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ON THE PRUDENTIAL REGULATION OF BANKS ——THEORIES, INSTITUTIONS AND TRENDS

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Abstract: Banking regulation has been one of the key issues affecting the financial and economic stability around the world. The worldwide economic crisis in the 1930s and the constant financial turmoil since the 1990s have aroused the world's attention towards how to prevent and handle the negative financial effects smoothly. The accelerating and deepening of financial globalization extends the perspectives of financial regulation to the cross-border scope. This thesis focuses on the latest development of banking regulation after the Asian financial turmoil and the challenges of international banking regulation. The outlook and challenges of financial regulation after China's accession to WTO are discussed.

Key words: prudential regulation, banks
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INTRODUCTION

For most of the past-World War Ⅱ era, banking regulation proceeded smoothly. Since few bank failures occurred, academics and the public paid little attention to the topic. Because of various factors, bank failures have become common since the 1980s and the international community has suffered great losses. For example, it is estimated that the U.S. Treasury Department spent 90 to 130 billion U.S. dollars on savings and loans' institutions closures and assisted sales(Litan, 1994). The credit structure in most Asian banks is highly concentrated and banks are linked too closely to companies. Inefficient regulation has worsened the problems Asian banking industry is confronted with. The Asian financial turmoil in 1997 has brought about large-scale adverse effects on the global economy. Subsequently, banking regulation has gained global attention again.

1. The nature of financial intermediary and regulation

Compared with other sectors of the economy, banks perform four major functions. First, they mobilize savings and provide liquidity insurance. Second, they facilitate transactions, providing mechanisms of wealth allocation. Third, they help risk diversification by bridging different portfolio preferences. And finally, they lower transaction costs by term transformation and through the payment system. Firms like to finance their projects with long-term credits. Households, instead, prefer short-term deposits for liquidity reasons. Banks are able to supply this transformation. Thus, banks should have some special characteristics: A relatively large part of banks' debts come from small depositors; most of banks' investments are financed with external funds, and in particular debt, so that the debt-equity ratio of banks is much higher than that of non-financial companies; banks insolvency have repercussions on the operation of the payment system; finally, banking is highly regulated(Dewatripont et al., 1994).

The strongest argument in favor of regulation is that banks transmit monetary policy changes from the central bank to the commercial sector of the economy through the stock of inside money and asset allocation decisions. In particular, the stock of inside money, which is created endogenously by the banking system, is considerably larger than the stock of outside money, under the control of the central bank; thus, banking activities need to be regulated if the monetary authorities are to have any operational control on the money supply. It has often been argued that an unregulated and competitive banking system would tend to produce too much inside money, thus creating an unstable financial environment. This potential problem constitutes the main rationale for the imposition of reserve requirements, portfolio investment restrictions, activity regulation, deposit contract constraints and the like (Afred et al., 1996). Another traditional justification for the regulation of the banking system is the need to ensure honesty and efficiency in the supply of credit, avoiding mishandling of funds, such as investing in fraudulent activities or taking excessive risk through an inappropriate diversification policy. Finally, banking regulation can also have the functional scope of preventing a too high degree of concentration in the industry, both in terms of size and power of individual institutions.

2. The institutional outline of banking regulation

The philosophy of the current regulations and reform proposals is to allow for healthy competition in banking while improving discipline through sufficient capitalization at any time.

(1) A new capital adequacy framework

The Basle Committee on Banking Supervision issued A New Capital Adequacy Framework in 2001 so as to keep track of the variation of financial risks and the latest development of financial innovation. The new framework, for the first time, integrate three essential elements: capital adequacy ratio, supervisory review and market discipline and attaches more importance to the risk management model. In addition to the market risks which arose at the beginning of 1996, it also covers interest rate risk, operating risks such as control risk, information technology risk as well as law and goodwill risk. The corresponding capital change is also specified. The minimal capital standard in the new framework still includes the definition of capital, risk exposure measurement and capital measurement according to the risk exposure. Three approaches for determining credit risk are added: 1) Use the assessment of external credit institutions to distinguish credit risks in detail; 2) Allow some banks to use internal ratings approach to determine capital; 3) Demonstrate further the feasibility of portfolio credit risk models. Moreover, the new capital framework approves some innovative financial instruments such as credit derivative products.

(2) Liquidity and the lender of last resort

Although the solvency ratio provides a clear picture of a bank's assets and liabilities, it cannot adequately summarize what has intrinsically multiple attributes, so regulators should pay attention to some other key variables. One of the most important is the liquidity ratio because once liquidity problems occur, the bank will fail. Capital adequacy requirements are meant to ensure the bank's solvency, but a solvency measure is not necessarily perfect. A bank may be solvent according to the accounts, yet potential lenders may stop at lending to it, a run on the wholesale market that can lead to waves of bank failures, forcing the bank to sell some of its long-term assets at distress prices (Diamond et al., 1983). In the end, the central bank or a government agency may have to act as the lender of last resort.

(3) Handling bank failures

The way a bank failure is dealt with affects the incentive system of the bank, such as the willingness of potential lenders to lend to the troubled bank, the willingness of the supervisory authority to interfere, and the willingness of the bank managers to act efficiently if their jobs are under some danger. A regulatory agency usually adopts four ways to handle bank failures: 1). Liquidation. The bank is closed and put under receivership. Insured depositors are paid immediately the full amount of their claims. 2). Merger. A healthy bank, which may be the highest bidder in an organized auction, acquires all the assets and liabilities of the failing bank. 3). The supervisory agency or the central bank offers financial assistance, purchases or guarantees some of the bad loans made by the bank to keep it afloat. 4). Government ownership. The government may take full control of the bank by infusing capital.

(4) The regulation of conglomerates

According to The Final Document on Conglomerate Supervision, a joint report by the Basle Committee on Banking Supervision, the Technical Committee of the 'IOSCO' and the International Insurance Supervision Committee, conglomerates are enterprises that are engaged in at least two business activities (banking, security and insurance), controlled by more than two supervisory authorities and required to satisfy different capital adequacy ratios although they are under single ownership(BIS, 1998). A major concern of bank regulators is that a healthy bank might suffer from the failure of a nonbank affiliate, reducing the value of bank deposits or increasing the expected loss of the deposit insurance fund. Another concern of regulators is how to account for cross-shareholdings, which may lead to 'double gearing' phenomenon. The same capital, in a sense, is used twice to permit leverage and asset expansion. Building-block prudential approach, risk-based aggregation method and risk-based deduction method are recommended for calculating the capital adequacy ratio of conglomerates required to meet different prudential requirements in the fields of banking, securities and insurance(Ling, 1999).

The discussion of banking regulation aspects is by no means exhaustive, we still leave out some relevant issues such as coordination of regulation and deposit insurance internationally.

3. The latest development of banking regulation after the Asian financial crisis

The Asian crisis in 1997 aroused the attention of governments and international institutions around the world to the contagion of financial risks. Industrialized countries with sound financial regulation system and Asian countries at the core of financial turmoil have adopted new policies to improve the efficiency of regulation. International cooperation in avoiding financial risks has also been greatly strengthened.

(1) IMF has strengthened its regulation over global banking regulation.

Now the IMF and World Bank are jointly developing one program to recognize potential problems at an early stage and develop prompt responses to avoid costly systemic crises. Now the main problems are whether it would be possible to define a core set of macroprudential indicators that IMF could use in its surveillance work and whether macroprudential indicators could be included in the IMF's Special Data Dissemination Standard or alternative vehicles.

Using a single composite indicator is considered simplistic and even potentially misleading. Analyses of financial sector vulnerability cannot rely on quantitative indicators alone. Quantitative information on institutional circumstances and informed judgments are also essential. Detailed analysis of macroeconomic variables and aggregated macroprudential data and the role of cyclical factors are essential for interpreting changes in macroprudential conditions. Besides, it is necessary to improve the quality of accounting practices in many countries, assess non-bank financial institutions and the health of the corporate sector, address the limitations of aggregating microprudential information to obtain macroprudential indicators as to the selection and measurement of macroprudential indicators.

(2) Financial disclosure has been further strengthened

From the ravages of Asia's financial meltdown, we can learn that poor financial disclosure can bankrupt nations, so investors are looking on as keenly as regulators to step up the level of transparency among Asia's banking systems. Starting with 1995 annual reports, banks in Hong Kong disclosed capital adequacy ratios, liquidity ratios, off balance sheet exposures etc. More disclosure was required to be made on areas of investor concern like property, so investors could see clearly the breakdown between mortgages, loans for property development and loans for property investment. Banks were told to disclose loan provisioning and segmentation in their interims. After the Asian financial crisis, the Monetary Authority of Singapore asked its banks to start breaking down overdue loans into categories in May 1988. Classifications in terms of specific and general provisioning were put in so investors could better understand banks' cumulative loan loss provisions(Meera, 1999).

(3) G-7 established a warning system of financial crisis.

Under the drastic attack by the Asian crisis, the G-7 Minister of Finance and the President of the Central Bank of the United States, Japan, Canada, Germany, Britain, France, Italy reached the consensus that an international forum should be established as the warning system of international financial crisis. 'Financial Market Stabilization Forum' is made up of the senior representatives from G-7 Department of Finance, Central Bank, Economic Supervision Institutions as well as World Bank, IMF, OECD etc. Regular conferences will be held to analyze the trend on the international financial market and strengthen the regulation of the international capital market so as to strengthen the ability to prevent worldwide financial crisis. International financial institutions and those countries demand further cooperation and coordination, learning more about large-scale enterprises' debts in various countries and banks' intervention as well as undertaking effective surveillance of debtor countries' economic and financial condition. With these policies, the deficiencies and problems in the operation of the international capital market can be detected at an earlier stage and resolutions can also be created to avoid the problems in the banking, insurance and international currency transactions.

(4) Strengthen the supervision of international hot money and financial derivatives transaction

Although some New Industrial Economies in Asia have witnessed rapid economic growth, financial and economic regulations need upgrading. The main speculative activities of hedge funds were carried out with international banks through derivative instruments, so it is essential that the signs of economic crises and the trend of capital flow be found out in advance, especially by monitoring the private financial activities of New Industrial Economies and regulating the international banks effectively.

Internal control system plays an important role in supervising derivative instruments. Derivative instruments should be traded by highly qualified brokers and placed under control and management of senior managers. Meanwhile, department of risk management should be separated from department of transaction and appropriate approaches to measure market risk should also be worked out. It is also necessary to set up Market Information System to monitor, manage and report the transaction risks and exposures, particularly specifying the reporting system.

4. The trend of international banking regulation

The existing banking regulation is the result of adjusting to financial deregulation and diversified financial business, settling the banks' insolvency crises in the 1980s and developing towards international coordination of prudential supervision. For example, the Basle Accord in 1988 and Core Principles of Effective Banking Supervision in 1997 have been widely accepted around the world. Due to fast-moving markets and innovating financial instruments, the trend and challenges of international banking supervision are as follows:

(1) Capital will continue to play its important role in the banking supervision. Generally speaking, capital reflects the risk exposure of loans. In order to improve the accuracy of determining capital base, A New Capital Adequacy Framework offers two upgraded methods: The risk ratios of rating agencies and internal ratings approaches, but there is some difficulty in implementing them. The role of private credit rating agencies in the supervision must accord to Goodhart's law: Any observable statistical results may not reflect the reality when it is used for control. The trustworthiness of rating agencies may also be lowered since the demand for high ratings may lead to the rising probability of breaking the rule. In addition, it cannot be certain that all banks will undertake risk management according to the models and the punishment for violating the risk management requirement is not been included in the banking regulation.

(2) Information asymmetry still exists in the supervision using the standardized approach and internal rating approach. Nowadays, Prompt Corrective Actions (PCA) have been in practice in the U.S. Federal Reserve System. The PCA approach requests banks to make capital commitment towards the authority in the testing period (e.g. one month) so that the accumulative loss of the period won't exceed the committed level, otherwise they would be punished in terms of higher financing requirement and low credit rating. Although PCA approach reduces banks' capital level, encourage them to improve the techniques of risk management and endure less constraints, whether it can be spread around the world depends on how to create an effective scheme of punishment and how to solve the more serious representation problem so as to improve supervision and prevent crises.

(3) At present, more importance has been attached to better supervision through market constraints. Two approaches have been applied: reducing the scale of deposit insurance and asking banks to issue certain percentage of subordinated bonds. The insured deposit can only earn lower interest rate, but they should be backed by totally secure and liquid assets such as treasury bonds and commercial bills, which is the 'narrow bank' model supported by many experts. Subordinated bonds plays an obvious role in

banking regulation. The authority requests commercial banks to issue certain amount of subordinated bonds (such as 2% of bank assets). Once the banks go bankrupt, the holders of subordinated bonds , who are different from shareholders and try to redeem the principal and higher fixed earnings will suffer losses and they will pay close attention to the fate of issuing banks. As earnings of subordinated bonds reflect banks' market risk, regulators will impose ceilings on the earnings of subordinated bonds. That is, risks will be avoided according to the market conditions rather than regulators' intentions.

(4) The rapid development of information technology has had tremendous impact on the financial circle while affecting people's daily life. The innovative derivative products, widespread virtual banks and emergence of mobile banking requires upgrading of the regulating structure and technology. After the first visual bank opened in 1995, virtual banks have mushroomed throughout the world. How to regulate e-currency and cross-border transactions on the internet will be one of the most important problems central banks are facing in the 21st century, With the fast development of internet banking, central banks around the world will formulate the rules and guidelines to regulate cyber-banking.

With the forthcoming accession of China to the World Trade Organization, the acceleration of financial globalization and the fast development of virtual banking, banking regulation in China is confronted with many new challenges. One of the biggest threats to China's banking sector is the Non-Performing Loans (NPL) problem. Although four asset management companies were created last year to recover assets, The Big Four Banks in China can improve the asset quality completely only if they upgrade considerably credit controls and bank employee training. Correspondingly, China's banking regulation should turn from 'behavior management' to 'risk management'. The People's Bank of China should promote the reform in the banking sector with the application of international supervisory criteria. The various documents issued by the Banking Supervisory Committee of BIS (Bank of International Settlement) will be of great value to the developing countries including China. The benefits of adopting international uniform rules will not only contribute to the stability of the banking system but also lower the financing costs for reliable domestic banks exposed to some risk.

Banking regulation in China will also be further internationalized with China's accession to WTO and the development of financial deregulation. The supervisory rules should cover domestic banks and their overseas subsidiaries as well as foreign banks in China. Since cross-border risks brought about by international banking will increase substantially, we should attach more importance to close coordination and cooperation with host countries and international institutions. Moreover, the legal and regulatory framework should be upgraded to internet banking such as on -line payment etc.

Only two years ago, the People's Bank of China separated the regulation of banking, securities and insurance, which is exactly in accord with the present conditions of China's banking sector. Therefore, it is likely that a super-regulator similar to the Financial Supervisory Committee in the UK will emerge, so the central bank in China should also keep track of the latest development of legal and regulatory framework, and technological and operational improvement in the western countries.

On the whole, with China's entry into the WTO, banks in China need not only market capital, better assets, but also better qualified banking people and technology to compete in the new era, but also an overhaul of banking regulation.

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