ISSN: 2688-9323

Spatial and Temporal Distribution Characteristics and Influencing Factors of Overseas Value of Chinese MNCs

Qingqing Li

School of International Economics and Trade, Anhui University of Finance and Economics, Bengbu, Anhui, 233030, China

Abstract

Based on the perspective of global value chain, the AMNE database developed by OECD is used to measure the sales value of Chinese MNCs in 58 economies to measure the overseas value of Chinese MNCs and to study the factors influencing their spatial and temporal distribution characteristics. The results show that: ① from the temporal characteristics, the total value of Chinese MNCs is growing rapidly, and in 2007, it overtook Japan to become the second largest country in terms of total value of MNCs; ② from the spatial pattern, the overseas value of Chinese MNCs is mainly concentrated in Asia, followed by Europe and the United States, and the country is mainly concentrated in Japan, the United States, South Korea, Australia, France, Russia and two other countries, Hong Kong, China and Taiwan. The analysis of the influencing factors found that the level of economic development of the host country, the level of urbanization, the freedom of business, the level of corruption in the host country, the level of science and technology, as well as the distance from China, direct investment from China, etc. have a significant impact on Chinese multinational companies. Finally, policy suggestions are made for the development of Chinese MNCs in response to the findings of the article.

Keywords

Multinational Corporations; Overseas Value; Global Value Chains; AMNE Database.

1. Introduction

In the 14th Five-Year Plan, a high level of opening up to the outside world is proposed, especially in the context of the double cycle, multinational companies, as the main carrier of the international cycle, are the basic force for China to achieve a high level of opening up to the outside world. According to the data of AMNE database developed by the Organization for Economic Cooperation and Development, from 2005 to 2016, the total sales volume and overseas sales value of Chinese MNCs have made a huge leap from lagging behind to second in the world, and MNCs play an important role in Chinas foreign trade and investment.

Currently, studies on MNCs focus on the following aspects: first, discussing the investment and trade behaviors affecting MNCs from a macro perspective, such as cultural distance (Wang Jinmeng et al., 2019), institutional distance (Chen Huaichao et al., 2014; Chen Huaichao and Fan Jianhong, 2014), institutional quality (Zhou Jieqi and Xia Nanxin, 2021), host country market structure (Gao Zhen and Jiang Ruochen, 2018), and new crown pneumonia epidemic shock (Hao, B.Y., 2021); second, analyze the investment and trade behaviors affecting multinational companies from a micro perspective, such as CEO social class (Du et al., 2020), corporate resources and transaction costs (Gao, Z.,Jiang, Rochen, 2018), and corporate value added trade (Ma, L.L. and Zhang, Y.N., 2019); third, study multinational from the perspective of value chain companies, such as global value chains reconfiguring global value chains (Shi, Dan and Yu, Jing, 2021), locational choice of value chains (Xu, Kangning,Chen, 2008; Chen, Jian, 2010)\ value chain efficiency (Ge, Chen, 2020). More relevant to this paper is the research on MNCs and value,

ISSN: 2688-9323

mainly from the perspectives of foreign exchange risk hedging and MNC value (Guo, Fei, 2012) and MNC value network formation (Zhou, Xuan and Cheng, Liru, 2004). However, few studies have been conducted on the overseas value of MNCs, let alone studying the spatio-temporal evolutionary distribution characteristics of MNCs overseas value.

Using the AMNE database developed by the Organization for Economic Cooperation and Development, this paper analyzes the evolutionary characteristics of the overseas value of Chinese MNCs in two dimensions, temporal and spatial, with respect to the share of sales of Chinese MNCs to 56 economies in the world as well as Hong Kong, China and Taiwan, China as a measure of the overseas value of Chinese MNCs, and examines the influence of Chinas outward direct investment, distance between the two countries, and bilateral GDP on the The factors influencing the overseas value of Chinese MNCs are examined from the perspective of Chinas foreign direct investment, distance between the two countries and bilateral GDP, etc., and policy suggestions are provided for understanding the distribution characteristics and influencing factors of overseas value of Chinese MNCs.

2. Research Data

The original data for this paper are obtained from the AMNE database developed by the OECD (Organization for Economic Cooperation and Development), a database that measures the contribution of multinational corporations and their foreign affiliates to global trade and production after being based on an improved input-output table. The database is built based on two main data sources: first, the World Input-Output Database (WIOD), which provides the overall structure of ICIO without distinguishing between domestic and foreign firms; and second, the OECDs (OECD) Multinational Corporations Database (Data source website: https://www.oecd.org/fr/sti/ind/amne.htm).

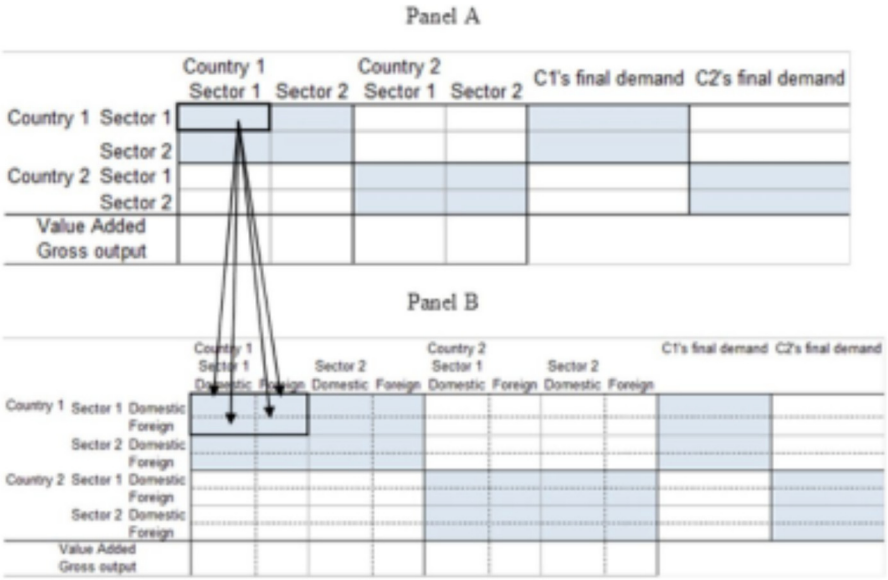

Figure 1. Schematic diagram of the splitting of the world input industry table

The AMNE database creates a world input-output matrix that includes countries and industries, and the development process can be divided into two steps as follows: in the first step, three balanced matrices of world output, value added and trade (exports and imports) are created based on firm ownership and, where possible, a distinction is made between multinationals and non-multinationals among domestic firms; then a split is made based on firm ownership and firms are divided into foreign-owned firms, domestic multinationals (i.e., domestic firms with

ISSN: 2688-9323

foreign affiliates), and other domestic firms (i.e., domestic firms without foreign affiliates); and bilateral input-output matrices are estimated for all countries and industries based on the country of firm ownership; in the second part, the world input-output table (WIOD) is split according to the one shown in Figure 1, and the inputs and outputs for each component for each country in panel 1A are split into four parts: the output value of domestic enterprises at home, the output value of foreign enterprises at home, the output value of domestic enterprises abroad, and the output value of foreign enterprises abroad, and finally form the world input-industry table with overseas values of multinational companies in group B of Figure 1. The resulting AMNE database is a matrix including the sales output value of cross-national firms in 59 countries (or regions) in the world and the rest of the world from 2005-2016. This paper retains data for China, allowing the use of overseas sales value, or overseas value data, of Chinese MNCs to 56 countries (or regions) in the world as well as Hong Kong, China and Taiwan, China. Using this data, this paper investigates the characteristics of the spatio-temporal distribution of overseas value of Chinese MNCs and its influencing factors.

3. Analysis of Overseas Value Distribution Characteristics of Chinese MNCs

3.1. Analysis of the Temporal Characteristics of the Development of Chinese Mncs

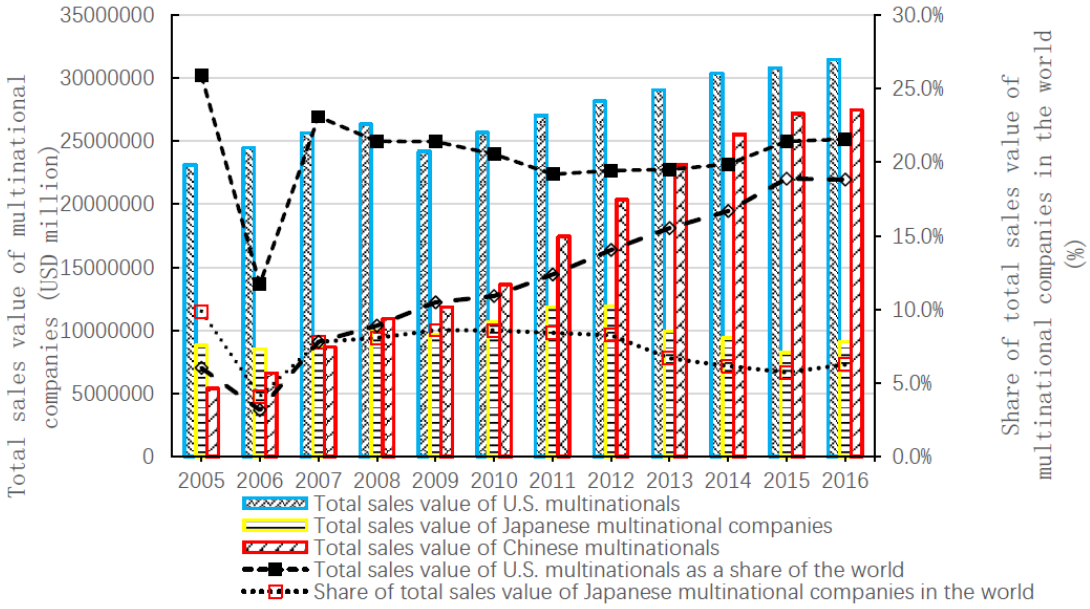

Figure 2. Comparison of the total sales value of multinational companies in China, Japan and the United States, 2005-2016

First of all, this paper takes 2005 as the benchmark and ranks the total sales value of global MNCs in that year, and finally selects the top three economies in the total sales value of global MNCs in that year, which are China, the United States and Japan. As can be seen from Figure 2, overall, in recent years, with the acceleration of the process of economic globalization, as the main driving force of globalization, multinational corporations have also been rapid development, but in 2006 showed greater fluctuations, because the United States in the spring of 2006, the United States "subprime mortgage crisis" began to gradually appear, and then in August 2007 In August 2007, the worlds major financial markets such as the United States, the European Union and Japan began to sweep, so that the operations of multinational companies were affected. After the financial crisis, the world economy gradually entered the recovery

ISSN: 2688-9323

stage, the multinational companies of various countries began to adjust, presenting a more intense competition; specifically, the total sales value of U.S. multinational companies all the way ahead, in 12 years of time, are ranked first in the world, the total sales value of U.S. multinational companies accounted for the proportion of the world basically maintained at more than 20%, that is, one fifth of the national multinational companies from the United States; in In 2005, the total sales value of Chinese MNCs lagged behind the total sales value of Japanese MNCs, but in 2007, it overtook Japan to become the second country in the global MNCs total sales value, until 2016, the total sales value of Chinese MNCs accounted for 19% of the world, while the proportion of Japanese MNCs in the world was only 6% at that time.

The following is a phased analysis of the trends in the total sales value of Chinese MNCs over a 12-year period.

3.1.1. Fluctuation Overtaking Period (before 2007)

In 2005, the total sales value of Chinas multinational corporations was less than 54 billion U.S. dollars, less than 2/3 of the total sales value of Japanese multinational corporations and 1/4 of U.S. multinational corporations; the total sales value of Chinese multinational corporations was less than 7% of the total sales value of global multinational corporations, the total sales value of Japanese multinational corporations accounted for nearly 10% of the global proportion, and the total sales value of U.S. multinational corporations accounted for 25.9% of the global proportion. In 2006, although the total sales value of Chinese multinational companies increased in value, but the growth value is not significant, its share in the global multinational companies fell 3 percentage points compared with 2005; the total sales value of U.S. multinational companies increased by $13 billion in value, but its share in the global multinational companies fell 14.2 percentage points compared with 2005; the sales value of Japanese multinational companies fell In 2007, the total sales value of Chinas multinational companies exceeded 86.6 billion U.S. do llars, approaching the total sales value of Japanese multinational companies, but still less than 1/3 of the total sales value of U.S. multinational companies; the total sales value of Chinas multinational companies accounted for 7.8% of the world, up from 3.2% in 2006, an increase of 4.6 percentage points. The total sales value of Chinese multinational companies rose from 3.2% in 2006 to 7.8% of the world, an increase of 4.6 percentage points, and the total sales value of Japanese multinational companies accounted for roughly the same proportion of the world, while the total sales value of U.S. multinational companies accounted for 11.4% of the world compared to the previous year, but did not reach the height of 2015. Since China joined the World Trade Organization in 2001, Chinese multinational companies have been growing rapidly, and the "subprime crisis" in the United States began to emerge in the spring of 2006 and started to sweep through the worlds major financial markets, such as the United States, the European Union and Japan, in August 2007. In order to cope with the negative impact of the subprime crisis, the U.S. adopted a loose monetary policy and a weak dollar exchange rate policy, which brought about a large depreciation of the U.S. dollar and brought huge exchange rate risks to multinational companies in other countries of the world, which was not conducive to their export trade.

3.1.2. Sustained Overtaking Period (2007-2015)

During the period 2007-2015, Chinese MNCs entered a rapid adjustment phase, which lasted until 2015. During this period, the total sales value of Chinese MNCs grew rapidly, from US$86.6 billion in 2007 to US$271.9 billion in 2015, achieving a quadrupling with an average annual growth rate of 26.8%. The total sales value of Chinese MNCs and their share in global sales value surpassed Japan in 2008, and their share in global MNCs rose from 7.8% to 18.9%, and have been in an upward stage; while the share of total sales value of Japanese MNCs in the world has been in a fluctuating stage during the same period, and the total sales value of Japanese MNCs increased by US$12.6 billion in 2007-2008, and their share in In 2007-2008, the total sales

ISSN: 2688-9323

value of Japanese multinational companies increased by 12.6 billion U.S. dollars, and the proportion of the total sales value of global multinational companies rose by only 0.2 percentage points; affected by the financial crisis, the total sales value of Japanese multinational companies suddenly decreased to 97.1 billion U.S. dollars in 2009; during 2009-2012, Japanese multinational companies reached a peak of 119.4 billion U.S. dollars in 2012 with an average annual growth rate of 7.6%, and then declined in the following three years, with the decline rate reached an average annual rate of 10%; the share of total sales value of Japanese MNCs in the world showed a trend of rising and then falling, rising from 7.85 in 2005 to 8.6% in 2009 and then declining to 5.7% in 2015. During the period 2007-2008, the average rate of increase in the total sales value of U.S. MNCs was 2.7%, and in 2009 there was a significant decrease in U.S. MNCs, down by $21.6 billion, after which the total sales value of U.S. MNCs maintained a slight increase during the period 2009-2015, slowly rising at an average annual rate of 4.6%, and its share of global The share of global MNCs rose, then slowly declined and then slowly increased from 2007 to 2015, but the change was not significant, and the share remained around 20%. While the total sales value of MNCs in major countries shows different degrees of decline, China keeps rising at a relatively fast rate of increase.

During this period, foreign multinational companies invested directly in China, bringing technology and management experience to China, allowing Chinese enterprises, especially multinational companies, to develop faster. Especially after the impact of the "subprime crisis", multinational companies from developed countries were greatly affected, while Chinas rapid economic recovery after the implementation of the 4 trillion dollar bailout plan has led to a rapid increase in the total sales value of Chinese multinational companies. In addition, China opened a new era of comprehensive deepening reform in 2013, introducing a series of innovative economic systems, especially the "Belt and Road" initiative, allowing Chinese multinational companies to participate in the construction and development of countries along the "Belt and Road", making The total sales value of multinational companies is growing rapidly at an average annual growth rate of 26.8%.

3.1.3. Adjustment Period (after 2015)

After 2015, the total amount of Chinese MNCs still showed a rapid increase, and the proportion of the total sales value of global MNCs also rose, but because global MNCs are also developing rapidly, making the proportion of Chinese MNCs in the world remain at 19%; in the same period, the total sales value of Japanese MNCs rose from $82.5 billion in 2015 to $91.2 billion in 2016, accounting for The share of global has increased to a certain extent; the total sales value of U.S. multinationals also grew in a stable trend, rising from $308.2 billion in 2015 to $314.8 billion in 2016, keeping the share of global at more than 22%.

After 2015, the growth rate of the total sales value of Chinese multinational companies slowed down, mainly because: first, Chinas demographic dividend gradually faded out, and the new foreign trade model is in the process of conversion. Chinas multinational companies mainly rely on the advantages of the demographic dividend into the global value chain, the demographic dividend disappears while the supply chain network to form a comprehensive advantage of the value chain has not yet been fully realized. Second, foreign demand is seriously insufficient. Before the economic crisis, people in developed economies generally like to overdraft consumption, early consumption, and rarely save all their income; and after the outbreak of the economic crisis, residents of developed economies postponed the consumption of non-essential goods, the corresponding demand structure in the proportion of tradable high degree of consumer durables fell, market demand this structural adjustment is not conducive to the growth of global sales.

ISSN: 2688-9323

3.2. Analysis of the Spatial Evolution Characteristics of Overseas Value Distribution of Chinese MNCs

3.2.1. Regional Distribution Characteristics of Overseas Value of Chinese MNCs

In order to analyze the characteristics of the overseas value of Chinese MNCs in terms of regional distribution, the data from 2005, 2008, 2010, 2012, 2013, 2014, 2015 and 2016 are selected for analysis in this paper (Table 1). Overall, the value of sales of Chinese MNCs in each continent shows a rising trend, but the share in in each continent only shows a rise in Asian countries.

Specifically, the overseas value of Chinese MNCs in Asia has shown an overall increase, and the share of overseas value to Asia in the total overseas value of Chinese MNCs rose from 30.75% in 2005 to 38.66% in 2012, and this share declined somewhat in 2014 and 2015, but increased again to about 38% in 2016. Due to geographical proximity and cultural identity, China and Asian countries have been maintaining better neighborly relations and the value of sales of Chinese MNCs in Asian countries has been growing faster.

Table 1. Continent-wise distribution of overseas values of Chinese MNCs

StateName	Category	2005	2008	2010	2012	2013	2014	2015	2016
Asia	Overseas Value	141270	304847	401923	604720	652833	686596	649434	674256
	Specific Gravity	30.75%	32.66%	35.70%	38.66%	37.86%	35.60%	36.21%	37.93%
Europe	Overseas Value	102573	226220	253141	332482	367611	409625	352755	349752
	Specific Gravity	22.32%	24.23%	22.48%	21.25%	21.32%	21.24%	19.67%	19.67%
Americas	Overseas Value	86228	147326	184252	246299	277170	337356	335063	319218
	Specific Gravity	18.77%	15.78%	16.36%	15.74%	16.07%	17.49%	18.68%	17.96%
Oceania	Overseas Value	35966	83611	103817	145551	158074	177863	146657	142709
	Specific Gravity	7.83%	8.96%	9.22%	9.30%	9.17%	9.22%	8.18%	8.03%
Africa	Overseas Value	2543	5023	6666	8573	9088	10002	9006	8000
	Specific Gravity	0.55%	0.54%	0.59%	0.55%	0.53%	0.52%	0.50%	0.45%
Other	Overseas Value	90907	166510	176143	226760	259464	306990	300710	283791
	Specific Gravity	19.78%	17.84%	15.64%	14.50%	15.05%	15.92%	16.77%	15.96%

Note: Other refers to countries other than the 58 countries counted and not classified in the five continents mentioned above.

In 12 years time, the overseas value of Chinese multinational companies in Europe shows a continuous rise, from 10 trillion dollars to 35 trillion dollars, with an annual growth rate of about 20%, the overseas value of Chinese multinational companies in Europe shows a decreasing trend, but the overall proportion are kept above 19%, compared with the value of Chinese multinational companies in Asia, only half of the latter, indicating that the Chinese multinational companies in Europe value is not the first; similarly, the value of Chinese multinationals in America (including North and South America) rose from $8.6 trillion to about $32 trillion, but the proportion showed a downward trend, and the overall proportion was also all above 15%; the value of Chinese multinationals in Oceania showed a trend of rising first and

ISSN: 2688-9323

then falling, and its overseas value to Oceania accounted for 7.83% of the global share from 2005 The value of Chinese multinational companies in Africa also showed an upward trend during 2005-2014, and then showed a downward trend in the next two years, with a small fluctuation of about 0.5%. Chinese multinational companies to the world excluding 58 countries (regions) in addition to other countries (regions) sales value also showed a growth rate, but the growth rate is relatively slow, so its proportion showed a downward trend, from about 20% to about 16%.

3.2.2. Characteristics of the Distribution of Countries Representing the Overseas Value of Chinese MNCs

In order to compare the changes of Chinese MNCs overseas value countries, this paper selects the top 10 countries of Chinese MNCs in overseas value ranking in 2005, 2010 and 2016, as shown in Table 2. overall, the top five countries are stable in Japan, the United States, South Korea, Hong Kong, China and Australia, of which Japan steadily ranks first, the value and proportion of Chinese MNCs in Japan are showing a rising trend, and its share also rose from 16.36% in 2005 to 22.51% in 2016; the overseas value of Chinese MNCs to the U.S. showed a rising trend, and its share showed first a decline and then an increase, but the U.S. still steadily ranked second; the rankings of South Korea, Hong Kong, China, and Australia alternately appeared in the third, fourth, and fifth positions, and the value of Chinese MNCs in South Korea, Hong Kong, China, and Australias value has been increasing, the proportion of South Korea and Hong Kong, China showed first decline and then rise, and fluctuations in the range of about one percentage point, the proportion in Australia rose from 7.83% in 2005 to 9.13% in 2010 and then fell to 7.9% in 2016; the ranking of Taiwan, China, France, Russia, Germany alternately appeared in the sixth, seventh, eighth, and The ninth position, the value of Chinese multinational companies in these four countries has been increasing, the proportion of China Taiwan and France showed an overall decreasing trend, China Taiwan from 7.35% in 2005 to 5.28% in 2016, France from 5.53% in 2005 to 3.16% in 2016, Russias share from 4.43% in 2005 to 5.05% in 2010 and then fell to 3.24% in 2016, Germanys share showed an upward trend from 3.76% in 2005 to 7.21% in 2016; the tenth ranked countrys share was around 2%, occupied by Finland in 2005, Brazil in 2010, and Singapore in 2016, respectively.

Table 2. Distribution of the top 10 countries in terms of overseas value of Chinese MNCs in 2005, 2010 and 2016

Ranking	2005			2010			2016		
	Country	Value	Specific Gravity	Country	Value	Specific Gravity	Country	Value	Specific Gravity
1	Japan	73361	16.36%	Japan	244869	21.97%	Japan	396635	22.51%
2	United States	71748	16.00%	United States	140707	12.63%	United States	264412	15.00%
3	Korea	47481	10.59%	Korea	103154	9.26%	Hong Kong, China	175326	9.95%
4	Hong Kong, China	46807	10.44%	Australia	101781	9.13%	Korea	174080	9.88%
5	Australia	35103	7.83%	Hong Kong, China	100512	9.02%	Australia	139185	7.90%
6	Taiwan, China	32941	7.35%	Germany	64516	5.79%	Germany	127134	7.21%
7	France	24789	5.53%	Taiwan, China	64021	5.75%	Taiwan, China	93083	5.28%
8	Russia	19865	4.43%	Russia	56299	5.05%	Russia	57101	3.24%
9	Germany	16835	3.76%	France	40523	3.64%	France	55739	3.16%
10	Finland	8797	1.96%	Brazil	30056	2.70%	Singapore	45329	2.57%

ISSN: 2688-9323

4. Factors Influencing the Overseas Value of Chinese MNCs

4.1. Selection of Influencing Factors

(1) The economic development level of the host country: Since the GDP per capita reflects the purchasing power of the residents of the host country, the higher the GDP per capita, the stronger the purchasing power of the residents, which affects the market-seeking motives of multinational companies for the host country, this paper adopts the natural logarithm of the real GDP per capita of the host country (lnpgdp).

(2) Geographical distance between China and the host country: distance is mainly used to measure the cost of distance that affects investment, and according to previous literature that uses constant geographical distance (Chen, Weiguang and Guo, Qing, 2016), this paper uses the geographical distance between China and the capital city of the host country to measure (lndis).

(3) The level of Chinese investment in the host country: since Chinese MNCs are one of the main subjects of outward investment, and the overseas value of MNCs is influenced by their investment in the host country (Qiao, Jing and Hu, Bing, 2014), this paper uses the natural logarithm measure of the stock of Chinese outward FDI in the host country (lnofdi) from the Statistical Bulletin of Chinese Outward FDI.

(4) Science and technology level of the host country: Since the science and technology level of the host country is an important factor in determining the overseas expansion of MNCs and reflects the strategic asset-seeking motive of MNCs, this paper adopts the share of exports of high-tech products of the host country in the total exports of all commodities measured by the World Bank Development Indicators Database (tec).

(5) The level of urbanization development of the host country: the level of urbanization development not only reflects the urban infrastructure of the host country, but also helps to expand domestic demand and promote consumption, which well reflects the investment environment of the host country and is expected to have a positive impact on the overseas value of Chinese MNCs, which is measured by the proportion of the urban population of the host country to the total population (urban) in this paper.

(6) Business freedom of the host country: Business freedom can effectively measure the ease of registration and start-up of enterprises in a country, and is expected to have a positive impact on the overseas value of Chinese MNCs.

(7) The degree of government corruption in the host country: corruption can effectively measure the degree of government corruption, which is related to the real interests of every citizen of the host country and export enterprises, and is expected to have a negative impact on the overseas value of Chinese MNCs. In this paper, we use the level of government corruption (cfre) in the Economic Freedom Index published by the Heritage Foundation (THF).

4.2. Model Construction

Based on the previous selection of influencing factors, this paper firstly takes the overseas value of Chinese MNCs as the explanatory variable and the model is designed as follows.

$$lnvalue_{it} = \alpha + \beta_1 lnpgdp_{it} + \beta_2 lndis_{it} + \beta_3 lnofdi_{it} + \beta_4 tec_{it} + \beta_5 urban_{it} + \beta_6 brfe_{it} + \beta_7 cfre_{it} + \mu_i + \vartheta_t + \varepsilon_{it} \quad (1)$$

Then the overseas value share of Chinese MNCs is used as the explanatory variable, and the specific model is.

$$valuep_{it} = \alpha + \beta_1 lnpgdp_{it} + \beta_2 lndis_{it} + \beta_3 lnofdi_{it} + \beta_4 tec_{it} + \beta_5 urban_{it} + \beta_6 brfe_{it} + \beta_7 cfre_{it} + \varepsilon_{it} \quad (2)$$

ISSN: 2688-9323

In the above two models, the$\alpha\alpha$ denote the constant terms, the$\beta\beta 1$ ...$\beta\beta 7$ are the coefficients to be estimated, the$\varepsilon\varepsilon iiii$ are the residual terms, i represents the host country, t represents the year, and$\mu\mu ii$ and $\vartheta\vartheta ii$ are country fixed effects and year fixed effects, respectively; lnvalue is the overseas value of Chinese MNCs, and the natural logarithm of overseas sales of Chinese MNCs in a country from 2005 to 2016 in the AMNE database is chosen to represent; valuep is the share of overseas value of Chinese MNCs, and the share of overseas sales of Chinese MNCs in a country from 2005 to 2016 in the AMNE database is chosen to represent; other variables are The share of overseas sales of Chinese MNCs in a certain country to the total overseas sales of Chinese MNCs is selected to represent; other variables are introduced in the previous section.

4.3. Analysis of Empirical Results

4.3.1. Analysis of the Factors Influencing the Overseas Value of Chinese Multinational Companies

Table 3 uses stepwise regression to examine the factors affecting the overseas value of Chinese MNCs. After controlling for year fixed and country fixed effects, the results do not change much after adding each influencing factor step by step, indicating that the correlation between each influencing factor and the overseas value of Chinese MNCs is relatively stable. Therefore, the following analysis is conducted with the estimated results in column (7).

First, the economic development level of the host country has a significant positive impact on the overseas value of Chinese MNCs, and when all other variables are controlled, for every 1% increase in the per capita GDP of the host country, the overseas value of Chinese MNCs will increase by 1.708%. It indicates that in the context of globalization, the location choice of overseas value of Chinese MNCs is mainly chosen in countries with higher level of economic development. Second, the geographical distance between the host country and China has a significant negative effect on the overseas value of Chinese MNCs with a coefficient of -0.695, which indicates that under the national level, the geographical distance between China and the host country inhibits the increase of the overseas value of Chinese MNCs, which is consistent with the conclusion of the gravitational model that as the bilateral geographical distance increases, the degree of information asymmetry, transaction costs and investment risks will also keep increase. Third, there is a significant positive relationship between the level of Chinese investment in the host country and the overseas value of Chinese MNCs, indicating that for every 1% increase in the level of Chinese investment in the host country, the value of China in the host country will increase by 0.643%. Fourth, there is a significant negative relationship between the level of science and technology in the host country and the overseas value of Chinese MNCs, with an impact coefficient of -0.029, indicating that the level of science and technology in the host country inhibits the increase in the overseas value of Chinese MNCs, which is because the higher the level of science and technology in the host country the higher the level of products produced, while the core competitiveness of high-tech products of Chinese MNCs is not yet strong, and facing such a host country market is not conducive to Its sales of goods. Fifth, the urbanization development level of the host country has a significant positive impact on the overseas value of Chinese multinational companies at the 10% level, with an impact coefficient of 0.015, that is, the urbanization development level of the host country is conducive to expanding domestic demand and promoting consumption, which well reflects the investment environment of the host country, and therefore has a positive impact on Chinese multinational companies. Sixth, the business freedom of the host country has a significant positive impact on the overseas value of Chinese MNCs with a coefficient of 0.039, thus it seems that the business freedom of the host country is important to the overseas value distribution of Chinese MNCs, i.e. Chinese MNCs are more inclined to sell to the host country where it is less difficult to register and start a business. Seventh, the degree of government corruption in the host country has a significant negative effect on the overseas value of Chinese MNCs with a

ISSN: 2688-9323

coefficient of -0.021, which is in line with the previous expectation, this is because the deepening of government corruption in the host country will harm the tangible interests of each citizen and exporting enterprises, which is not conducive to the import of overseas value of Chinese MNCs to their home countries.

Table 3. Analysis of factors influencing the overseas value of Chinese MNCs

	lnvalue						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
lnpgdp	1.956***	2.088***	1.892***	1.988***	1.882***	1.426***	1.708***
	(0.136)	(0.133)	(0.115)	(0.120)	(0.128)	(0.160)	(0.195)
lndis		-1.665***	-0.590***	-0.651***	-0.846***	-0.774***	-0.695***
		(0.254)	(0.228)	(0.228)	(0.241)	(0.238)	(0.239)
lnofdi			0.630***	0.647***	0.621***	0.635***	0.643***
			(0.039)	(0.039)	(0.040)	(0.040)	(0.040)
tec				-0.027***	-0.032***	-0.031***	-0.029***
				(0.010)	(0.010)	(0.010)	(0.010)
urban					0.020**	0.017**	0.015*
					(0.008)	(0.008)	(0.008)
bfre						0.036***	0.039***
						(0.008)	(0.008)
cfre							-0.021**
							(0.008)
_cons	-13.357***	-0.036	-13.499***	-13.721***	-12.103***	-10.738***	-13.069***
	(1.340)	(2.416)	(2.213)	(2.205)	(2.297)	(2.283)	(2.456)
N	696	696	696	696	696	696	696
R^2	0.231	0.276	0.476	0.481	0.486	0.501	0.506
National fixed	Control	Control	Control	Control	Control	Control	Control
Year Fixed	Control	Control	Control	Control	Control	Control	Control
F	208.421	131.914	206.872	158.178	128.610	113.868	99.269

Note: Standard errors in parentheses,* ,** ,*** denote the 10%, 5% and 1% statistical significance levels, respectively.

4.3.2. Analysis of Factors Influencing the Overseas Value Share of Chinese MNCs

Table 4 examines the factors influencing the value share of Chinese MNCs in host countries using stepwise regression after controlling for country fixed effects and year fixed effects. From the results, the estimation results of each model are more robust with the inclusion of the influencing factors, so the analysis focuses on the estimation results in column (7). The level of economic development of the host country, Chinese direct investment in the host country, the level of urbanization of the host country and the business freedom of the host country have a significant positive effect on the share of Chinese MNCs in the host country, indicating that the level of economic development of the host country, the higher the investment from China, and the higher the level of urbanization and and the level of business freedom, the higher the value share of Chinese MNCs in the host country is also said to be. The geographical distance from China and the level of corruption in the host country have a significant negative effect on the share of Chinese MNCs in the host country, in line with expectations. Only the estimated coefficient of the level of science and technology in the host country is not significant, indicating that the level of science and technology in the host country does not have a significant effect on the value share of Chinese MNCs in the host country.

ISSN: 2688-9323

Table 4. Analysis of factors influencing the overseas value share of Chinese MNCs

	lnvalue						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
lnpgdp	0.941***	1.145***	1.047***	1.091***	0.977***	0.753***	1.196***
	(0.135)	(0.126)	(0.123)	(0.129)	(0.136)	(0.173)	(0.210)
lndis		-2.579***	-1.993***	-2.020***	-2.244***	-2.209***	-2.090***
		(0.241)	(0.242)	(0.244)	(0.259)	(0.258)	(0.258)
lnofdi			0.377***	0.386***	0.352***	0.358***	0.370***
			(0.043)	(0.043)	(0.045)	(0.045)	(0.045)
tec				-0.012	-0.018	-0.018	-0.014
				(0.011)	(0.011)	(0.011)	(0.011)
urban					0.022**	0.021**	0.018**
					(0.009)	(0.009)	(0.009)
bfre						0.018**	0.023***
						(0.008)	(0.008)
cfre							-0.033***
							(0.009)
_cons	-7.554***	13.082***	5.310**	5.198**	7.054***	7.735***	4.111
	(1.332)	(2.292)	(2.355)	(2.356)	(2.462)	(2.477)	(2.646)
N	696	696	696	696	696	696	696
R^2	0.066	0.198	0.283	0.284	0.291	0.295	0.309
National fixed	Control	Control	Control	Control	Control	Control	Control
Year Fixed	Control	Control	Control	Control	Control	Control	Control
F	48.817	85.508	89.098	67.176	55.408	47.134	43.062

Note: Standard errors in parentheses,* ,** , and*** denote the 10%, 5%, and 1% statistical significance levels, respectively.

5. Conclusion and Discussion

This paper uses the characteristics of overseas value distribution of Chinese MNCs in time and space and its influencing factors from 2005-2016 based on the OECDs AMNE database. First, the characteristics of the overseas value distribution of Chinese MNCs are analyzed from two aspects of time and space, respectively, and the conclusions are as follows: in terms of time evolution, the total sales value of Chinese MNCs shows a rising trend, and it overtook Japan in 2007 to become the MNC with the second value in the world, but it is still lower than the value of US MNCs until 2016; in terms of space, the Chinese MNCs sales value in all continents shows a growing tr end, and Asia is the main region of Chinese MNCs overseas value distribution, with a proportion close to 40%, and Europe and America are important regions of Chinese MNCs overseas value, with a proportion close to 20% and 18%; in terms of country distribution, Japan is the largest country of Chinese MNCs overseas value, followed by the United States, South Korea, Hong Kong, China, Australia Taiwan, China, France, Russia and Germany alternately appear in the sixth to ninth place in the ranking. Second, the influencing factors are studied and found that: first, the level of economic development, the level of urbanization and business freedom of the host country, as well as Chinese direct investment in the host country have a significant positive effect on the value of Chinese sales and value share in the host country; second, the level of corruption in the host country and the geographical distance from China have a significant negative effect on the value of Chinese sales and value share in the host country; third, the The level of technological development in the host country has a significant

negative effect on the value of Chinas sales in the host country, but does not have a significant effect on the share of Chinas sales value in the host country.

In the increasingly fierce global competition, developed countries through multinational corporations to bypass a variety of competitive barriers to seek greater development. From the overseas business of Chinas multinational corporations to get faster development, through the study of its spatial and temporal distribution characteristics and influencing factors, this paper puts forward the following policy recommendations: First, China should continue to deepen its opening-up efforts, establish a multinational corporation foreign investment and trade service system, cultivate and support a number of key multinational corporations, so that they can become the main body of Chinas foreign economic activities; Second, continue to promote cooperation with cooperation with the "Belt and Road", so that Chinese multinational companies can expand their business to the "Belt and Road" countries through the "Belt and Road" initiative, in order to achieve a relatively balanced distribution of Chinese multinational companies in each continent; third, strengthen the Third, strengthen the cooperation between China and neighboring countries in Asia, especially through the Regional Comprehensive Economic Partnership Agreement (RCEP), to expand the business of Chinese multinational companies to 14 Asian countries; fourth, for multinational companies in making location choices, they need to consider the host countrys level of economic development, technology, urbanization, business freedom and corruption, as well as the geographical distance from China and Chinas investment in the host country. geographical distance and the level of Chinese investment in the host country, etc., and reasonably choose the host country suitable for their business development for investment and trade activities.

References

[1] Wang Jinmeng, Xu Yuhua, Shen Zhiyu. Cultural distance and intra-MNC trade[J]. Academic Research, 2019 (08):98-105+177-178.

[2] Chen Huaichao, Fan Jianhong, Niu Chonghuai. A study on the impact of institutional distance on the effect of knowledge transfer of Chinese multinational corporations - the moderating effect of international experience and social capital[J]. Scientology Research,2014,32(04):593-603.

[3] Chen, Huai-Chao, Fan, Jian-Hong. Institutional distance, Chinese multinational companies entry strategies and internationalization performance:based on organizational legitimacy perspective[J]. Nankai Economic Research,2014(02):99-117.

[4] Zhou Jieqi, Xia Nanxin. The impact of investment facilitation in "Belt and Road" countries on Chinas OFDI[J]. Asia-Pacific Economy, 2021,(05):82-94.

[5] Gao Zhen, Jiang Ruochen. Host country market structure and MNCs international market entry mode choice:A test of meta-analysis[J]. Industrial and Economic Review,2018,9(04):113-126.

[6] Hao, B.Y.. New crown pneumonia epidemic shock and global investment layout adjustment of multinational corporations--an analysis based on the superposition of political and economic motives[J]. Contemporary Economic Management,2021,43(02):17-23.

[7] Du Xiaojun, Shu Bo, Qi Chaoshun, Feng Fei. Does CEO social class influence MNCs OFDI political risk locational choice? --Based on Chinese MNC micro data[J]. Operations Research and Management, 2020, 29(03):217-228.

[8] Gao Zhen, Jiang Ruochen. Corporate resources, transaction costs and multinational corporations international market entry mode choice[J]. Finance and Trade Research,2018,29(08):49-61.

[9] Ma, Lili, Zhang, Yannan. Comparison of the status of regional services trade division in East Asia from the perspective of value added[J]. Asia-Pacific Economy,2019,(06):45-54+145.

[10] Shi, Dan, Yu, Jing. Global value chain reconfiguration and strategic differentiation of multinational corporations--an exploration based on the globalization turn[J]. Economic Management, 2021, 43 (02):5-22.

ISSN: 2688-9323

[11] Xu, Kang-Ning, Chen, Jian. Location choice of multinational corporations value chain and its determinants [J]. Economic Research,2008(03):138-149.

[12] Chen Jian. Research on global value chain, location distribution and its influencing factors of multinational corporations[J]. International Trade Issues,2010(12):102-107.

[13] Ge Chen, Ge Shunqi, Chen Jiangying. Epidemic events:From multinational corporations global value chain efficiency to national supply chain security[J]. International Economic Review,2020(04):67-83+6.

[14] Guo Fei. Foreign exchange risk hedging and firm value:An empirical study based on Chinese multinational corporations[J]. Economic Research,2012,47(09):18-31.

[15] Zhou Xuan, Cheng Liru. Research on the mechanism of value network formation of multinational corporations: an extension of value chain theory[J]. Economic Management,2004(22):12-17.

[16] Chen, Wei-Guang, Guo, Qing. Potential estimation and location selection of Chinas investment in countries along the Belt and Road[J]. Macroeconomic Research,2016(09):148-161.

[17] Qiao Jing, Hu Bing. Chinas outward foreign direct investment:Excessive or insuff icient[J]. Journal of Quantitative Economics and Technical Economics,2014,31(07):38-51.