The influence of note financing on credit aggregates

Guo Yongqiang[1]

1. Overview

Because of its “low risk and high return” virtue, note financing is increasingly recognized and favored by financial institutions. In addition to energetically developing traditional note financing business, financial institutions have designed new note financing businesses such as repo-typed, outright sale-typed and synchronized outright sale-typed note financing. They have also introduced innovation products such as risk participation and quasi-securitization. These businesses have spread from the inter-bank market to the whole financial market. The rapid development of note financing has influenced the credit total and risk control of financial institutions. This paper analyses the influence of note financing on consolidated credit data of financial institutions from the accounting perspective,, taking the operating flow of note financing into account, then puts forward the corresponding framework of financial statistics to reflect the actuality of note financing comprehensively, objectively and precisely.

2. The types of note financing and corresponding accounting methods in China

There are many types of note financing. The major ones are as following:

(1) Discount. Discount is the traditional way of note financing. It means that a nonfinancial institution that holds an undue note pays a certain amount of interest to a financial institution, then endorses the note over to the financial institution in order to finance funds before the maturity of the note. When a financial institution records a note discount transaction, “discount” on the asset side is increased by the par value of the note and the corresponding asset position is decreased by the funds paid out. The difference between them is recognized as deferred income on the liability side and amortized in the following periods according to accrual accounting principle.

(2) Inter-bank discount. It means the transfer of undue note from a non-central bank financial institution to other non-central bank financial institutions. At present, there are three forms of inter-bank discount: repo-typed, outright sale-typed and synchronized outright sale-typed.

a. Repo-typed inter-bank discount means that the note transferor finances funds by discounting the note and promising to repurchase the same note at par on a promised date in the future. The note transferee increases “reverse repo” on the asset side by the par value of the note and decreases the corresponding asset position by the funds paid out. The difference between them is recognized as deferred income on the liability side and amortized in the following periods according to accrual accounting principles. In the mean time, the note transferor increases “repo” on the liability side by the par value of the note and increases the corresponding asset position by the funds financed. The difference between them is recognized as deferred expense on the asset side and amortized in the following periods according to accrual accounting principles.

[1] Deputy Director at the People’s Bank of China.

b. Outright sale-typed inter-bank discount means that the note transferor pays a certain amount of interest to the note transferee, then endorses the undue note over to the note transferee in order to finance funds. In current practice, financial institutions use two accounting methods to deal with “outright sale-typed inter-bank discount”:

(a) Some financial institutions consider that according to the provision in ”Negotiable Instruments Law” in our country that the note transferee has the right of recourse to the prior holder of the endorsement, the risk and the return of the note is still kept by the note transferor, so the note transferor should only increase the liabilities, not decrease the assets. The accounting records are: the note transferee increases “outright sale-typed inter-bank discount” on the assets side by par value of the note and decreases corresponding asset position by the funds paid out. The difference between them is recognized as deferred income on the liability side and amortized in the following periods according to accrual accounting principles. The note transferor increases “inter-bank discount” on the liability side by par value of the note and increases corresponding asset position by the funds financed. The difference between them is recognized as deferred expense on the asset side and amortized in the following periods according to accrual accounting principles.

(b) Other financial institutions consider that at present in our country, for note discount, especially banker’s acceptance discount, it’s nearly impossible that the recourse right is exercised against the note transferor. According to the accounting rule “substance over form”, the note transferor should decrease the assets. The accounting records are: the note transferee increases “outright sale-typed inter-bank discount” on the assets side by par value of the note and decreases corresponding asset position by the funds paid out. The difference between them is recognized as deferred income on the liability side and amortized in the following periods according to accrual accounting principles. The note transferor decreases the asset that was discounted by its par value, increases the corresponding asset position by the funds financed and decreases deferred income on the liability side, which was produced by the discount and was not amortized yet. The difference between them is recognized as current profit or loss.

c. Synchronized outright sale-typed inter-bank discount means that the note transferor and transferee sign two outright sale-typed inter-bank discount contracts, one is that the transferor outright sells the note to the transferee, the other is that the transferee outright sells the same note to the transferor at a promised price on a promised date in the future. At present, there are two ways to operate a synchronized outright sale-typed inter-bank discount: one is to view two inter-bank discount contracts as a repo transaction, and the accounting is the same as repo-typed inter-bank discount; the other is to view this business as two separate outright sale-typed inter-bank discounts, and the accounting is the same as outright sale-typed inter-bank discount.

(3) Rediscount. It means that a financial institution pays a certain amount of interest to the central bank, then endorses the undue note over to the central bank in order to finance funds. In practice, the accounting records are: “rediscount fund” on the liability side is increased by par value of the note and corresponding asset position is increased by the funds financed. The difference between them is recognized as deferred expense on the asset side and amortized in the following periods according to accrual accounting principles.

(4) Note purchase and sale. It means that an undue note is transferred without right of recourse between a financial institution and a non-financial institution for the purpose of financing funds. Note purchase and sale business has two forms: one is simple direct note purchase and sale, and the other is to pack and sell several notes to companies or sell them as financial products, which is essentially a securitization of note assets. As the note transferor, the banking institution decreases the asset that was discounted by its par value, increases the corresponding asset position by the funds financed and decreases deferred income on the liability side, which was produced by the discount and was not amortized yet.

The difference between them is recognized as current profit and loss. As the note transferee, the financial institution increases “notes” on the assets side by par value of the note and decreases corresponding asset positions by the funds paid out. The difference between them is recognized as deferred income on the liability side and amortized in the following periods according to accrual accounting principles.

(5) Note risk participation financing. This happened among banking institutions by signing the risk participation agreement. The note holder transfers part of the risk of the note to risk participants, and risk participants pay money to the note holder based on their risk shares. Generally, the counter parties do not endorse the note. When the note is due, the note holder collects the funds and pays them to the risk participants. If a collection loss occurs, the risk participants bear the loss according to their agreed risk shares. In accounting, the note holder is the same as note transferor in note purchase and sale, and the risk participant is the same as note transferee in note purchase and sale.

3. The influence of different note financing methods on credit aggregates

(1) The influence of valuation method on loans statistics

Firstly, under the current financial system, the valuation of note financing and that of loans are different. Loans are valued as the funds paid out, while note financing is valued at par value, which is the sum of funds financed and accrued interest at maturity. Secondly, current valuation method of note financing is different from the IMF’s recommendation on loans valuation as well. IMF recommends in Monetary and Financial Statistics Manual, “The value of a domestic currency loans should be the amount of the creditor’s outstanding claim (equal to the debtor’s obligation), which comprises the outstanding principal amount plus any accrued interest (ie interest earned but not yet due for payment).” But “discount”, “note”, “inter-bank discount” and “inter-bank discount fund” are all valued at par value of the note, which equals the sum of funds actually financed at maturity (principal amount) and accrued interest. Before maturity, the par value is constantly greater than the sum of fund financed and accrued interest, and the difference between them is the deferred asset or liability that is not amortized yet. So, the current statistical method of note financing is not in accordance with that of loans, overestimates the size of note financing and compromises the accuracy of loans statistics.

(2) The influence of non-unified accounting methods used by counterparties on loans statistics

a. When an “outright sale-typed inter-bank discount” occurs, the note transferee recognizes an increase in “outright sale-typed inter-bank discount” on the assets side, but the note transferor may deal with this transaction in two different ways.[2] If the note transferor considers that the risk and the return of the note are not transferred, it will keep the asset that was discounted and increase the liabilities. Thus, the “discount” and the “outright sale-typed inter-bank discount” assets would both be classified as note financing, and one financing transaction would be reflected as two transactions in statistics.

b. The counter parities have different recognitions of the “synchronized outright sale-typed inter-bank discount” business and use non-unified accounting methods, which bias the statistics of note financing. In some cases, the note transferor treats it as a repo, while the note transferee treats it as an outright sale-type discount. The transferor recognizes a “repo”

[2] For different ways to deal with this transaction, see the two accounting methods to deal with “outright sale-typed inter-bank discount” used by the financial institutions on Page 2.

asset while maintaining the "discount" asset, and the transferee just recognizes an "outright sale-typed inter-bank discount" asset. Thus, the transferee and the transferor both recognize this note as their assets. The "discount" and the "outright sale-typed inter-bank discount" assets would both be sorted as note financing, while "repo" would be sorted as inter-bank transaction, which implies that one note transaction is counted twice as note financing. In some other cases, the note transferor treats it as an outright sale-typed discount and decreases the assets, while the note transferee treats it as a repurchase. The transferor recognizes a "repo" asset while maintaining the "discount" asset, and the transferee just recognizes an "outright sale-typed inter-bank discount" asset. The transferor does not maintain the assets or the liabilities, while the transferee recognize a "reverse repo" asset. Thus, only an inter-bank transaction was reflected in statistics, and the note financing is zero. Obviously, the size of the note financing is underestimated.

Table 1

Possible cases in financial statistics when dealing with synchronized outright sale-typed inter-bank discount

Note Transferor			Note Transferee			Consolidated Statistics	Statistical result of Note Financing
Business definition	**Accounting**	**Statistical Result**	**Business definition**	**Accounting**	**Statistical Result**		
Repurchase	Recognize a "repo" liability without decreasing the original asset.	A "discount" in note financing and a "repo" in inter-bank transactions.	Repurchase	Recognize a "reverse repo" asset.	A "reverse repo" in inter-bank transactions.	A "discount" in note financing.	Right.
	Recognize a "repo" liability without decreasing the original asset.	A "discount" in note financing and a "repo" in inter-bank transactions.	Outright sell	Recognize an "outright sale-typed inter-bank discount" asset.	An "outright sale-typed inter-bank discount" in note financing.	A "discount" and a "outright sale-typed inter-bank discount" in note financing, a "repo" in inter-bank transactions.	Wrong. Double counting of note financing.
Outright sell	Recognize a "repo" liability without decreasing the original asset.	A "discount" in note financing and one more inter-bank transaction.	Repurchase	Recognize a "reverse repo" asset.	A "reverse repo" in inter-bank transactions.	A "repo" in note financing.	Right.
	Recognize a "repo" liability without decreasing the original asset.	A "discount" in note financing and one more inter-bank transaction.	Outright sell	Recognize an "outright sale-typed inter-bank discount" asset.	An "outright sale-typed inter-bank discount" in note financing.	A "discount" and a "outright sale-typed inter-bank discount" in note financing, a "repo" in inter-bank transactions.	Wrong. Double counting of note financing.
	Decrease the original asset.	None.	Repurchase	Recognize a "reverse repo" asset.	A "reverse repo" in inter-bank transactions.	Note financing is 0.	Wrong. Note financing is understated.
	Decrease the original asset.	None.	Outright sell	Recognize an "outright sale-typed inter-bank discount" asset.	An "outright sale-typed inter-bank discount" in note financing.	An "outright sale-typed inter-bank discount" in note financing.	Right

c. For note risk participation financing business, according to the form agreed by counter parities, it is a partial outright sale of the note, and risk participants take the right and the risk based on their agreed share. But, according to Article 33 of Chinese ”Negotiable Instruments Law”: “The endorsement which transfers part or the entire amount on the draft to two or more persons is invalid”, risk participants do not enjoy the rights and obligations to the note. The corresponding debtor is the risk seller, and the essence of this business is the embedded debtor-creditor relationship between banking institutions connected to note risk. Under the current statistical system, this transaction is reflected precisely in consolidated loans statistics of banking institutions, but is distorted in the loans statistics of a single institution.

(3) The influence of note financing participant expansion on total risk

In recent years, the note financing market in China has grown rapidly, and securities, insurance, financing for clients products and non-financial companies gradually entered this market. The identities of these participants evolved from pure note transferor to both transferor and transferee. The entrance of these new note financing participants has had a new influence on the statistics of current total risk. Take financing for clients for example, when the bank packs the notes and sells them to the financing for clients products of its own as a note transferor, the notes disappear from the bank’s balance sheet, with the credit risk decreasing accordingly. But to guarantee the credit rate of the securitized note products, the bank always repurchases some of them. To improve the attraction of the financing for clients’ products, the bank always promises that the principal and the return of these products are guaranteed. These two kinds of credit risk do not show in the bank’s balance sheet. Thus, the credit risk of the bank is underestimated.

4. The design idea of the note financing statistics framework

(1) Breakdown by transaction forms

In order to depict the development of note financing of financial institutions more comprehensively and more particularly, we sort note financing businesses by their transaction forms into rediscount, discount (including note sales) and outright sale-typed inter-bank discount (including synchronized outright sale-typed inter-bank discount), and divide them further into domestic notes and notes abroad. Also, the financing of bankers’ acceptance should be listed separately to reflect the assets abroad owned by financial institutions through note financing and the participation of bank’s credit in note financing.

(2) Breakdown by counter parties in note financing transactions

When consolidating data of each level of the financial sector such as other depositary corporations subsector, depositary corporations subsector and financial institutions subsector, intra-subsector transactions should be netted completely and precisely. Thus, detailed classification of statistics by counter parties should be provided.

(3) Satisfy the requirement of adjusting the bias of the loans statistics

Under the current statistical system, because of the usage of different accounting methods, the data that reflect note financing in financial institutions’ consolidated financial statements are biased. To ensure the completeness and accuracy of the statistics, statistics of financial institutions should be adjusted on the base of adequate data. Firstly, unify the accounting method used by financial institutions to deal with note sales, realize symmetric accounting, eliminate discrepancies in statistics because of the usage of different accounting methods, and define that every financial institution should treat “synchronized outright sale-typed inter-bank discount” as a repurchase transaction. Secondly, require that every financial institution should strictly follow the rules in valuation and reflect the notes hold accurately. When consolidating “synchronized outright sale-typed inter-bank discount” and “outright sale-typed inter-bank discount”, offset “discount” asset by an “inter-bank discount fund” liability recognized by one institution and offset “deferred expense” asset by a “deferred income” liability. Thus, the influence on loans data is eliminated through adjustments in statistics. Lastly, set off-sheet statistical indicators to show the type and number of sold notes and quasi-securitized notes and reflect their risk precisely. Sort sold notes and quasi-securitized notes into bankers’ acceptances and non-bankers’ acceptances, then sort bankers’ acceptances further into bankers’ acceptances of the bank itself and bankers’ acceptances of other banks, and sort non-bankers’ acceptances further into notes signed by the bank itself and notes signed by other banks. View bankers’ acceptances of the bank itself and notes signed by the bank itself in non-bankers’ acceptances as credit extension and measure their risk according to their counter parties; measure the risk of bankers’ acceptances of other bank according to their acceptors; measure the risk of notes signed by other banks in non-bankers’ acceptances according to their transferees.

Table 2

The statistical adjustments in Inter-bank discount business

Note Transferor			**Note Transferee**			**Statistical Adjustments**	**Consolidated Statistical Result**
Business definition	**Accounting**	**Statistical Result**	**Business definition**	**Accounting**	**Statistical Result**		
Outright sale-typed inter-bank discount	Recognize a “inter-bank discount fund” liability without decreasing the original asset.	A “discount” in note financing and an inter-bank transaction.	Outright sale-typed inter-bank discount	Recognize an “outright sale-typed inter-bank discount” asset.	An “outright sale-typed inter-bank discount” in note financing.	Offset “outright sale-typed inter-bank discount” by “inter-bank discount fund”	A “discount”. The statistical result is right.
	Decrease the original asset.	None.		Recognize an “outright sale-typed inter-bank discount” asset.	An “outright sale-typed inter-bank discount” in note financing.	None.	An “outright sale-typed inter-bank discount”. The statistical result is right.

(4) Satisfy the requirement to adjust the loans valuation

At present, financial institutions do the accounting based on par values, but par values are different from the funds actually financed. So, we need to adjust the par value to the funds actually financed on the condition that relevant data are available. The adjustment is as following: the banking institution that receives the note recognizes the relevant asset at par value. The par value is greater than the funds paid out, and the difference between them is recognized as deferred income on the liability side. As time goes by, the deferred income is gradually amortized, and the amount amortized each period is the accrued interest of note financing at that period, therefore par value minus unamortized deferred income equals outstanding claim of note financing. When a banking institution recognizes liabilities as note transferor, a similar procedure applies.