing China's external economic and trade relations this year. Against these uncertainties, it might bring more challenges to us in striking a balance between the internal and external equilibrium. As you previously stated, we shall prevent risks from spreading among different markets. Could you please expound on this aspect? For instance, at present there are three months for China and the US to negotiate over the trade issues. What if the result turns out to be less satisfactory three months later? What responding measures we have in terms of monetary policies? I believe we must have a pre-arranged plan, right?

Yi Gang: What I meant by internal and external equilibrium, is to strike a balance between internal and external equilibrium when considering monetary policies. For example, when the domestic economy faces downward pressure and credit crunch, the monetary conditions should be somewhat accommodative; however, if the conditions are overly accommodative, the excessively low interest rates will impact on the exchange rate. Therefore, the external equilibrium shall be taken into consideration for a balance. The Fed is now in interest rate hike cycle. As it approaches the neutral rate, the uncertainty about a further rate hike seems to be greater than that a few months ago, while the rate rise prospects were very clear a year ago. However, as our economy faces certain downward pressure and requires relatively accommodative monetary conditions, there is a typical contradiction between the internal and external equilibrium. In this case, we shall focus on the internal equilibrium while considering the external one to strike a balance in between, which in fact is the optimal balance point.

As to China-US trade frictions, President Xi Jinping and President Donald Trump have held fruitful meetings days before in Buenos Aires, Argentina and reached important consensus in this regard. We'll address this issue in a constructive way in line with the consensus made by two leaders. I believe that there are huge mutual benefits and economic integration between China and the US. A constructive solution will benefit not only China and the US, but also the global economy.

Thank you!