Measuring the Off-Balance-Sheet Wealth Management Business of Commercial Banks

--The case in China

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The views expressed in this paper are those of the writer and should not be attributed to People's Bank of China.

Abstract

In recent years, Wealth management product (in Chinese, *licai*) experienced a rapid growth in China. The off-balance-sheet ones have their own independent assets and liabilities and are booked on their own balance sheets, meanwhile they are not required to satisfy the regulating requirements and their size become big enough to affect the on-balance activities. The off-balance-sheet *licai* product is considered as a typical kind of shadow banking.

To monitor the activity of *licai*, not only the total amount is needed, but other information such as that on term structures, interest rates and investment portfolio is necessary. Statistical standardization was thought by the People' Bank of China (PBoC) as the most appropriate solution. By implementing standardization all requirements on information are met.

The statistics on *licai* is successful, but there is still a long way. *Licai* is only a part of shadow banking; PBoC intends to extend this solution to other SPVs. At the same time, we are going to extend the method of statistical standardization to other financial instruments.

1. Introduction

This paper narrates the methodology adopted by the People' Bank of China in monitoring wealth management business of commercial banks. Wealth management product (in Chinese, *licai*) was first introduced into China's financial market in 2004. There are two types of it, one is recorded on bank's balance sheet, and the other is recorded off balance sheet. The off-balance-sheet ones have their own independent assets and liabilities and are booked on their own balance sheets. Usually it is considered as a typical kind of shadow banking. *Licai* can offer a return rate higher than the deposit interest rate that is determined by the central bank. What is more, they are not required to comply with the regulating requirements. Due to these characters, both the individual investors and commercial banks flush to it. In the past two years, the market saw an explosive growth of *licai* business. The size of *licai* is big enough to affect the balance sheet of commercial banks.

The People' Bank of China has begun to implement statistical standardization in recent years. Different from traditional ways, statistical standardization not only requires the numerical information of the transactions, but also non-numerical ones such as the transaction dates, term structures, the counter-parties, the interest rates and so on. All of the above can help the economists understand the business in all dimensions.The standardization method was thought as the most appropriate solution to monitor *licai*. The statistician defined the necessary attributes and required the banks to report data in the pre-defined format. By this way, all the requirements on information are met.

The statistics on *licai* was successful, many interesting things were found from the results. But there is still a long way. *Licai* is only a part of shadow banking; the central bank intends to extend this solution to other instruments and other SPVs.

This article describes the statistical reporting framework used by PBoC in monitoring commercial banks' wealth management products, especially those off-balance-sheet ones. It is organized as follows: the second part gives a brief introduction of *licai* and the reason why it is necessary to build a monitoring framework; the third part describes how the central bank constructed the monitoring system; the forth part shows some interesting findings and the final part makes a further consideration.

2. A need for further information of *licai*

Wealth management product (in Chinese, *licai*) was first introduced into China's financial market in 2004 by China Everbright Bank. Although literally it is wealth management product, it is not the comprehensive service offered by banks to their client. It is more like collective investment vehicle. It performs like mutual funds, but are managed by commercial banks. Customers usually buy the shares from bank counter and most of the products are close-ended. The threshold of investment is at least 50,000 CNY usually.

Nearly one third of *licai* products are recorded on the banks' balance sheets currently, while others are independent from the banks' balance sheets. The independent (off-sheet) *licai* can also take part in financial activities such as repos and security transactions. The products would book the transactions on their own financial reports like real entities. However, few of the regulating rules designed for banks are applicable for them. Therefore, the off-balance-sheet *licai* should be considered as a typical kind of shadow banking business.

Since the product is not deposit, it can give the investors a higher return rate than the deposit interest rate determined and controlled by the central bank, sometimes the spread touches 100 to 200 base points. This feature makes *licai* very popular in investors, especially the individual investors who have few investing channels and are more sensitive about the return rate. When there is a high CPI rate, more and more people draw money from their saving accounts and turn to *licai*.

On the other hand, in the past years, to keep the economy from overheating and fight with the climbing price, the policymakers took tightening policies. From January 2010 to June 2011, PBoC raised required reserve ratio 12 times in eighteen months. The ratio touched the peak of 21.5% in June 2011 and remained at that level for 5 months. At the same time, the banks were told to control their total credit size. This makes the enterprises very thirsty for fund. However the off-balance-sheet *licai* is much less regulated than tangible entity. Therefore many companies turned to *licai* for fund.

Then things seemed perfect! The investors received a return higher than deposit, the companies raised money other than bank loan, the banks earned rich intermediate fee. Every part satisfied. This gave a boost to the development of (off-balance-sheet) *licai*. But there might be some potential problems behind the fast growth. One of them was that the above process weakened the effect of the tightening policies. The real financing activities of private sector exceeded the limit of the policymakers' intension by borrowing from these off-sheet SPVs. Another problem lay in

that since these SPVs were less regulated as tangible financial institutions, they might be over leveraged and the quality of their assets would be not that robust. Once there is a shock in economy, *licai*'s ability of paying would be doubted.

At the end of 2010, in fact, the amount of off-balance-sheet *licai* reached 2.5 trillion CNY, accounting for 3.5% of the money supply M2. The economists were highly interested in understanding further information.

3. The project implementation

The boom of *licai* posed challenges on current statistical system, which were amplified when there were tightening policies. Obviously just measuring the size of it was not enough, to understand the whole story, more attributes such as maturity, investment portfolio, counter parties, mode of business were required. However, the limited structure of traditional reporting system, which is designed based on the balance sheet of financial institution, could not get such information. Only the amounts of fund raised and the size of the asset could be obtained via traditional method. Meanwhile, in recent years, PBoC was considering to adopt standardization in statistical tasks. This solution was thought, by the statisticians of PBoC, as a way out.

Work on this project started in autumn 2009 and lasted 18 months or so. Its objective was to define conceptual and technical framework to ensure the information for the needs of monetary and banking statistics and other needs of central bank such as risk analysis. Joint efforts of experts from both central bank and commercial institutions made sure that the required information was useful and available.

3.1 Statistical Standardization

Since 2009, People's Bank of China has been reviewing the statistical challenges and lessons brought by the passed crisis. The experts thought there were mainly five major challenges facing the authorities. First, traditional central bank statistical practice has not kept pace with the progress of financial innovation, and could not fully cover the new types of financial institutions and financial instruments. Second, the current statistics schema focuses on balance sheet data of commercial banks, but does not pay enough attention to off-balance-sheet operations, structured products and contingent assets and liabilities. Third, central banks need to improve their access to high-frequency data and transaction-connected data. Fourth, central banks are lack of experience in monitoring the contagion of cross-border and cross-market risks. Fifth, information sharing is poorly based due to lack of harmonized standards-setting efforts.

To find a solution a desirable direction is to establish a comprehensive, consistent, harmonized and sensitive financial statistics framework. In this endeavor, the key we think about is standardization. Financial statistics standardization can ensure the authenticity of statistical data and offer a "searching engine" for monitoring cross-border, cross-market and cross-institution transactions. What is more, it also enhances the harmonization among the sources of micro-level sources and between micro and macro-level data, and makes it possible for data collected by one party to be

shared by every other party, solving the information sharing difficulties. The central bank plans to refine the different attributes of economic activities on the basis of current statistical framework, to dig further into the source data of financial institution and transaction, to realize dual-core statistics for balance sheet and financial instrument, to formulate standards for financial institutions, financial instruments, and source data, to define financial statistics terminologies and release data exchange standards, and then build IT system for it. The objective is to set up a sensitive and efficient central bank statistical system.

3.2 The monitoring framework

First, even though *licai* was relatively a new business of commercial banks, its activities nevertheless consist of the source and usage of fund like other on balance business. As a result, both sides should be considered when designing the statistical framework. Second, while the task was organized in the statistics department, the data would also be used for other purposes. Therefore what was different from the traditional way lay in that non-numerical information was also included. Another thing should be mentioned is that unlike savings and loans which are collected on institutional basis, *licai* is measured product by product, i.e. asset and liability of each product should be collected rather than the total outstanding amount managed by certain banks. The information of issuing institution of a certain product is required, so when necessary, we can get the exact total outstanding amount of *licai* issued by every individual bank. This can be obtained simply by accumulating the data of products grouped by issuing institutions.

Thorough preliminary analyses showed that the standardization method was the most appropriate solution. The first step taken by PBoC was to set up the statistical standards for SPV products like *licai*. The first one was for codings of *licai* products. According to this standard, every product had been assigned one unique code in order that it could be dealt with by computer systems. The code also included the information of issuing institutions (the standard code of financial institutions had been published already), issuing date and type of product (*licai*, trust plan, mutual fund, etc), which could be decoded by computer as well. The second standard decided what attributes should be reported for each product, all related data needs were organized. What is more, for those non-numerical attributes, the codomains were determined, i.e. the possible values have been determined and there would be no other choices beyond the range for certain attributes. Automatic built-in controls at the reception phase assured that the data could be used for all functional needs of the central bank, particularly for market supervision and risk analyses.

Standard code list was a breakdown of specific attributes for one or several purposes. It was important that breakdowns for different purposes (defined by attributes) were not mixed together in one code list, but separated in different ones. If different purposes were combined in one code list, the breakdowns were normally more detailed (granulized). Breakdowns of the same kind for different purposes had to be commonly defined, which also required reconciliation efforts. The experience furthermore showed that exceptions are to be avoided in reporting, as they complicate matters.

Number of codes in the standard code list was, in principle, not limited and nor was the number of

reporting items. This gave to the system the desired flexibility and was, consequently, at least technically, easy to introduce subsequent changes in reporting.

In such a framework, the logical output of the information reported would be a flat table with data records extracted directly from data warehouse system.

3.3 Data Structures

The information required was divided into three themes according to their nature and purpose of use. The first one was the descriptive information, illustrating the characteristic of products, most information under this theme were nun-numerical. The second was fund raising related information, describing how much money collected in certain period. Both the on/off-balance-sheet kinds of *licai* were required to report descriptive and fund raising information. The third one was the balance sheets of products. It was unique for off-balance-sheet ones. The reporting items were defined like the balance sheet items.

The details of the themes are listed as follows,

Table 1: Descriptive information:

Number	Information required	Explanations
1	Product code	
2	Name of issuing institution	
3	Fund raising currency	
4	Principle paying back currency	
5	Profit paying currency	
6	Client types	Household or corporation
7	Collecting mode	Public or private
8	Managing mode	Singular or collective
9	Type of product	Trust, QDII, structured, etc
10	Business mode	On-balance or off-balance
11	Principle guaranteed indicator	
12	Highest estimated return rate	
13	Lowest estimated return rate	
14	Beginning date of raising fund	
15	Ending date of raising fund	
16	Beginning date of product	
17	Ending date of product	
18	Callable option indicator	Whether the issuing institution can finish the product before expiry
19	Puttable option indicator	Whether the client can finish the product before expiry
20	Credit enhancement indicator	
21	Credit enhancing institution	If any

22	Domestic custodian institution	
23	Overseas custodian institution	If any
…	…	…

Table 2: Fund raising information

Number	Information required	Explanations
1	Amount of initial raising	
2	Amount raised in current period	Transaction happened in this period
3	Amount redeemed / paid back in current period	
4	Outstanding amount	Stock of the end of this period
…	…	…

Table 3: Balance sheets information

Number	Information required	Explanations
1	Total asset	
2	Cash	
3	Deposit	
4	Loan	
5	Securities	
6	Equities	
7	Derivatives	
8	Receivables	
9	Liabilities and equities	
10	Loan	
11	Derivatives	
12	Payable	
13	Principles	
…	…	…

The related data collected by this system are reported with a single monthly frequency in three (theme) groups of files, which makes reporting and especially potential revisions much easier, compared to the mode of multiple frequencies for multiple themes.

4. General findings

Via the framework described above, for the first time, we had a clear scene of the situation of *licai* products. Some of the findings are listed here.

4.1 Total size

At the end of 2011, the number of on-balance- sheet *licai* products reached 10.4 thousand, the outstanding amount of the principle raised was near 1.3 trillion CNY, which constituted 1.6% of the total deposit, showing an increment of more than 240 percent year on year.

The number of off-balance-sheet *licai* reached 10.3 thousand, the outstanding amount of the principle raised was near 2.7 trillion CNY, which equaled 3.4% of the total deposit, showing an increment of about 16 percent year on year.

4.2 Term structure

More than half of the money raised by off-balance-sheet *licai* was raised by products with maturity less than one month. Meanwhile nearly 30 percent was raised by those with maturity between one to three months. The long-term products only constituted 16.6 percent of the total fund raised. However, from the stock's point of view, we have a different story. The products with long-term account for more than 75 percent of the total outstanding amount. Those with maturity less than one month only stand for 1 percent. The short-term products raised and paid money more frequently and had a larger effect on the market.

4.3 Return rates

In December 2011, the average return rate of off-balance-sheet *licai* was 5.2%, increased by 160 basis points compared with the beginning of the year. While the interest rate of one-year deposit was 3.5 percent. *Licai* did seem more attractive. From January to September, the return rates of all terms climbed up, but after that, the returns of short term products decreased slightly while the long term ones kept the climbing trend.

4.4 Investment portfolio

The investment portfolio of off-balance-sheet *licai* included mainly five assets. The largest part was trust plan. More than one third of the fund was invested in trust plans. The reason lay in that some banks cooperated with trust companies to make loans to the clients. They operated like this, licai products invested in trust plans, and the plans made the loans. The second one was securities, accounted for 22.2 percent. The third was equities, which contributed 21.7 percent. The forth was loans issued directly by *licai*, accounting for nearly ten percent. The fifth was call loan or repos with financial institutions, constituted for about 7 percent.

4.5 Client types

The statistical data illustrates that more than 70 percent of the *licai* fund was raised from households. Less than 30 percent came from institutions (including financial institutions). This was perhaps because that in China, the households has fewer investing channels than institutions. Meanwhile they think high of the returns. Therefore deposits and instruments alike are important choices. Generally, *licai* has higher return rate than deposits and lower threshold and risk than other instruments. That explains why household like to invest in *licai*. On the other hand, institutional investors more use bank accounts as paying tools, not for return

4.6 The effect on banks' balance sheets

We also found that some banks used *licai* products to manipulate the size and structures of their

balance sheets. The most popular way was that the products were designed to expire just before the end of the month, especially the end of the quarter, when the principle and return were paid back, the fund was usually credited to the clients' deposit accounts. Thus the size of the deposit would be enlarged to meet the relevant requirements such as loan to deposit ratio. A more complicated way was that the banks offered liquidity (by repos for example) to their products, and the products provided fund to clients, then the clients' deposit would also be increased.

5. Conclusion and further considerations

5.1 The advantages of the framework

As we are emerging from the most severe financial and economic crisis of the modern era, lessons can be drawn also for financial statistics function. One of them is the lack of some pertinent and important statistical information linked to fresh financial instruments and exposures.

Under this condition, it is of importance that new information is obtained as soon as possible with maximum efficiency. The main benefit of the solutions we adopted lies in:

a) The reporters prepare data only once for multiple purposes. The cost of both sides, reporting and receiving, is lowered. At the same time the efficiency and consistency is enhanced. Simultaneously, information provided by reporters also included multi-functional needs, such as supervisory and policymaking.
b) Central bankers learn more information than merely total size, leading to a more precise risk analysis and policy making. The introduction of new framework was followed by necessary harmonization processes to support monetary policy decision-making.

5.2 Consolidation of off-balance-sheet *licai* products and banks

In May 2011, the International Accounting Standards Board published "IFRS10—Consolidated Financial Statements" and "IFRS 12 — Disclosure of Interests in Other Entities" to replace "IAS 27 — Consolidated and Separate Financial Statements" and "SIC 12 - Consolidation – Special Purpose Entities". The new standards will come into force on Jan 1, 2013. The new standards requires an entity (the parent) that controls one or more other entities (subsidiaries) to present consolidated financial statements.

The basis for consolidation is control. The criteria of control is defined as whether an investor is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The relationship between off-balance-sheet *licai* product and its issuing bank just satisfies the definition of control. Because the bank can decide the activities of products and the profit allocation, thus the return it receives can be decided by itself.

In most cases, *licai* products are guaranteed by their issuing banks more or less, and theses SPVs often have business with their "parents". Risk can be contaminated to the banks quikly. There are also banks utilizing *licai* to avoid the regulatory requirements. To understand the whole risk situation and asset and liability structure, therefore it is necessary to require consolidated reports

from reporters some time in the future.

5.3 Extension

Encouraged by the success of the application of the system on *licai* products issued by monetary financial institutions, the idea has been taken up to extend this method also to reporting of other financial instruments and other SPVs initiated by nonmonetary financial institutions. The interest rate monitoring system, which is under construction, adopts the same method, collecting information of each deposit and each loan then computing the average interest rates. PBoC will also soon begin to cooperate with the CSRC, supervisor of capital markets in China, to expand this system to security companies and to mutual funds. Preparations are under way.