

Research on the Transformation and Development of Investment Bank FICC Business of CITIC Securities Company Limited

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Abstract. In the current financial environment, with the continuous expansion of China's economic output and the continuous expansion of demand for financial services, the mutual influence of the international market is gradually deepening. Deepening the development of FICC business has become the core breakthrough point for the high-quality development of securities companies. Since its development, the FICC business (i.e. capital intermediary business) under the investment banking system of CITIC Securities has been involved in fixed income, foreign exchange, commodities, etc. However, there is still a significant gap in its development compared to international investment banks. Taking the current research status of FICC business at home and abroad as the background, taking CITIC Securities Company as an example, analyze the development status of its FICC business from multiple perspectives. Analyze the development bottlenecks in various aspects such as overall capital scale, traditional business and internationalization level, talent team structure, and technological innovation ability, and propose targeted solutions to improve the risk management system, expand the FICC business chain, accelerate technology investment, improve organizational structure, and leverage synergies to promote the transformation and development of CITIC Securities' FICC business and support the high-quality development of the securities and finance industry.

Keywords: Securities companies, Investment banks, FICC business.

1. Introduction

International investment banks often integrate various products other than equity, including bonds, currencies, and commodities, into the fixed income department in terms of management and information disclosure, forming a broad fixed income business, namely FICC (Fixed Income, Currency, and Commodities, FICC) [1]. Since its development, FICC business has always been one of the profit pillars of international investment banks. After the outbreak of the global financial crisis in 2008, the scale of FICC business has shrunk. However, as of 2023, FICC's business revenue still accounts for nearly half of the annual revenue of international investment banks such as Goldman Sachs and Morgan Stanley, making it the core business of international investment banks.

As the mutual influence of the international financial market deepens, China's capital and financial markets continue to develop and mature. The operating methods and business development of international investment banks have entered the domestic market's vision, and FICC business is one of them. There are currently more than 100 securities companies in China, but securities investment banks started late and developed slowly. Compared with international investment banks, their development models and business concepts are still relatively backward. Due to various reasons, FICC business has always been stagnant.

In recent years, under the promotion of the state and securities regulatory authorities, securities firms in China have actively carried out business transformation, and have paid more attention to and attempted FICC business. Therefore, this article will combine the development experience of international investment banks in FICC business with the specific situation in China. Taking CITIC Securities as an example, this paper analyzes the current development status, existing problems, and underlying causes of its FICC business from multiple perspectives, including macro, corporate, and

foreign comparisons. Targeted suggestions and plan designs are proposed for CITIC Securities' FICC business transformation to assist in its development.

This article takes CITIC Securities Company as an example to analyze the current development status and bottlenecks of FICC business, taking into account the domestic and international FICC business development status, macro market environment, and the company's development status. The design plan for the future transformation and development of CITIC Securities FICC business within the scope of domestic regulation has certain practical significance in reality.

The China Securities Association has announced the practical significance of developing FICC business for domestic securities firms, and the design of domestic regulatory policies has also vigorously promoted the construction of quantitative trading platforms for financial institutions, bringing opportunities for the development of FICC business. As the commission rate of securities continues to decline, the proportion of brokerage revenue is getting lower and lower. Therefore, deepening the development of FICC business is beneficial for securities companies to increase revenue, develop diversified businesses, improve the company's business structure, align with international investment banks, and build world-class investment banks. This article combines various research foundations and international investment banking development experience to study the development of CITIC Securities FICC business, providing theoretical guidance for the transformation and development of CITIC Securities FICC business, and also having certain reference significance for other securities companies with comparable comprehensive strength in China.

2. Literature Review

2.1. Current Research Status of Investment Banks at Domestic and Abroad

There is a constant stream of research on investment banks internationally, analyzing them from different perspectives and perspectives. Cummins believes that the main function of investment banks is to serve as intermediary services, to some extent, without even bearing any risks[2]; Muniesa et al. argued that in large investment banks, the front-end department typically revolves around several business lines or product lines, namely different categories of financial products: stocks, bonds, currencies, commodities, foreign exchange, and derivatives [3]. Foreign investment banks have a long history of development, and their business development and business models are relatively mature and diverse. They also undertake more comprehensive functions and responsibilities. However, investment banks emerged relatively late in China, and research on investment banks in both depth and breadth is not sufficiently remote and reasonable. Zhou believes that since its inception, investment banks in China have achieved remarkable results in various aspects. However, there is still a significant gap in management models, revenue, and business scale compared to top foreign investment banks such as Goldman Sachs, Morgan Stanley, and Citigroup. Therefore, we should continue to promote business transformation, innovate management models, and enhance business capabilities [4]. From the research of domestic scholars on investment banks, it can be seen that domestic investment banks have a long way to go in terms of growth and development. They should not be satisfied with traditional business and management methods but should have further innovation.

2.2. Current Research Status of FICC Business at Domestic and Abroad

FICC business has always held a dominant position in international investment banks. Before the 2008 financial crisis, foreign investment banks had widely used quantitative investment models to conduct large-scale market-making on standardized products [5]. In the transactions of FICC business, American investment banks continuously expand their debt scale in pursuit of higher return on equity, use high leverage to drive high profits of FICC business, and continuously improve the organizational structure of investment banks. After the outbreak of the 2008 financial crisis, new regulatory regulations were continuously introduced, the FICC business of the US investment bank was fully contracted and its business structure was adjusted. Bulk commodities withdrew from the physical

trading business, and its service targets expanded from institutions to individuals. At a time when investment banks in foreign countries experienced bloody storms and significant changes, investment banks of securities firms in China only took one step forward in FICC business. Today, less than one-third of the securities firms in the entire industry are engaged in this business. He Fengjie (2016) believes that China's securities firms are in a period of opportunity to build the FICC business chain, and large securities firms are actively trying their luck. However, China's securities firms face difficulties in obtaining business qualifications, lack a market-making system, lack sufficient capital strength, and have deficiencies in their organizational structure, resulting in stagnation in the development of FICC business [1].

Overall, the development history and trends of foreign investment banks in FICC business have reference significance for China's FICC business and need to be analyzed in conjunction with domestic economic development and specific situations.

3. Analysis of the Current Development Status of Investment Bank FICC Business of CITIC Securities Company

3.1. Basic Information of CITIC Securities Company

CITIC Securities Co., Ltd. is the first securities company in China to be listed on the A+H stock market. Its business covers multiple fields such as securities, funds, futures, foreign exchange, and commodities. It has eight major primary subsidiaries and more than 400 domestic branches. The company has expanded its net assets through multiple means such as issuing new shares and issuing new shares during its development process. Its main financial indicators have remained at the top in the industry for more than ten consecutive years. At the same time, it has utilized high leverage to achieve high net asset returns, achieving dual growth in asset size and profit scale. It can be inferred that CITIC Securities has the strength and qualifications to develop emerging businesses in the financial industry, such as FICC business.

3.2. Analysis of the Current Situation of FICC Business of CITIC Securities Company

The 14th Five-Year Plan points out the need to actively and orderly expand the opening up of the financial industry to the outside world [6]. As an innovative business of CITIC Securities and a backbone of international investment banks, the FICC business has sufficient reasons to become the core breakthrough point for CITIC Securities to upgrade domestically and expand externally. In recent years, the brokerage business has the highest proportion among CITIC Securities' various businesses, accounting for 25% of total revenue in 2022. Data shows that the development space of the brokerage business is still very large. With the continuous growth of China's GDP, the expansion of the total economic output, the increasing number of high-income individuals and market entities, and the corresponding increase in demand for financial services, the business needs of FICC customers are also constantly expanding. At present, CITIC Securities mainly targets individual customers, but with the development of the economy, institutional investors will increase with the development of the capital market. This is an inevitable trend, and the future development model of FICC business should be given some consideration.

In 2022, CITIC Securities is the largest investment bank in China, with a total asset size of RMB 1.31 trillion, and Citigroup, an international investment bank, has a total asset value of USD 2.4 trillion, far exceeding CITIC Securities in terms of capital strength; In 2022, CITIC Securities had a revenue of approximately 65.1 billion RMB and a net profit of approximately 22.2 billion RMB. Citigroup, an international investment bank, had a revenue of over 18.8 billion USD and a net profit of over 15 billion USD, far exceeding CITIC Securities. The data shows that CITIC Securities has insufficient capital strength to meet the characteristics of FICC business requiring a large amount of transaction amount and occupying funds for a long time, which to some extent limits the development of FICC business (Fig. 1).

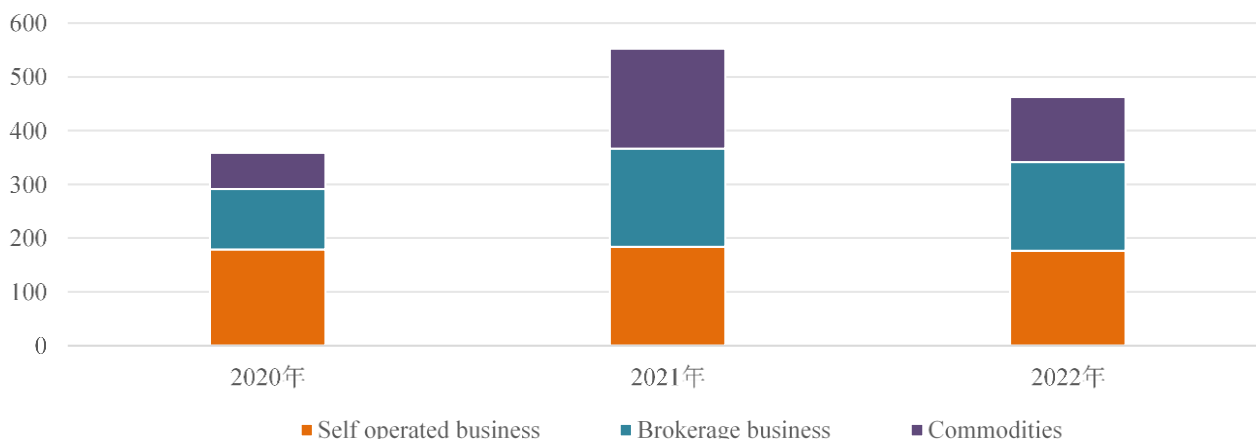


Fig. 1 CITISC FICC Business Revenue

With the gradual opening and development of China's capital market, CITIC Securities actively attempts to innovate and expand its business. In the annual report of CITIC Securities, FICC-related businesses such as fixed income, derivatives, and commodities are collectively referred to as capital intermediary businesses. It is the first securities firm in the industry to propose and practice this business, and a dedicated department is established to be responsible for related businesses. From 2018 to 2023, CITIC Securities saw a stable and high increase in its self-operated business revenue, becoming the company's largest contributor to performance, accounting for nearly 40%. Among them, the fixed-income business generated a revenue of 12.4 billion yuan, but there is still a significant gap compared to international investment banks.

4. Analysis of Existing Problems and Causes

4.1. Insufficient Overall Scale and Comprehensive Strength

FICC business belongs to the transaction-driven capital intermediary business, which has characteristics such as transactional, quantitative, large-scale, leveraged, and institutionalized. It requires large transaction funds, and the capital occupation time is long, naturally requiring high-leverage support.

Table 1. Comparison of Main Financial Data between CITIC Securities and Goldman Sachs in 2022

Time	Main data	CITIC	Goldman Sachs	Multiple
2022	Total assets	13082.89	100,415.53	7.68
	Operating income	651.09	3,109.69	4.78
	Net profit	213.17	784.28	3.68

From Table 1, it can be seen that Goldman Sachs Group far exceeds CITIC Securities in total assets, operating income, and net profit attributable to shareholders. CITIC Securities has a gap in capital scale compared to world-class investment banks, making it difficult to drive the development of FICC business.

Indeed, between 2015 and 2022, CITIC Securities' leverage ratio increased from 3.3 times to 4.1 times, and the company's leverage ratio further increased to 4.42 times in the first half of 2023. However, in 2022, Goldman Sachs Group's leverage ratio was already over 10 times. The high leverage ratio of Goldman Sachs Group provides sufficient financial support for the development of FICC business, achieving high profit and revenue generation in FICC business. The main reason why CITIC Securities is unable to achieve high leverage is that for a long time, various financing channels of securities companies in China, especially medium and long-term financing channels, have not been smooth enough. In addition, the risk management system of securities companies has extremely strict

requirements for net capital, which limits the use of their balance sheets. As a leading securities firm, CITIC Securities is no exception. Its financing channels are not smooth, its asset liability management ability is limited, and its ability to withstand cyclical fluctuations is not strong. Therefore, its profitability is far from that of world-class investment banks. Taking Goldman Sachs Group as an example, its annual operating revenue in 2022 was \$47.365 billion, of which the FICC business had a net revenue of \$14.68 billion, a year-on-year increase of 38%. It can be seen that CITIC Securities lacks comprehensive strength.

4.2. Traditional Business is Single and Has a Low Degree of Internationalization

In 2022, CITIC Securities achieved operating revenue of 16.488 billion yuan in its brokerage business, 12.185 billion yuan in its asset management business, 15.772 billion yuan in its securities investment business, and 8.511 billion yuan in its securities underwriting business; Goldman Sachs Group's investment banking business had net revenue of \$7.36 billion, FICC business had net revenue of \$14.68 billion, asset and wealth management business had net revenue of \$13.376 billion, and platform solutions business had net revenue of \$1.5 billion, as shown in Fig. 2 and Fig. 3. From the data, it can be seen that CITIC Securities mainly engages in traditional businesses, which are different from international investment banks in terms of business classification, and FICC business (i.e. CITIC Securities Capital Intermediary Business) is not separately listed. In the financial statements of CITIC Securities, it can be seen that in the capital intermediary business, there is a focus on fixed income business, commodity business is still in the ascendant, foreign exchange business is still to be expanded, and innovative business is still in its infancy.

CITIC Business revenue

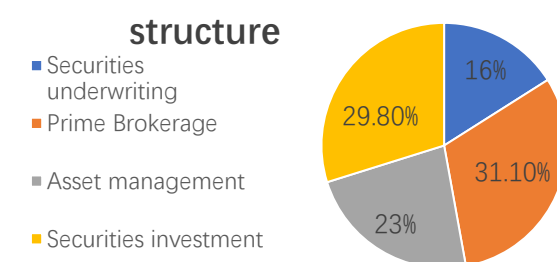


Fig. 2 Business Income Structure of CITIC Securities in 2022

Goldman Sachs Business

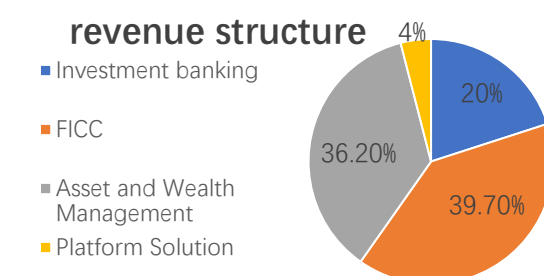


Fig. 3 Business Income Structure of Goldman Sachs in 2022

In recent years, CITIC Securities has laid out its internationalization strategy by first establishing a subsidiary in Hong Kong, and then acquiring business qualifications through the acquisition of third-party licensed institutions to expand its overseas foreign exchange business. From 2013 to 2020, CITIC Securities continuously acquired and integrated securities companies such as Lyon and Kunlun, utilizing Kunlun's existing trading platforms and technologies to enter the global foreign exchange trading business, positioning CITIC Lyon's development as a bridgehead for CITIC Securities to expand its international business. Although CITIC Securities is steadily expanding its international layout, its overall revenue generation is still average. In 2022, CITIC Securities International achieved

a revenue of 1.41 billion US dollars and a net profit of 130 million US dollars, with international business accounting for only about 10%; Goldman Sachs Group achieved an international revenue of 16.919 billion US dollars in 2023. The comparison of the two data is obvious, and CITIC Securities' global business network is not perfect, with a low degree of internationalization.

4.3. The Structure of the Talent Team Is Flawed, And the Ability to Innovate in Science and Technology Needs to Be Improved

The mature FICC business is concentrated in various derivatives, with high technical and complexity, requiring professional talents to explore and grasp investment opportunities for various assets, and identify, measure, and control risks in asset positions and overall business. At the same time, one of the major characteristics of FICC business is to create and customize products and transaction strategies for customers. These two characteristics require enterprises to develop not only professional talent teams but also high technology and innovation capabilities when developing FICC business. On this aspect, in 2020, CITIC Securities and Alibaba Cloud became partners and initiated the project proposal for Alibaba Cloud's NASDAQ stock market products, utilizing cloud computing to achieve personalized customized services and standardized delivery models. In 2021, the investment in financial technology reached 1.74 billion yuan, but the technological achievements were not significant. Goldman Sachs Group, an international investment bank, invested \$1.347 billion in IT in 2020, accounting for approximately 3% of its revenue. Based on its strong investment and research capabilities, Goldman Sachs has successively independently developed and built core infrastructure systems such as SecDB and Marquee to support the development of internal and external businesses [7]. At the same time, strengthen external technological cooperation, invest in high-quality technology enterprises, and explore cutting-edge technology fields.

The FICC business has a wide range of product lines, which heavily rely on IT infrastructure, big data, quantitative trading, and other technological developments in the pre -, mid -, and post-chain processes of trading and risk control. However, CITIC Securities currently lacks sufficient technological investment, talent reserves, experience, and innovation capabilities, making it difficult to keep its product system up-to-date and meet the diverse needs of institutional clients for complex risk hedging and investment.

5. Design of Transformation Plan for Investment Bank FICC Business Development of CITIC Securities Company

5.1. Improve Risk Management System and Enhance Overall Strength

In the FICC business chain, investment, market making, and product creation all require securities firms to fully utilize their balance sheets and carry out heavy asset businesses. Therefore, capital strength is a key factor in determining whether a business can expand and the space for expansion. CITIC Securities can improve its capital strength and leverage ratio from two directions: firstly, on the debt side, financing can be obtained from multiple channels; second, on the asset side, developing diverse businesses and balancing light and heavy asset businesses by providing liquidity to the market to earn price differentials, actively expanding derivative markets, equity investments, and other businesses within regulatory requirements, and improving asset utilization.

When securities firms carry out FICC-related businesses, such as market-making trading, buying and selling securities, and creating financial products, they need to establish a certain level of risk control capabilities [8]. The Opinion on Building a More Perfect Factor Marketization Allocation System and Mechanism proposes to unify the information disclosure standards for credit bonds, improve the bond default disposal mechanism, and regulate the development of the credit rating industry. Therefore, higher requirements are put forward for the risk management capabilities of securities firms. As an industry leader, CITIC Securities should be the first to bear the brunt. On the one hand, we need to balance the proportion of risk and return. Conducting FICC business requires

bearing risks with its funds. CITIC Securities should learn from the experience and lessons of international investment banks, while expanding its business, pay attention to matching risk exposure with its own capital size and risk management capabilities, and maintain moderate leverage. On the other hand, we will continue to promote the improvement of our risk management system and achieve diversified and precise management. FICC's business involves a wide range of areas and is not aligned with traditional business ideas. In the development process, CITIC Securities needs to break traditional thinking and accurately measure factors such as product types, market demand, and volatility direction to achieve strong risk control capabilities, which will help CITIC Securities provide risk management solutions to customers and enhance customer stickiness.

5.2. Promote International Business Layout and Expand FICC Business Chain

In 2021, the oil trade between China and Iran began to be settled in RMB, which was once one of the two core pillars supporting the dominance of the US dollar in the world capital market. The oil dollar settlement has been challenged. This is a good opportunity for top domestic securities firms to vigorously develop and improve the FICC business chain, connect various market functions, and enter the international market. International investment banks have relatively mature trading platforms and experience in developing FICC business, and many overseas institutions also have good investment value. CITIC Securities can consider implementing overseas interbank mergers and acquisitions under the premise of controllable risks and complementary advantages, to promote the internationalization process, apart from overseas mergers and acquisitions [9]. CITIC Securities also has a branch in Hong Kong, which is developing steadily. It should continue to consolidate its business in the Hong Kong region and establish a business system with multiple varieties, businesses, and qualifications. Through the business platform in Hong Kong, and following the "Belt and Road" initiative, actively enter the Asian market, occupy a certain market share, gradually improve the global layout, and promote the proportion of international business.

One of the important sources of revenue for FICC business in mature markets is market making, while CITIC Securities' market-making business is still relatively small in scale and revenue generation. With the further increase in business qualifications and market demand in the future, market-making business is expected to become one of the revenue pillars of CITIC Securities. In the trading pricing of market-making business, CITIC Securities can draw on two business models: the high-frequency market-making model of quantity replenishment by international investment banks and the low-frequency market-making model of high price difference, to improve its differentiated product pricing model. Adjust trading prices in real-time based on factors such as product types, market supply and demand, and risk levels, and maximize market price difference revenue when providing competitive quotes to customers.

5.3. Accelerate Technology Investment, Improve Organizational Structure, and Leverage Synergies

The front, middle, and back of the FICC's entire business chain, as well as the establishment of risk control systems, require technical support such as automation, big data applications, and quantitative trading models. In the era of big data, only by using financial technology as the engine, empowering finance with technology, and enhancing core competitiveness, can we further drive efficient business development [10]. Therefore, CITIC Securities should increase investment in technology, widely apply quantitative trading models, build advanced AI algorithms and quantitative models, and achieve platform automation and intelligence. Build an electronic trading platform that utilizes its data scale and timely and accurate trading capabilities to accurately capture market changes, eliminate subjective assumptions, and provide customers with the most cost-effective and objective trading positioning, breaking the upper limit of risk management capabilities.

The operation of the entire business chain, in addition to technology empowerment, complements each other in the FICC business chain. International investment banks do not separate their market-making, product creation, and self-operated businesses in the form of separate departments, but rather

isolate them through departmental business teams, positions, and other levels, which helps promote cooperation between different business teams. CITIC Securities should integrate its fixed income department, derivatives business department, commodity business department, and other related business departments with FICC as soon as possible, and include them under the same department to establish a FICC business department, better promote the coordination and progress of the entire business chain, and improve operational efficiency.

Whether it is technology empowerment or leveraging business synergy, the prerequisite and foundation are inseparable from a high-quality talent team. In the future, CITIC Securities should pay more attention to the cultivation of research talents related to FICC business, and build a professional team through talent attraction and internal training mechanisms. Whether it is depth, breadth, or quality, it can achieve comprehensive coverage. Focusing on customer demand orientation, relying on synchronous support from research and sales teams, promoting customized product design services, further stimulating diverse investor needs, and achieving high-quality transformation of FICC business.

6. Conclusion

This article takes CITIC Securities as an example to introduce the basic situation of CITIC Securities Company and analyze its current overall development status. Further analyze the development of FICC business in CITIC Securities from three dimensions: macro market environment, comparison with international investment banks, and the company's own business, and study the existing problems and underlying causes. Specific issues include insufficient overall capital scale, single and low levels of internationalization in traditional businesses, structural defects in talent teams, and the need to improve technological innovation capabilities. From the surface of the problems, the reasons for their formation are explored, and corresponding transformation plans are proposed to address the existing problems, including improving the risk management system, expanding the FICC business chain, accelerating technology investment, improving organizational structure, and leveraging synergies.

In summary, to better develop FICC business and enable FICC business to support national economic development, suggestions are proposed from the following two aspects. Firstly, China should accelerate the improvement of financial market infrastructure, formulate relevant laws and regulations, and provide a favorable market environment and institutional guarantee for the development of FICC business. The securities and finance industry should strengthen the internal governance of industry institutions, play an important role in serving the main force of the real economy and maintaining financial stability, and actively promote capital market reform. Secondly, major securities companies should actively learn from the development experience of international investment bank FICC business, continuously optimize talent structure and international layout, develop diversified businesses, increase investment in technology, and improve the FICC business chain. Fully benchmarking against world-class investment banks and aligning with internationalization, FICC's business can quickly develop and mature in China, becoming one of the profit pillars of domestic investment banks.

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