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The Impact of Financing Structure on Enterprise' Overseas Direct Investment: A Case of A-share Listed Companies in China

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Abstract: This research reviewed relevant literature and theories to analyze the influence of financing structure on enterprises' overseas direct investment and its influence mechanism. The panel data of 1,725 Chinese A-share listed companies from 2000 to 2020 was used. The debt-to-equity ratio index was used to measure the corporate financing structure, and the model was established combining the control variables at the enterprise level. The Probit model was used for benchmark regression, and the Logit and negative binomial panel model were used for robustness tests. At the same time, the influence mechanism was analyzed from the perspective of enterprise innovation research and development and productivity, as well as the heterogeneity analysis and endogeneity test. The conclusion is as follows: (1) The financing structure affected the overseas direct investment of enterprises. The high proportion of equity financing in the financing structure of enterprises was conducive to the generation of overseas investment projects and the increase in scale (2) The financing structure affected the overseas direct investment of enterprises through innovation, research and development, and productivity of enterprises. (3) According to the results of industry heterogeneity, the financing structure of manufacturing enterprises did not have a significant impact on their overseas direct investment.

Keywords: Foreign Direct Investment, Corporate Financing Structure, Financing Stability, Financing Cost, Agency Cost, Hypotheses Development.

1. Introduction

1.1. Background and Significance of Research Problem

Since the 21st century, the integration and development of the world economy have become more and more close. Foreign direct investment has become an important way of economic and trade communication between countries, and many multinational corporations have been born. China is also actively integrating into the world economic globalization, vigorously carrying out reform and opening up, and successively putting forward the "Going out" strategy and the "Belt and Road" Initiative.

Therefore, enterprises will consider whether to conduct overseas direct investment activities based on their own operating level and future development planning based on various factors.

Therefore, based on this background, this research uses the micro data of Chinese enterprises to discuss the impact of financing structure on enterprises' overseas direct investment.

1.2. Research Objectives

1.2.1 To analyses the financing structure of Chinese enterprises and identifying any problems that exist from a micro perspective.

1.2.2 To identify financing structure problems that enterprises encounter during foreign direct investment activities and providing guidance for these enterprises.

1.2.3 To examine the relationship between foreign direct investment behavior and financing structure, with a focus on identifying factors that influence equity financing.

1.3. Research Hypothesis

1.3.1 Financing structure will affect enterprises' overseas direct investment, and the higher the proportion of equity financing in financing structure, the more favorable enterprises' overseas direct investment.

1.3.2 Innovation research and development is a transmission mechanism of financing structure affecting enterprises' overseas direct investment, that is, the higher proportion of equity financing in external financing structure will increase enterprises' innovation input, and the improvement of enterprises' innovation research and development intensity will promote the occurrence of enterprises' overseas direct investment behavior.

1.3.3 Productivity is a transmission mechanism of financing structure affecting enterprises' overseas direct investment. Under the same conditions, equity financing will have more promotion effect on enterprise productivity, that is, the higher the proportion of equity financing in external financing structure, the stronger the enterprise productivity, the more conducive to enterprises' overseas direct investment.

1.4. Scope of the Study

In this research, the ratio of debt financing to equity financing is used to measure the financing structure of enterprises. At the same time, whether the enterprise makes overseas direct investment and the number of overseas direct investment are used to analyze.

This research sorts out and summarizes relevant theories and literature on foreign direct investment and corporate financing structure, and uses literature analysis method to sort out relevant studies on the relationship between financing structure and foreign direct investment, summarizes the existing relevant studies, and puts forward the innovation points and shortcomings of this paper.

1.5. Conceptual Framework

The conceptual framework as shown in Figure 1.

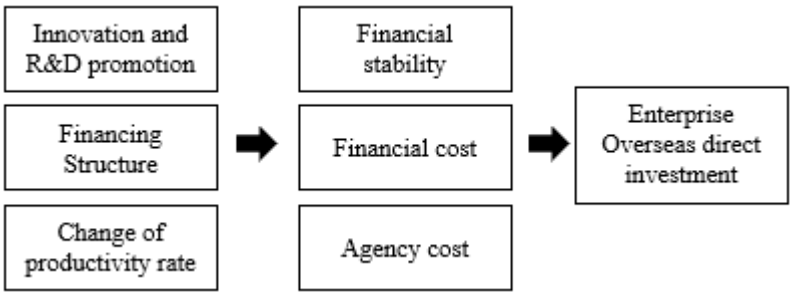


Figure 1. Conceptual framework

This research aims to analyze the financing structure of Chinese enterprises and identify any existing problems from a micro perspective. Additionally, it aims to identify financing structure problems that enterprises encounter during foreign direct investment activities and provide guidance for these enterprises. Furthermore, it aims to examine the relationship between foreign direct investment behavior and financing structure, focusing on identifying factors that influence equity financing. The research emphasizes testing hypotheses related to the relationship between variables associated with foreign direct investment behavior.

1.6. Definition of Terms

1.6.1 Financing structure refers to how a company funds its operations and investments, including the sources of financing, the types of financing, and the terms of financing agreements.

1.6.2 Financial stability refers to the ability of a company to maintain its financial position in the face of external shocks or changes in market conditions.

1.6.3 Financing cost refers to the cost of capital for a company, which includes the cost of debt financing and the cost of equity financing.

1.6.4 Agency cost refers to the costs that arise from conflicts of interest between a company's managers and shareholders.

1.6.5 Enterprises' overseas investment behavior refers to the actions and decisions taken by a China's; A-share listed companies when investing in foreign countries.

1.7. Expected Benefits

1.7.1 By examining the financing structure of Chinese enterprises and identifying any issues from a micro perspective, several benefits can be derived. Firstly, it can lead to a better understanding of the financing structure of Chinese enterprises, which can inform policy making and investment strategies. Secondly, it can help to identify potential obstacles that Chinese enterprises face when accessing financing, which can inform efforts to improve access to finance and support the growth of the private sector. Lastly, it can highlight areas where Chinese enterprises may have an excessive dependence on certain types of financing, which can inform efforts to diversify funding sources and reduce risks.

1.7.2 The identification of financing structure challenges faced by enterprises during foreign direct investment, along with the provision of guidance, can have multiple advantages. It can lead to a greater understanding of the risks and obstacles associated with financing cross-border investments, which can inform policymaking and the development of tools to facilitate international investment.

1.7.3. An investigation into the connection between financing structure and foreign direct investment behavior can yield multiple advantages. By identifying the factors that influence equity financing, the study can enhance our comprehension of the financing choices made by enterprises that engage in foreign direct investment.

1.7.4 This study has the potential to enhance theoretical knowledge in various ways.

2. Literature Review

The researcher has studied concepts, theories and related research used to determine the research guidelines as follows:

1. Foreign Direct Investment Theory
2. Corporate Financing Structure Theory
3. Financing Stability
4. Financing Cost
5. Agency Cost
6. Hypotheses Development

2.1. Foreign Direct Investment Theory

Foreign direct investment is widely defined as the economic activities in which the domestic investment subject of a certain country or region owns the equity or voting rights of an overseas company, thus obtaining the right to operate and manage the company and investing in it by means of cash, physical or intangible assets.

2.1.1. The Theory of Monopoly Advantage

2.1.2. Life Cycle Theory

2.1.3. Internalization Theory

2.1.4. Eclectic Theory of International Production

2.1.5. Foreign Direct Investment Theory of Developing Countries

2.2. Corporate Financing Structure Theory

Corporate financing structure, also known as capital structure, is the division of capital sources from the perspective of corporate financing methods, including internal financing and external financing, and external financing includes equity financing and debt financing. The financing structure of an enterprise will affect its production decisions, investment and development direction as well as the development direction of the whole enterprise.

2.3. Financial Stability

Financial stability refers to the ability of a company to

maintain its financial position in the face of external shocks or changes in market conditions.

2.4. Financing Cost

Financing cost refers to the cost of capital for a company, which includes the cost of debt financing and the cost of equity financing.

2.5. Agency Cost

Agency cost refers to the costs that arise from conflicts of interest between a company's managers and shareholders.

2.6. Hypotheses Development

2.6.1. The influence of financing structure on enterprises' overseas direct investment

Hypothesis on the influence of financing structure on enterprises' overseas direct investment as shown in Figure 2.

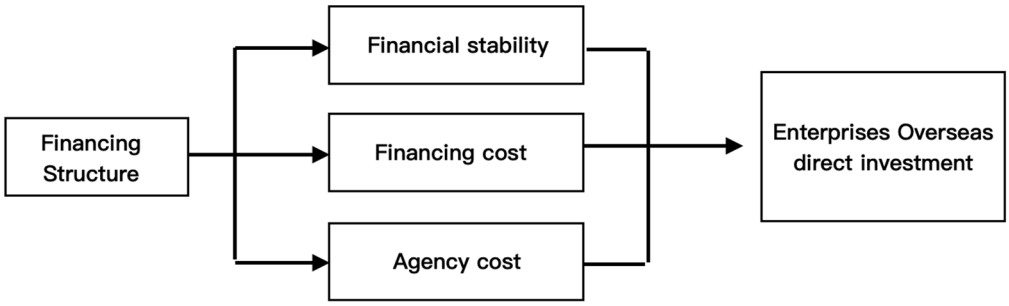


Figure 2. The influence of financing structure on enterprises' overseas direct investment

Hypothesis 1: Financing structure will affect enterprises' overseas direct investment, and the higher the proportion of equity financing in financing structure, the more favorable enterprises' overseas direct investment.

2.6.2. Innovative research and development transmission mechanism

In Figure 3, the hypothesis shows that innovation research and development is a transmission mechanism that affects financing structure and overseas direct investment of enterprises.

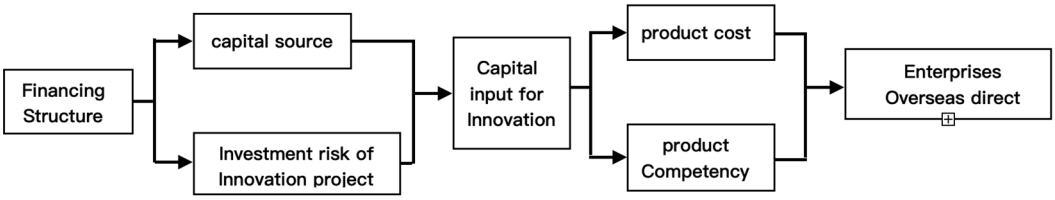


Figure 3. Innovation research and development as transmission mechanism of financing structure affecting enterprises' overseas direct investment

Hypothesis 2: Innovation research and development is a transmission mechanism of financing structure affecting enterprises' overseas direct investment, that is, the higher proportion of equity financing in external financing structure will increase enterprises' innovation input, and the improvement of enterprises' innovation research and development intensity will promote the occurrence of enterprises' overseas direct investment behavior.

2.6.3. Productivity transmission mechanism

Hypothesis 3: Productivity is a transmission mechanism of financing structure affecting enterprises' overseas direct investment as shown in Figure 4

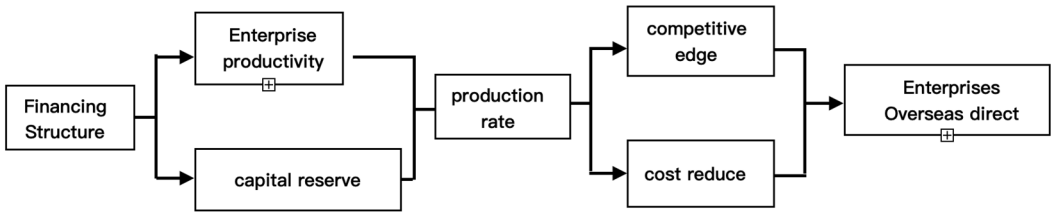


Figure 4. Productivity as transmission mechanism of financing structure affecting enterprises' overseas direct investment

Hypothesis 3: Productivity is a transmission mechanism of financing structure affecting enterprises' overseas direct investment. Under the same conditions, equity financing will have more promotion effect on enterprise productivity, that is, the higher the proportion of equity financing in external financing structure, the stronger the enterprise productivity, the more conducive to enterprises' overseas direct investment.

3. Research Methodology

This research is quantitative research. The details about the research method as follows:

1. Research Design
2. Population and Sample Size
3. Research Methods
4. Data Collection
5. Data Analysis

3.1. Research Design

The research design consists of four main methods: literature analysis, induction and summary method, quantitative analysis method, and productivity estimation method.

3.2. Population and Sample Size

Considering the availability and continuity of samples, this paper selects the data of listed A-share companies from 2000 to 2020 as research samples, deletes the listed companies in the financial industry, facing delisting risk and having negative equity (insolvent), and obtains A total of 18,975 samples from 1,725 listed companies.

3.3. Research Methods

3.3.1. Literature analysis

By collecting and sorting out relevant literature, the contents of foreign direct investment and financing structure of enterprises from different perspectives are connected together.

3.3.2. Induction and summary method

Inductive argument is a kind of argumentation method from individual to general.

3.3.3. Quantitative analysis method

Since the explained variables in this paper are dummy variables, Probit model estimation method and Logit model are used.

3.3.4. Productivity estimation method

Productivity, also known as total factor productivity, is one of the most important concepts in economic research at present, reflecting the productivity level of the subject of research excluding the input of labor and capital factors. Therefore, this paper uses LP method to estimate the total factor productivity of enterprises.

Assuming that the production function is in the form of C-D, the estimation equation of LP method is:

$$y_{it} = \beta_0 + \beta_{li} l_{it} + \beta_{ki} k_{it} + \beta_{mi} m_{it} + \omega_{it} + \eta_{it}$$

In this equition,i is the enterprise and t is the year. y is the logarithm of the total industrial output of the enterprise, l is the logarithm of the annual average number of employees of the enterprise, k is the logarithm of the enterprise capital, and m is the logarithm of the enterprise intermediate input. ω is total factor productivity, η is independent uniformly distributed random error term. At this time, the productivity of enterprise i in t can be calculated as:

$$\widehat{\omega_{it}} = y_{it} - \widehat{\beta_{li}} l_{it} - \widehat{\beta_{ki}} k_{it} - \widehat{\beta_{mi}} m_{it}$$

3.4. Data Collection

Considering the timeliness of data, this research selects enterprise data from 2000 to 2020 to make the research conclusions timelier and more reliable.

3.5. Data Analysis

Because it is difficult to obtain the specific data of the scale of OFDI of enterprises, whether enterprises have made foreign direct investment is used as the measurement index, that is, the explained variable is dummy variable (0 means enterprises have not made overseas direct investment in the current year, 1 means enterprises have made overseas direct investment in the current year). Based on this, Probit model is established to test the research hypothesis of this paper:

$$\mathrm{OFDI}_{it} = \alpha_0 + \alpha_1 \mathrm{DEV}_{it} + \sum_{i=2}^{n} \alpha_n \, \mathrm{control}_{it} + \varepsilon_{it}$$

In this equition, the subscript i represents the company, t represents the year, and ε is the random disturbance term. The core explained variable OFDI is whether the enterprise makes foreign direct investment, the explanatory variable is the enterprise financing structure (DEV), and control the variable (productivity and R&D innovation), which mainly reflects the specific financial index characteristics of the company.

4. Research Results

4.1. Description of Variables

4.1.1. Explained variables

At present, there are still many enterprises that have not made foreign investment, so the samples in this research include enterprises that have made foreign direct investment and those that have not made foreign direct investment.

4.1.2. Explanatory variables

The enterprise financing structure is measured by debt-to-equity ratio (DEV), which refers to the ratio of debt financing to equity financing. If the value is smaller, the financing structure favors equity financing; otherwise, if the value is larger, the financing structure favors debt financing. Debt financing (DF) refers to the way to obtain funds through borrowing activities, defined as (bonds payable + short-term loans + long-term loans)/total assets; Equity financing (EF) refers to the financing of enterprises through equity transactions, defined as (equity + capital reserves)/total assets.

4.1.3. Control variables

Enterprise Size (Size) : the logarithm of the total assets of an enterprise, which is used to measure the size of the enterprise.

Return on assets (Roa) : the ratio of net profit to total assets. It is used to measure the earning ability of enterprises.

Liquidity ratio (Lr) : The ratio of a company's current assets to its current liabilities.

Capital intensity (K) : the logarithm of the ratio of the total fixed assets of an enterprise to the number of employees of an enterprise.

Corporate profitability (Profit): the ratio of corporate operating Profit to total operating revenue.

Growth ability of the enterprise: (TobinQ) : (total capital stock -- B shares of foreign capital listed in China) * Current closing price of A shares + B shares of foreign capital listed in China * Current closing price of B shares * Ratio of the exchange rate on that day to total assets of the enterprise. Tobin's Q value can be used to reflect the growth prospects of enterprises.

Administrative cost per capita (M) : The logarithm of the ratio of administrative expenses to the number of employees, reflecting the degree of specialization of internal management.

The average overseas investment of enterprises in the table is 0.4560. It can be seen that more than 40 percent of enterprises in the sample have made overseas direct investment. Meanwhile, the average debt-to-equity ratio is 0.9441, and the debt financing ratio is less important than equity financing. The minimum value of the debt-to-equity ratio is -12.6187, which is negative because a listed enterprise

in the sample has a negative capital reserve due to internal accounting treatment reasons. This negative reserve results in negative equity financing, leading to a negative debt-to-equity ratio

4.2. Empirical regression

Before regression, in order to test whether there is serious collinearity among variables, correlation test and VIF test are carried out for main variables. Usually, collinearity may occur when the correlation coefficient between variables exceeds 0.8. It can be seen from the table that the maximum correlation coefficient between variables is 0.4529, and the maximum VIF is 1.56, which is less than 10.

4.2.1. Baseline regression

Probit model was used to regression the benchmark measurement equation (4.1).Column (1) only carries out regression on financing structure and overseas direct investment behavior, and the result shows that DEV is significantly positive at the 1% level, indicating that debt financing in financing structure is more favorable to OFDI of enterprises without considering other conditions of enterprises. However, no control variables are added to the model at this time, and Pseduo-R2 is only 0.0022. The model is poorly fitted. Columns (2) to (4) are the regression results of financing structure and enterprises' overseas direct investment behavior after adding control variables and gradually fixing the year and regional effect. (4) is listed as the final baseline model and column (5) is its marginal impact. The results from columns (2) to (4) all show that the financing structure is significantly negatively correlated with whether an enterprise conducts overseas FDI at the 1% level, indicating that there is a reverse change relationship between the financing structure and the enterprise's overseas direct investment, that is, the more the enterprise's financing structure favors equity financing, the more conducive the occurrence of the enterprise's overseas investment behavior. The marginal effect estimates after mixed regression in column (5) shows that, under the condition that other conditions remain unchanged, if the financing structure index decreases by 1 unit, the possibility of overseas investment of enterprises will increase by 2.56%.

Hypothesis 1 can be verified: the external financing structure of an enterprise will affect the overseas direct investment of an enterprise, and the smaller the debt-equity ratio, the more favorable the occurrence of the overseas investment behavior of an enterprise. According to the regression results of control variables, there is a positive correlation between enterprise scale and overseas investment, indicating that the larger the enterprise scale, the stronger the enterprise's overseas investment behavior. There is a significant positive effect between the future growth ability of enterprises and overseas investment, indicating that the better the growth prospect of enterprises, the more help can be provided for the generation of overseas investment behavior of enterprises. The coefficient of the enterprise's internal management level is significantly positive at the level of 1%, indicating that the improvement of the enterprise's management level is conducive to the occurrence of the enterprise's overseas direct investment behavior, which is consistent with the expected symbol.

At the level of 1%, the return on assets of enterprises and FDI is significantly negative, which is opposite to the expected sign. The profitability of enterprises is negatively correlated with their overseas investment behavior at 1% level, which is contrary to the expected symbol. Under the condition of good domestic market profit, enterprises hope to continue to expand the domestic market, so they will ignore the expansion of the international market. The liquidity ratio coefficient of enterprises is small and insignificant, indicating that the short-term solvency of enterprises will not affect the OFDI of enterprises.

4.2.2. Robustness test

(1) Replace the model

There are many methods for robustness test, such as variable change and estimation model change.Column (1) is the regression result of mixed Logit model, and column (2) is the random effects regression result of panel Probit. The regression results all show that the influence of financing structure on enterprises' overseas direct investment is negative. However, the significance of regression results using panel Probit random effects model is only 10%, but the coefficient is still negative and significant, which can also ensure the robustness of the model. And the coefficient of control variable did not change greatly.

(2) Change variables

Secondly, the method of changing the explanatory variable or the explained variable is adopted. Firstly, the explanatory variable financing structure should be changed. Different literatures on the measurement of corporate financing structure put forward different measurement methods respectively. For reference to Pan Haiying (2019), the longer the experience time and cycle of overseas direct investment activities of enterprises, the higher the possibility of long-term borrowing, so the calculation formula of debt financing should be changed to long-term borrowing/total assets. So the calculation of the debt-to-equity ratio has changed.The regression coefficient of new debt-to-equity ratio (DEVN) is also significantly negative after changing the calculation method, and the regression coefficients of other control variables have not changed significantly, which means that the research hypothesis of this paper is still valid, the empirical results have not changed, and the robustness of the model is guaranteed.

In addition, by changing the measurement method of explained variables, enterprises' overseas direct investment can be studied from the perspective of scale. Although it is difficult to obtain the amount of enterprises' overseas direct investment, this paper uses the number of enterprises' overseas investment (OFDITIMES) as the proxy variable to reflect the scale of enterprises' overseas investment (Li Lei, 2015). Since the number of overseas direct investment is a non-negative integer, and the variance of OFDITIMES is much larger than the mean, negative binomial regression model is used for estimation. The influence of financing structure on the number of overseas investments is still negative. At the same time, explanatory variables, explained variables and models were changed.The results of the new regression show that the influence of financing structure on enterprises' overseas direct investment is still negative, indicating that a high proportion of equity financing in the financing structure is conducive to enterprises' overseas direct investment. In conclusion, the robustness of the model is verified.

(3) Instrumental variable regression

Some financial institutions will consider the fixed assets and cash flow level of enterprises to judge the repayment ability of enterprises when lending to enterprises. In addition, the overseas investment projects of enterprises have a long

cycle, so there may be a certain consideration period, and the current financing structure may affect the overseas direct investment of the next phase, with a certain lag. Therefore, referring to Hu Hengqiang (2020), the explanatory variable of the delayed phase is used as the instrumental variable for testing, so as to eliminate the deviation of the results brought by endogeneity.

4.3. Heterogeneity analysis

The heterogeneity of enterprises is studied, and the data samples are classified and returned. The conclusion is still valid, that is, the financing structure of the enterprise favors equity financing, and the overseas investment behavior is more likely to occur. As can be seen from the results, the effect of return on assets of state-owned enterprises on their OFDI is not obvious, meanwhile, the liquidity of state-owned enterprises has a significant positive impact on their choice of overseas direct investment. In contrast, the effect of liquidity of non-state-owned enterprises on OFDI is not strong, and state-owned enterprises themselves have strong capital strength. The speed of capital turnover will be faster than other private enterprises. The growth ability of state-owned enterprises has a less significant impact on overseas direct investment than non-state-owned enterprises, indicating that non-state-owned enterprises contain many small and medium-sized enterprises and innovative enterprises, which are in the growth stage and have strong growth ability and rapid growth, while state-owned enterprises have been in a stable stage and will have less growth space in the future. So the effect is not as strong as that of non-state-owned enterprises.

According to the statistical bulletin of FDI in 2020, the top three industries with the largest investment are manufacturing, wholesale and retail, leasing and business services, among which manufacturing enterprises account for more than 30%. Moreover, in the total sample studied in this paper, manufacturing data exceeds 50%, so the research samples are classified into manufacturing and non-manufacturing industries. As can be seen from Table 4.7, for the manufacturing industry, the influence of financing structure on its overseas direct investment is positive but not significant. At present, commercial banks are continuously improving financial services for the manufacturing industry and providing medium - and long-term financing support. Manufacturing industry is mostly a real industry, so it can obtain more borrowing funds. The effect of more debt financing on FDI is not obvious, which indicates that financing is not the main problem among the factors affecting FDI of manufacturing enterprises. However, for non-manufacturing enterprises, the conclusion that financing structure will negatively affect their overseas direct investment is still valid. Liquidity in manufacturing is 5 per cent

4.4. Empirical analysis of the influence of financing structure on the transmission mechanism of enterprises' overseas direct investment

4.4.1. Innovation input transmission mechanism

In order to verify the influence mechanism and effect of corporate financing structure on FDI behavior through innovation and R&D intensity, a mediation effect model is established by referring to the research ideas of Wen Zhonglin et al. (2004).

When α1 in model (4.3) and α2 in model (4.4) pass the significance test, When α1 in model (4.4) and α1 in model (4.2) are significant, it indicates that the mediation effect exists and is significant.

The regression coefficient is significantly negative at the level of 1%, which is consistent with the above results, indicating that the corporate financing structure is more favorable to equity financing to promote enterprises to make overseas direct investment. The regression coefficient is significantly negative at 1% level, indicating that corporate financing structure has a negative impact on corporate innovation R&D input, that is, the more the financing structure favors equity financing, the more it can promote corporate innovation R&D. It can be concluded from the results that the innovation research and development of enterprises is significantly positive at the 1% level, indicating that enterprise innovation can promote the overseas direct investment of enterprises. The debt-equity ratio of financing structure is significantly negative at the level of 1%, and the regression coefficient is numerically smaller than the regression coefficient when no intermediary variable is added. Each coefficient in the regression result is consistent with the coefficient result when the expected intermediary effect is established, which indicates that innovation research and development plays an intermediary role between corporate financing structure and FDI. It also means that the smaller the debt-equity ratio of the corporate financing structure is, the equity financing will be favored, which will promote enterprise innovation and research and development, so as to promote enterprises to make more overseas direct investment. In other words, hypothesis 2 is verified.

4.4.2. Productivity transmission mechanism

TFP is the productivity of enterprises.Column (1) in the table corresponds to model (4.5), which is also the benchmark regression model of this paper. The impact of financing structure on overseas direct investment of enterprises is significantly negative at the level of 1%. Column (2) corresponds to model (4.6), which is the regression result between enterprise productivity and financing structure. The results show that the impact of financing structure on enterprise productivity is also significantly negative at the level of 5%, which indicates that a high proportion of equity financing in enterprise financing structure is conducive to the improvement of enterprise productivity. (3) is listed as the regression result of model (4.7). After adding enterprise productivity and financing structure, it shows that the influence of enterprise financing structure on OFDI has not changed, and the effect of enterprise productivity on FDI is significantly positive at 1% level. It indicates that enterprise productivity can promote enterprise OFDI. To sum up, each coefficient in the regression results is consistent with the coefficient results when the expected mediation effect is established, indicating that the financing structure affects enterprises' overseas direct investment

The change of financing structure will affect the change of enterprise productivity, while the productivity will also affect the overseas direct investment of enterprises. Specifically, the financing structure favors equity financing, which will promote the increase of enterprise productivity. The stronger enterprise productivity is good news for its OFDI, which will promote the increase of enterprise overseas investment. Based on this hypothesis 3 is verified.

5. Conclusions, Discussions, And Recommendations

5.1. Conclusion

This research uses the data of China's A-share listed companies from 2000 to 2020 to construct corporate financing structure indicators, and analyzes the influence of corporate financing structure on their overseas direct investment behavior and its influence mechanism. Through empirical regression of data, this paper mainly draws the following conclusions:

First, the financing structure will have a significant negative impact on enterprises' overseas direct investment.

Secondly, through the intermediary effect model, it is found that the influence of financing structure on enterprises' overseas direct investment can be achieved through two channels: innovation research and development and productivity.

Thirdly, this paper analyzes the influence of financing structure on the overseas direct investment of heterogeneous enterprises, and finds that the conclusion is still valid in the case of state-owned enterprises or non-state-owned enterprises and regional differences.

5.2. Discussion

5.2.1. Proof of hypothesis 1:

According to the benchmark regression conducted in Chapter 4, we find that hypothesis 1 can be verified: the external financing structure of an enterprise will affect the overseas direct investment of an enterprise, and the smaller the debt-equity ratio, the more favorable the occurrence of the overseas investment behavior of an enterprise.

5.2.2. Proof of hypothesis 2:

Model 4.2-4.4 was established for regression, and the intermediary effect test was conducted on the relationship between overseas investment, innovation research and development and corporate financing. The test results are shown in the table.

In other words, hypothesis 2 is verified.

5.2.3. Proof of hypothesis 3:

We established models 4.5-4.7 to test the impact of productivity on the relationship between financing institutions and enterprises' overseas direct investment through the intermediary effect.

Based on this hypothesis 3 is verified.

5.3. Recommendations

5.3.1. Practical Recommendation

Based on the above conclusions, the practical recommendations of this paper are as follows:

First, accelerate the reform of corporate financing structure and increase equity financing.

Second, strengthen the strength of enterprise development, increase the cost of enterprise talent management.

Third, encourage enterprises to innovate actively and improve production efficiency.

Fourth, the government has created a favorable financial environment for enterprises to "go global" and improved financial policy support for outbound investment.

Fifth, the government should improve diversified financing platforms to reduce the financing pressure on enterprises.

5.3.2. Future Research Recommendation

Based on the above conclusions, the future research recommendations of this paper are as follows:

First, the potential future research direction could be to investigate the impact of specific types of financing sources on enterprises' overseas direct investment.

Second, future research could be to explore the specific mechanisms and factors that mediate the relationship between equity financing, innovation input, productivity, and overseas direct investment in enterprises.

Third, future research could be to investigate the impact of financing structure on the overseas direct investment of specific industries or sectors other than manufacturing.

References

[1] Al-Thaqeb, S. A., Algharabali, B. G., & Alabdulghafour, K. T. (2022). The pandemic and economic policy uncertainty. International Journal of Finance & Economics, 27(3), 2784–2794. http://doi: 10.1002/ijfe.2298.

[2] Bakhtiari, S., Breunig, R., Magnani, L., & Zhang, J. (2020). Financial constraints and small and medium enterprises: A review. Economic Record, 96(315), 506–523.

[3] Cantwell, J. A., Tolentino, P. E. E. (1987). Technological accumulation and third world multinationals. Paper presented at the annual meeting of the European International Business Association, Antwerp, December.

[4] Dunning, J. H. (1981). Explaining the international direct investment position of countries: Towards a dynamic or developmental approach. Weltwirtschaftliches Archiv, 119, 30–64.

[5] Geis, G. (2007). Business outsourcing and the agency cost problem. Notre Dame Law Review, 82(3), 955–1003.

[6] Jensen, M., Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs and capital structure. Journal of Financial Economics, 3, 305–360.

[7] Lall, S. (1983). Multinationals from India. In S. Lall (ed). The New Multinationals (pp. 21-87). Chichester: John Wiley & Sons.

[8] Modigliani, F., Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. American Economic Review 48, 261–297.

[9] Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13, 187–221.

[10] Ross, S. (1977). The determination of financial structure: The incentive signalling Approach. Bell Journal of Economics, 8, 23–40.

[11] Yao, L., & Yang, X. (2022). Can digital finance boost SME innovation by easing financing constraints? Evidence from Chinese GEM-listed companies. PLoS ONE, 17, e0264647. https://doi.org/10.1371/journal.pone.0264647