CHAPTER 3
OVERVIEW OF THE LIQUIDITY RISK MANAGEMENT THEORY OF SECURITIES COMPANIES

3.1Liquidity and liquidity risk of securities companies

Liquidity means how quickly you can get your hands on your cash. In simpler terms, liquidity is to get your money whenever you need it.Cash is the most liquid asset. However, some investments are easily converted to cash like stocks and bonds. Since stocks and bonds are extremely easy to convert to cash, they're often referred to as liquid assets. Liquidity for companies typically refers to a company's ability to use its current assets to meet its current or short-term liabilities. A company is also measured by the amount of cash it generates above and beyond its liabilities. The cash left over that a company has to expand its business and pay shareholders via dividends is referred to as cash flow. Although, this article won't delve into the merits of cash flow, having operating cash is vital for a company both in the short-term and for long-term expansion.

The technical committee of the International Securities Regulatory Commission (IOSCO) defines the liquidity of the securities company as the risk that the company may suffer economic losses due to the uncertainty of the company's asset changes. In "Liquidity risk management guidelines for securities companies", "liquidity risk" refers to the risk that a securities company cannot obtain adequate funds at a reasonable cost in time to pay due debt, perform other payment obligations and meet the capital needs of normal business. " From the above definition, the liquidity risk of securities companies can also be divided into asset liquidity risk and debt liquidity risk. The company must operate with moderate leverage, which inevitably brings about the requirement of liquidity risk management. The development of securities companies has led to increasing financing demand. On the one hand, in order to pursue profits, securities companies always focus on short term funds with short term and low interest rates; on the other hand, the financing channels of securities companies are relatively simple and their dependence on the inter-bank market is high. In order to maintain a reasonable liquidity to avoid liquidity risk, securities companies must have sufficient liquidity to cope with the liquidity needs in the business process.

According to the length of the term, liquidity demand is divided into short-term demand and long-term demand. Liquidity management should do a good job in calculating the demand for long and short-term funds in advance, and make reasonable plans for the time, time limit, way and cost of raising funds. The sources of liquidity demand include the repayment of borrowed funds, the payment of tax and operating expenses, the pay of the employees, the payment of payment to the exchange, the payment of cash dividends to the shareholders, and the financing of the customers. Liquidity management should calculate the liquidity gap in advance according to the nature of the business.

A liquidity crisis can on occasions lead to what is commonly known as a “bank run” when depositors make a beeline for the bank to withdraw their money and such occasions can easily aggravate the situation. It is for this reason that full-service banks such as J.P. Morgan, Morgan Stanley, and all other banks are required proactively to maintain their liquidity risk in order to remain in a healthy condition. It is essential for every bank to maintain adequate levels of liquidity failing which the bank would have to deal with the crisis mentioned within this discussion. Banks are required to make adequate provisions for the money they advance as loans along with the deposits they receive. Banks also have the option of borrowing short-term loans from other financial institutions to cover any shortfall they may be facing. However, at no time can bank afford to overlook their depositor base and advance loans far in excess of the deposits they have.

The liquidity supply of securities companies refers to the way companies can obtain funds. According to the channel division, including shareholder investment, issuing companies, corporate bonds, interbank market access, service income, the sale of non cash assets. As a result, securities companies always have "congenital deficiency" in external financing, and financing channels are single, resulting in short term financing in the industry.

When the liquidity supply of securities companies is greater than demand, securities companies need to increase the effective use of the remaining liquidity and improve the efficiency of fund utilization; when the liquidity demand of a securities company is greater than that of supply, securities companies need to increase their holdings of high liquidity assets or reduce their business scale and maintain liquidity. The essence of liquidity risk management of securities companies is to take comprehensive measures to maintain liquidity demand and supply balance.

3.2Causes and supervision of the liquidity risk of securities companies

3.2.1Causes and influencing factors of liquidity risk

Generally speaking, the liquidity risk of a securities company is always accompanied by other risks, such as credit risk, legal risk, reputation risk and so on, which may eventually induce liquidity risk. As a whole, the factors affecting liquidity risk are not only affected by the internal management, but also mainly by the external macroeconomic and financial market factors and other risk transformation.

The risk types of securities companies include business risk, credit risk, operational risk, liquidity risk, compliance risk, settlement risk, information system risk, financial risk, reputation risk and so on. Liquidity risk and other kinds of risks are not isolated. All kinds of risks have the possibility of forming liquidity risk. Usually, the deterioration of other risks will trigger the chain reaction of the company's ability to pay and the deterioration of financing capability and turn it into a liquidity risk outbreak under certain conditions. Although liquidity risk is a small probability event, it will be extremely destructive once it occurs. Therefore, liquidity risk is still the most critical risk that should be taken seriously.

3.2.2Basel Agreement III capital requirements for liquidity risk

Internationally, the Basel Commission issued the "prudent liquidity risk management and supervision principles" in 2008, and the Basel Agreement III: international framework for liquidity risk measurement, standards and monitoring issued in 2010 officially established a comprehensive framework for the liquidity risk management and supervision of investment banks. A unified global liquidity risk quantitative regulation standard was put forward to improve the liquidity risk management level of investment banks worldwide. In January 2013, the Basel Commission also released the Basel Protocol III: liquidity coverage and liquidity risk monitoring standards, , which increased capital requirements for liquidity risks and proposed two international standards for liquidity risk measurement: one is liquidity coverage rate (LCR), it is used to measure the liquidity of a single investment bank in short-term pressure situations, so as to improve the ability of investment banks to deal with liquidity interruption in the short term; the other is Net stable financing ratio (NSFR), it is used to measure the ability of investment banks to solve the mismatch of funds in the middle and long term. It covers the entire balance sheet and aims to motivate investment banks to use stable sources of funds as far as possible. And the global unified quantitative measurement is required to increase the high liquidity reserve level of the global investment banking system in order to reduce the probability of liquidity crisis.

These two indicators complement each other in terms of deadlines. The Basel Agreement III promoted the liquidity supervision of investment banks to the same important position as capital supervision, and broke through the liquidity risk management which had only emphasized the operation of investment banks under normal circumstances and introduced how to ensure the liquidity safety of investment banks in the future and under certain stressful situations. Meanwhile, it also considered the inter - and out of - balance business, as well as liquidity risk and credit risk and interest rate risk, which was more scientific and prudent, and of great significance.

3.3Development of liquidity risk management in securities companies

The liquidity risk management of securities companies is mainly to manage the end of assets and liabilities. Through the use of modern management strategies and technical tools, the relative unity of liquidity and profitability is constructed, and liquidity risk is reduced to acceptable level.

Before 60s of the last century, the most basic theoretical source of liquidity risk management in western commercial banks was asset management theory, which focused on the bank's asset management. The reason was that the early banking industry had a single capital channel, a limited amount of funds and lack of stability. The bank had a low degree of initiative in its management. It could only put the focus of management on the use of assets and optimize the capital structure of the bank. In order to satisfy the demand of customers' withdrawals at any time, it was reasonable to guarantee the proportion of the liquidity in the total assets, so as to improve the profit level and competitive advantage of the bank. It played a positive role in the early development of banking industry, but it was no longer suitable for the banking industry which is developing continuously.

At the end of the 1950s, with the prosperity of the world economy and the increasing demand for capital in the field of production, the banks only depended on their own capital to meet the demand of funds. Thus, the bank loan management had been increased. And the theory of debt management had been produced. The core of the theory is to turn the focus of bank management from asset management to debt management, which could increase the liquidity of the bank. The leverage effect of debt management could increase the level of bank income and increase the scale of business. Thus debt management has created a new way to maintain bank liquidity from another perspective.

From 70s to 80s in twentieth Century, asset liability comprehensive management theory which had advantages of assets and liabilities appeared. The theory took into account the balance of assets and liabilities, adjusted the ratio of assets and liabilities in time, and avoided the contradiction between excessive weight of assets or excessive liabilities, so that the management of banks was more scientific.

In 1980s, with the further development of the economy, financial control in various countries was relaxed and financial liberalization began to rise. Frequent cross-border transactions made the bank liquidity risk management more difficult, a large number of out of statement operations were produced, the management theory of banks expanding financial services to increase profits, focusing on services came into being.

It is visible that the evolution of the liquidity management theory of commercial banks is adjusted with the changes of social change, economic development, financial rise and other external factors. The basic principle is to pursue profit maximization on the basis of balancing the balance of liquidity and safety. The theory of liquidity risk management is the inner theoretical core of the concrete practice of liquidity risk management, and also the theoretical basis for the quantitative analysis following.