Research on Impacts' Factors on Investment Banking Risk Taking Based on Internal and External Environments Analysis

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Abstract. Investment banks face enormous challenges due to the rapidly changing global situation and the repercussions within banks, which can lead to huge losses for banks and the global economy. Therefore, this paper studies the internal and external impacts of investment banks by collecting the changes in GDP and income of investment banks in various countries and by comparing data. The study found that investment banks, with the help of the government, have taken precautionary measures to deal with Covid-19 in advance, and for the Ukraine-Russia war, appropriate foreign exchange reserves need to be prepared to reduce losses and risks. Internal supervision of shadow banking and employee compensation needs to be strengthened, internal governance improved and employees encouraged.

Keywords: War · Covid-19 · Shadow banking · Salary structure

1 Introduction

The Ukrainian-Russian War has impacted the world economy and reshaped world trade. Global growth forecasts have been weakened since the start of the war [1]. Commodity import and export interfered with the real GDP of various countries, and investment banks were also affected [2]. Bloomberg notes that Wall Street's investment banks have stalled due to the war, and initial public offerings have slowed [3]. JP Morgan also looks strong. It seems like most big investments banks are also strong enough to overcome the threats of Covid-19. They do not get as much credit loss as that of 2008 [4]. As a product of financial reform and innovation, shadow banking has promoted the prosperity and development of the financial market. However, after the global financial crisis broke out in 2008, it has brought challenges to the rapid development of the global economy and the stability of the financial system [5]. Since 2008, after the extraordinary intervention

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of the Federal Reserve and the U.S. Treasury, the compensation scheme of financial institutions' executives and employees has aroused considerable concern, and in some cases, indignation [6].

Foreign exchange reserves can provide financial support for the war and minimize the external shocks faced by commercial banks [7]. As a negative external impact, COVID-19 not only increases the risk of a single financial market, but also increases the degree of Risk Spillover among financial markets. In addition, the uncertainty of the epidemic has impacted the confidence of investors and caused investors' panic and irrational investment behavior. Under the action of two factors, the financial market will overreact, and the price of the financial market will fluctuate [8]. Shadow banking has its own asset liability characteristics, which has accelerated the expansion of financial instability, making the whole shadow banking system more closely linked and more vulnerable in the face of crisis. Strengthening the supervision and guidance of shadow banking is one of the important contents of the future development of financial markets [9]. This paper first emphasizes the external factors which investment banks generally need to adapt themselves to them, wars and covid. Then, internal factors are written to help improve the internal competitiveness of investment banks.

2 External Impact Factors Analysis on Investment Banking

2.1 War

Global growth forecasts have been weakened since the war began, according to forecasts from the Federal Reserve Bank of Dallas. These forecasts fall by 1% and 0.4% for 2022 and 2023, respectively. Over the same period, global CPI inflation is also forecast to rise by around 2.3% in 2022 and 0.9% in 2023.

By June 16, 2022, the Fed announced a 75bps rate hike to 1.50%-1.75% to combat inflation, which may have justified the forecast. However, raising interest rates can only solve the monetary factors that lead to inflation, but it is not difficult to solve the problems of the Ukraine-Russia war and supply chain disorder. The Fed's rate hike method has slowed down the inflation rate. The inflation rate of the United States will increase to 20%, which will cause huge damage to the US economy and completely collapse the credit of the US dollar.

The impact of the Ukrainian-Russian war on investment will be studied from the short, medium and long term. In the short term, the breakdown of supply and demand has caused prices of some commodities to skyrocket. Russia mainly exports energy products, of which the impact of crude oil exports on international oil prices rose by more than 40%. Natural gas, which faces the same problem, rose by more than 70%. The Ukrainian-Russian war has had more impact on natural gas prices than it has on oil prices, and as the U.S. continues to overproduce natural gas, the U.S. and Russia's scramble in the European Union's natural gas market has become increasingly tense. The uptick in agricultural markets has been exacerbated by limited agricultural inventories and the impact of Covid-19. While export curbs further reduce global supply, import liberalization measures and subsidies will stimulate demand, and rising prices for natural gas, a key ingredient in ammonia fertilisers, will drive up costs for farmers, reduce crop yields and exacerbate food shortages. In late February, when the war broke out, the 67

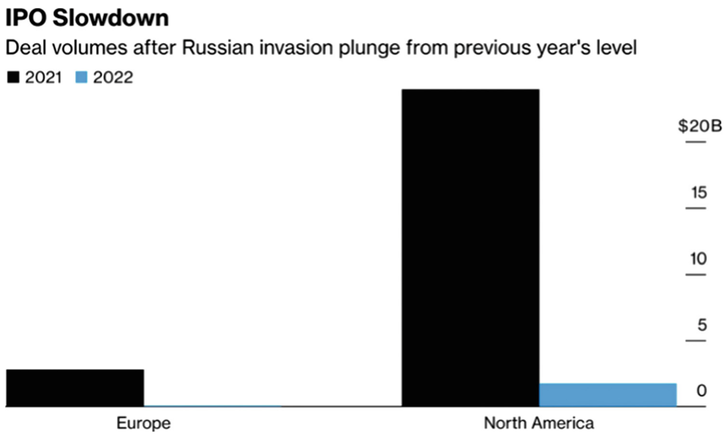

Fig. 1. Deal volumes after Russian invasion plunge from previous year's level. Source: Bloomberg Bars measure volume of priced IPOs on exchanges in the region during the period of Feb. 24 - March 8.

Trade New Deal was implemented or announced. Export restrictions alone pushed wheat prices up 7 percent. (Coulter, J., & Martínez-García, 2022).

The medium-term implication is that EU countries need energy independence. Due to the constantly volatile energy prices and supply chain crisis, not only the EU but also all countries in the world need to ensure the safety of energy sources and a self-supply system, so that the world can check the energy problems of their own countries, photovoltaics, wind power, energy storage The development of new energy and new energy will be further concerned and maintain a long-term positive trend (Fig. 1).

The possible long-term effect of the war is that the war will lead to globalization. The company will reassess geopolitical risks and potentially reshape global value chains to some extent, shifting production to countries that it considers riskier. However, given the availability of capital, the cost of finding alternatives, and differences in wages across countries, the process is likely to be gradual rather than sudden.

For investment banks, the pace of initial public offerings and large-scale mergers has been halted by Russia's invasion of Ukraine's markets and economic turmoil. Banks are losing all kinds of businesses that they have prepared for the next few years. Since the intrusion began on February 24, IPOs on European exchanges have been priced at just $110 million, compared with about $2.8 billion a year earlier. In the same week in North America, IPOs fell to $1.7 billion from $24 billion a year earlier. (Nair & Spezzati, 2022) [1].

In addition, the macroeconomic impact of rising commodity prices and inflation expectations are increasing. In any event, rising inflation and sluggish economic growth could reduce bank profits and negatively impact retail business performance.

2.2 COVID-19

As for the COVID-19 is a worldwide issue which could be a driving force for investment banking reform. In 2008, the global financial crisis broke out, which was a year when the investment banking industry collapsed. With the fall of two dominoes, the first is the collapse of the Lehman Brothers in 2008. And the second is the Federal Reserve decided to provide emergency funds to Bear Stearns through JP Morgan Chase to alleviate the company's liquidity shortage crisis. The lesson that we learn from that crisis in 2008 is that deregulation has become one of the biggest reasons why many investment banks went broke, but we suppose the main reason is that investment banks had not prepare the crisis response before.

Every industry is trying to survive in the COVID-19 crisis, and investment banking is no exception. However, investment banks have unique complexities as their stakeholders are spread across industry verticals and multiple geographies. Before the pandemic hit, most banks were well set on their operating journey. But during the age of almost every industry has to face the hard circumstances, investment banks are also trying to take measures to get strengthened. Not only to deal with the pandemic issue, but also to develop risk prevention measures.

In fact, there has been a lot of economic decline in the past 50 years, such as investment market crisis and prediction in the economic system. The current recession is different: it is triggered by a global pandemic, government and social response, and the consequences of shocks for production and demand.

This paper chose a few typical top investment banks to clarify their methods and problems. According to the report of Morgan Stanley, the stronghold of the investment bank-trading bonds and stocks are still lively and go smoothly. The tax of Morgan Stanley was ninety three percent at the second quarter of 2019 which proves that even in the period of pandemic, investments still perform significantly good [3].

3 Internal Impact Factors Analysis on Investment Banking

3.1 Shadow Banking

As a product of financial reform and innovation, shadow banking was put forward in the early 21st century, which effectively promoted the prosperity and development of financial market. However, shadow banking has brought great challenges to the stability of the global economy, which emerged after the financial crisis broke out in 2008. "Shadow banking" was first proposed by American PaulMcCarley at the annual meeting of the Federal Reserve in 2007. The definition of shadow banking refers to the financial credit intermediary system, which is detached from the regulatory system and may generate systemic risks and risks related to regulatory arbitrage. There are essential differences between shadow banking and general commercial banks, mainly because shadow banking is a financial institution that is not regulated by the regulatory system, and it has certain banking characteristics that can engage in banking-related business to a certain extent. As a result, there may be huge risks in shadow banking, but the supervision of shadow banking by regulators will not be too strong. There are several main reasons for the shadow banking risks in investment banks. The first is its high leverage, which is also one of the most remarkable features of shadow banking. The high leverage ratio of shadow banks has two main meanings. First, shadow banks can make the capital leverage ratio very high through the financial leverage of borrowing, without being restricted by the capital of traditional commercial banks; Second, with the help of its extremely high leverage, a large number of derivatives transactions are used to achieve the purpose of high returns, which has caused great hidden dangers to the stable investment banks. Second, its source of funds is too single. The source of funds of shadow banking is different from that of traditional commercial banks. Shadow banking can't absorb public deposits, and its funds mainly come from the money market. The market itself receives great risks. Shadow banking can't get the guarantee and support from the central bank and the government, and its source of funds is also very unstable, which is easily impacted by the market, resulting in all kinds of unpredictable losses. Therefore, the source of funds of shadow banking is different from that of traditional commercial banks. Third, the lack of supervision, and the businesses maintained by shadow banks are mostly with high-risk appetite, which is rarely supervised by the Banking Insurance Regulatory Commission, leads to the shadow banks' inability to form a unified supervision system without considering the constraints of capital adequacy ratio and deposit reserve, which also makes shadow banks unable to control their internal control, risk degree and scale according to the existing standards. Finally, the systemic risk of shadow banking is too high. Compared with traditional commercial banks, the special asset-liability structure of shadow banking is more likely to lead to systemic risk. By analyzing the main sources of funds of shadow banking, we can find that the internal system risks of shadow banking will inevitably be triggered once the capital chain is broken. Moreover, most of the assets accumulated by shadow banking are sensitive assets, and the opacity of its own market operation intensifies the risk of shadow banking system, which leads to the risk of shadow banking system, and the risk of shadow banking system is affected to some extent.

3.2 Salary Structure

Generally speaking, the salary scheme structure of enterprise executives combines the rewards for short-term profitability, long-term enterprise potential growth and the stability of enterprise income. For example, executives are encouraged to create short-term gains through basic salary and bonuses paid by recent performance of enterprises, and long-term growth and stability of enterprises are maintained through restricted stocks, stock options and welfare plans. However, through well-designed salary plans, managers are encouraged to create value in the short term, and generally they become some long-term income owners of the company through stock grants and stock options. This provides a direct idea for them to carry out their plans in the company, and to increase short-term profits at the expense of long-term investment to reduce the value of stocks and options. This is greater than the personal gains brought by basic salary and bonus, but such behavior greatly increases the internal risks of enterprises.

Picture display, in 2005, the top executives in the banking and financial industries were obviously paid the highest salary, with a total salary of $3.4 million per executive, which was about 30% to 40% higher than those in other industries [5].When we analyze the salary composition of executives in various industries, we can find that within the range of $400,000, there is little difference in the basic salary of various industries, but the dividends in the banking and financial industries have increased significantly, and more restricted stocks have been granted. Each person is close to $1 million, and the bonus of bank executives is even more than twice the basic salary, which is 1.5 to 2.5

times that of executives in other industries. The value of restricted shares granted to banking executives is also close to $750,000, which is 1.5 to 2.5 times that of other industries. (Cai, Cherny & Milbourn, 2010).

Generally, bonuses are linked to short-term financial performance, usually one to three years' performance. It can be seen that such salary structure tends to reward the creation of short-term profits and encourage the short-termism of financial institutions. Higher-paid bank managers are more likely to take excessive risks at the expense of bank safety and stability to create the maximum shareholder wealth.

4 Countermeasure Analysis of Investment Bank Risk Management

4.1 Countermeasure Analysis of External Factors

Normally, the transmission mechanism of the impact of external factors is determined by some factors of the social environment. This transmission does impact on the investment banks indirectly. This leads to the fact that the factors and results of investment banks affected by outside causes are not significantly different from those of other financial industries. But wars and covid differ from each other. For example, the impact of war on commercial banks mainly lies in foreign exchange and capital hedging, while the epidemic mainly affects the real economy.

4.1.1 Wars

When the war breaks out, the world's finance will be affected and impacted. The local war will make the local economy stagnate, and its related investment banks, securities, insurance, and other real economies will be damaged to varying degrees. At the same time, financial institutions often face difficulties or even collapse due to the rapid deterioration of the external environment. Therefore, appropriate prewar foreign exchange reserves can play a preventive role against financial risks during local wars. In fact, the more foreign exchange reserves and quantities of different countries, the more institutions or countries will be able to cope with the impact [6].

4.1.2 Covid-19

The foundation of finance is the real economy. The outbreak of the Covid-19 has a direct impact on the real economy. On the surface, the occurrence of pandemic seems to have no direct connection with the operation of investment banks. As a matter of fact, the epidemic not only has a major impact on the micro and macro-economic, but also has an impact on the operation of banks. The impact of the epidemic is negative. Like other industries, under the circumstances of pandemic, the decline of profitability, the deterioration of liquidity and the weakening of turnover capacity make the investment banks are not able to manage sudden public crises. When the real economy goes down, it will cause the risk transmission effect between financial markets, and the losses of a single financial institution or market will spread to other institutions and markets in the short term, causing systemic financial risks. For example, the asset price drops and the total demand shrinks, the property value of economic subjects drops, the debt ratio increases, and a large number of risky assets are sold off, causing the asset price to fall further and eventually forming a vicious circle. Therefore, planning ahead before crisis is significant, which gives an inspiration that governments need to modify policies to adapt variation in the 20th financial environment [7].

4.2 Countermeasure Analysis of Internal Factors

4.2.1 Shadow Banking

Shadow banking is the outcome of the spontaneous supply of market demand as well as other social problems. Compared with commercial banks, shadow banks lack the direct liquidity support and deposit insurance mechanism of the central bank to commercial banks, so they are easily affected by the run. Therefore, the overall risks of shadow banking are transferred to the government to a greater extent, and the government must pay for these remaining risks, and the remaining crisis must be paid by the government. Whereas limited government resources are not able to solve all the huge financial gap. Precautions should be taken. First, strengthen the corporate governance and internal risk control of shadow banks which requires banks to separate proprietary trading and similar investment activities from banking institutions that have joined the deposit insurance system. Second, improve the information disclosure of the shadow banking system. We should strengthen the supervision of over-the-counter transactions, ensure that any financial transactions and financial institutions are within the scope of supervision. Strictly prevent the on-balance sheet funds of commercial banks from flowing to shadow banking institutions such as private equity funds and restrict small loan companies from financing from banks [8].

4.2.2 Salary Structure

Nowadays, the unreasonable of investment banking salary structure has caused a lot of debates in the world. Such unfairness is reflected in a theory called tournament theory which describes the important role of widening the pay gap in improving corporate performance. This theory was proposed in 1981 and over the past forty years it was admitted and widely used as a motivation tool within investment banks. Employees and executives have to work diligently to win their competitors which may cause some side effects to the financial industry. Effortless work could be done just to outperform other competitors do not create real fortune to this society. Generally, the growth of executive payment is closely related to the growth of enterprise performance. However, salary structure needs to be changed in order to adapt the changing external surroundings. For instance, in the epidemic situation, if the economy shuts down for a long period of time and executives' income is halved, they will turn to other jobs.

5 Conclusion

This research evaluates the internal and external impact of investment banks by collecting data and information, This study finds that external factors, the Ukrainian-Russian war and Covid-19, as well as internal factors, shadow banking and employee salary structure, have direct and indirect effects on investment banks. The impact of the war on banks is mainly related to foreign exchange and capital hedging, while Covid-19 mainly affects the real economy and reduces the business of investment banks, which means that investment banks have less income. The unregulated shadow banking model carries high risk-taking, which can be dangerous to sound investment banks. The personal use of employee salary structure poses a risk to investment banks. Therefore, investment banks need to prepare measures in advance for emergencies under external influences and store foreign exchange and conduct other businesses to reduce losses. Internally, it is necessary to strengthen the supervision of shadow banking and improve information leakage, which effectively reduces the risk to investment banks. In the problem of employee salary structure, the company needs to improve the salary structure to cope with external problems at any time and to appease employees' emotions and create value for the bank and the society.

This research allows the public to understand more intuitively and will reflect the response of other financial institutions through the strategies of investment banks. This study put forward some suggestions to investment banks. The economic pressure brought about by the war is enormous, and it is related to the interests of all countries in the world. The turbulent situation in the future is unpredictable, so the plan of this study can only reduce losses, and the changed situation in the future is more conducive to research development.

Allowing the public to understand more intuitively, and will reflect the response of other financial institutions through the strategies of investment banks. Finally, this article's advice to investment banks is put forward from an objective point of view. The economic pressure brought about by the war is enormous, and it is related to the interests of all countries in the world. The turbulent situation in the future is unpredictable, so the plan of this study can only reduce losses, and the changed situation in the future is more conducive to research development.

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