Chinese outward direct investment: a study on macroeconomic determinants

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Abstract: On the basis of Dunning’s Investment Development Path (IDP) hypothesis, this paper tests the macroeconomic determinants of Chinese Offshore Direct Investment (ODI) from a home-country perspective. We review the recent firm- and country-level studies on determinants of Chinese ODI. We propose a model and test seven home-country macroeconomic variables as determinants of Chinese ODI. Our results reveal that the macroeconomic variables such as interest rate, exchange rate, import and foreign reserve are important determinants of Chinese outward Foreign Direct Investment (FDI).

Keywords: business; emerging markets; ODI; offshore direct investment; China; FDI; foreign direct investment; Chinese ODI; macroeconomic determinants; empirical analysis.


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1 **Introduction**

Owing to the ‘Open Door’ policies of the late 1970s and the accession to the World Trade Organization (WTO) in 2001, China became the ‘world factory’, with huge trade surplus and ranked third in total trade volume globally. Under the policies of an opening market and a competitive low labour cost, FDI rushed into the Chinese market, which is one of the factors that accelerated the booming Chinese export-led economy. Compared with FDI inflows, Chinese ODI is quite small. According to the United Nations statistics, China’s FDI inflow and outflow ratio was 6.4 to 1 in 2005 (Cheung and Qian, 2008). In 2008, China had $1.9 trillion in foreign currency reserves, ranking number one in the world. This provides new waves of ODI – the financial sources for Chinese State-Owned Enterprises (SOEs). As a result, the Chinese outflow of FDI has shown steady growth in recent years. Chinese Multinational Cooperations (MNCs) such as PetroChina, Huawei, Lenovo and Haier became aggressive in global investments. In this paper, we attempt to analyse Chinese ODI from distinctive economic development of China. On the basis of Dunning’s IDP hypothesis, we test the macroeconomic determinants of Chinese ODI from a home-country perspective. We then review the recent firm- and country-level studies on determinants of Chinese ODI. We propose a model and test seven home-country macroeconomic variables as determinants of Chinese ODI and discuss the results. We conclude by recommending and commenting on future research.

2 **Literature review**

Chinese ODI has been analysed from various theoretical and empirical perspectives since the middle of the 1990s and in quite a number of studies (Zhan, 1995; Wang, 2002; Child and Rodrigues, 2005; Buckley et al., 2007; Alon and McIntyre, 2008). Generally, studies have concentrated on the regulatory framework and the influence of the government regarding ODI growth, sectoral patterns, geographical distribution, as well as on the investment motives of Chinese companies (e.g., Zhan, 1995; Wang, 2002; Taylor, 2002; Hong and Sun, 2004; Wu, 2005). Some other studies have applied an international management perspective and have focused on the internationalisation strategies of Chinese companies (e.g., Warner et al., 2004; Liu and Tian, 2008; Deng, 2009; Rui and Yip, 2008). An examination of a fair amount of the current literature indicates that a variety of explanatory variables have been addressed to account for the growing Chinese ODI and its global economic and political impact. Therefore, studies on Chinese ODI determinants can be categorised into two groups:
Firm-level explanatory variables, which belong to the specific ownership advantages of each firm. Such variables mainly refer to the organisation and management know-how the firm is able to apply to acquire, train, and coordinate researchers towards the development of methods, technologies, and products, which effectively form the basis of its ability to supply markets (Dunning, 1993). The host-country variables focus on the location advantages. Such attributes include market characteristics, endowments of natural resources and comparative advantages, etc. Home-country variables involve factors such as institutional environment, capital market imperfections, exchange rate and level of economic development. We will review the extant literature on Chinese ODI according to the above-mentioned two groups (Tables 1 and 2).

### Firm-level studies on Chinese ODI determinants

<table>
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<tbody>
<tr>
<td>Yu et al.</td>
<td>Two waves of questionnaire survey of 274 usable cases between 2003 and 2004</td>
<td>Technological capabilities</td>
<td>The effect of technological capabilities are contingent on the intensity of industry competition in the home country</td>
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<tr>
<td>Söderman et al. (2008)</td>
<td>Quantitative study based on responses given by 102 Chinese EMBA students currently working, largely as managers, in the Shanghai region</td>
<td>12 ‘key driving forces’ of Chinese OFDI which are get international experience, get access to internationally experienced management or human resources, explore own advantages on markets abroad, increase profits, improve customer service, increase sales volume, achieve international reputation and brand recognition, get government support and finance, improve own product development and innovation ratio, improve cost efficiency in production, increase technology content on own products and finally improve quality of products</td>
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<tr>
<td>Zhao and Wang</td>
<td>Empirical study based on the 2004 nationwide survey of Chinese private firms and official data from Chinese government</td>
<td>Governance advantage, inherited advantage, bank loan access, level of organisational slack and inward internationalisation</td>
<td>Governance advantage, inherited advantage, bank loan access, a low level of organisational slack and inward internationalisation are at work simultaneously driving the outward internationalisation of Chinese private firms</td>
</tr>
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### Descriptive study literature

<table>
<thead>
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<th>Researches</th>
<th>Main findings</th>
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<tr>
<td>Deng (2004)</td>
<td>By examining the unique features of Chinese OFDI, the author outlines five motives of Chinese OFDI, which are resource seeking, technology, market-seeking, diversification and strategic assets-seeking</td>
</tr>
<tr>
<td>Warner et al. (2004)</td>
<td>Learning and borrowing from the industrially advanced economies in order to build their own ‘infrastructure’ is a key driver of Chinese OFDI as a ‘late development country’</td>
</tr>
<tr>
<td>Child and Rodrigues (2005)</td>
<td>Chinese case conforms more closely to the latecomer perspective than to analyses derived from the exploitation of firm-specific advantages by already strong companies, and the government’s sponsorship and funding support are significant factors in Chinese firms’ OFDI decision</td>
</tr>
<tr>
<td>Deng (2009)</td>
<td>OFDI is a function of asset seeking activities through M&amp;A and Greenfield investments</td>
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2.1 Firm-level studies on Chinese ODI determinants

The mainstream perspective in FDI is developed by Dunning (1981, 2001) in which he draws together elements of previous theories to identify Ownership, Location and Internalisation (OLI) advantages that motivate ODI, assuming that firms conduct outward...
FDI on the basis of a definable competitive advantage to secure enough return to cover the additional costs and risks associated with operating abroad (Buckley and Ghauri, 1999; Caves, 1993). According to Dunning’s theory, known as the Eclectic Paradigm Theory, firms conducting outward FDI should possess an internally transferable ownership advantage, such as superior proprietary resources or managerial capabilities, to be applied in a foreign country (Barney, 1991). Former studies on firms in developed economies have examined many firm-specific factors, such as firm age (Autio et al., 2000), firm size (Akoorie and Enderwick, 1992; Chetty and Hamilton, 1993), firm capabilities (Autio et al., 2000; Zahra et al., 2000), financial and physical resources (Bloodgood et al., 1996; Westhead et al., 2001; Zucchella et al., 2007), firm location (Leonidou, 1998; Zhao and Zou, 2002), technological advantage (Chang and Grubb, 1992; Evangelista, 1994) and the nature of the products (Akoorie and Enderwick, 1992). However, literature from other perspectives suggests that firms also move across geographic boundaries for resource and knowledge acquisition as well as capability enhancement (Bartlett and Ghoshal, 1988; Madhok, 1997; Luo, 2000). Particularly with the rise of Asian multinationals, an asset-augmenting or asset-seeking perspective has been advocated to explain how these latecomers are employing international expansion as a way to seek resources and overcome their competitive disadvantages (Makino et al., 2002; Mathews, 2002, 2006; Child and Rodrigues, 2005). This view indicates that there may not be a direct relationship between firm-specific ownership advantages and the pursuit of FDI. Instead, firms from developing economies may engage in FDI for the purpose of enhancing their competitiveness rather than exploiting their existing set of advantages.

In relation to Chinese ODI, Child and Rodrigues (2005) argue that the Chinese case conforms more closely to the latecomer perspective than to the analyses derived from the exploitation of firm-specific advantages by firms in the developed economy. Voss et al. (2008) also indicate that Chinese firms internationalise when domestic institutions are sufficiently well developed and the institutional environment allows them to exploit their competitive advantages across borders but not when a firm perceives itself to be ready. From this point of view, some macro-level factors relating to the government, such as government support and government finance, appear to be variables more distinct to the Chinese case. For example, a favourable relationship with the government is highlighted in the overseas activities of most Chinese firms, such as Haier, Lenovo and TCL (Child and Rodrigues, 2005). The provision of an ‘acquisition fund’ and cheap loans from the State-owned banks influence the investment decision of Chinese firms and constitutes an invaluable source of competitive advantage from them (Child and Rodrigues, 2005). Furthermore, Zhao and Wang (2008) also found that firm-specific advantages, such as governance advantage and bank loan access, are at work, simultaneously driving the outward internationalisation of Chinese private firms. However, in a more recent empirical study, Söderman et al. (2008) identified 12 ‘key driving forces’ of Chinese ODI, and found that ‘improve quality of production’ and ‘improve customer service’ were of the most significant drivers, albeit ‘government support and finance’ became less important.
2.2 Macro-level studies on Chinese ODI determinants

Theory suggests that home-country market imperfections can exert a significant impact on the decisions of foreign investors (Dunning, 1988). Therefore, location advantages of an FDI host country account for determinants influencing investment in foreign countries, which offer superior market or production. However, Chinese government policy may have led to a distinctive pattern of Chinese ODI in terms of host country determinants. Unlike the industrialised economies, outward FDI by Chinese firms has been trigger primarily by ‘pull’ factors. In a non-empirical study based on host country characteristics, Deng (2004) categorised five investment motivations for Chinese firms to go overseas: seeking natural resources, technology, markets and strategic assets of the host country as well as diversification of investment.

Accordingly, the market characteristics, natural resource endowment and comparative advantage of host countries are considered as significant factors for Chinese ODI. First, for the market seeking FDI, host market characteristics are considered as a significant determinant. Numerous studies show that FDI flow and market size are positively associated, and this also applies to Chinese ODI. For example, it is found that a 1% rise in the host market size increases Chinese ODI by 0.35% (Buckley et al., 2007). Second, natural resource endowment of a host country is also a significant determinant of Chinese FDI, especially for the period following 1992 (Buckley et al., 2007). Third, as far as asset-seeking FDI is concerned, Deng (2007) found that a quest for strategic resources is the primary motivation behind Chinese firms’ investment activities in industrial countries. Buckley et al. (2007) indicated the asset-seeking variable (patent) is insignificant, which suggests that Chinese firms have not been motivated to acquire strategic intellectual capital assets over the period under the study. From an institutional perspective, the legislation and regulation of a host country have been taken into account as a determinant variable in explaining Chinese ODI (Child and Rodrigues, 2005). Furthermore, host country culture proximity is found to have a highly significant and positive effect on Chinese ODI (Buckley et al., 2007).

Given the fact that Chinese ODI is characterised by an active governmental involvement in business, both through ownership and regulation (Peng, 2001), most studies concerning the home-country variables of Chinese ODI adopted an institutional perspective, with a focus on exploring the role of Chinese government and the ODI activities of Chinese firms. Buckley et al. (2007) found that the policy liberalisation variable is positive and significant to Chinese ODI. Voss et al. (2008) develop an analytical frame based on the institutional change and test its effects on transaction costs and market imperfections. On the basis of non-empirical discussion, Voss et al. (2008) argue that the institutional environment within which outward investment from China occurs has undergone significant change over the last 30 years. These two studies support the argument that the qualitative changes in Chinese policy that took place in 1992 did make a significant step towards liberalisation in a number of ODI-related areas, and positively influenced the amount of Chinese ODI.

However, there are very few empirical papers on Chinese ODI based on the macroeconomic factors of home country, and most of these studies concentrate on the explanatory determinants of institutional perspective. Since studies on ODI positions of countries indicated that the mix of ownership, location and internationalisation advantages of a country’s firms differentiates along the country’s course of economic development (Dunning, 1993, pp.76–86), it is argued that ODI should be considered as a
function of home-country-specific characteristics, such as income, exchange rate, technology and interest rates (Kyrkilis and Pantelidis, 2003). Thus, it is necessary to explore the relationship between ODI and their home country’s economic development variables. More recently, a small number of empirical studies have sought to model and analyse features of Chinese ODI in this direction. For example, Liu et al. (2005) use Dunning’s IDP theory to analyse a narrow set of data on Chinese ODI published by MOFCOM, while Buckley et al. (2007) use project data collected by the State Administration of Foreign Exchange (SAFE).

However, such research is rare and the statistic should be updated. On the basis of Dunning’s IDP, we therefore propose a model and test the hypotheses from home-country macroeconomic variables to explain Chinese ODI. These variables include income, technology, interest rate, exchange rate, openness of the economy and foreign currency reserve. The data used covers the period from 1987 to 2006. Model and hypothesis are discussed in Section 3.

3 The model and hypothesis

3.1 Dependent variable

Annual FDI outflows from China during 1987–2006

3.2 Independent variables

3.2.1 Income

The crude relationship between ODI and Gross National Product (GNP) or GNP per capita can be criticised as mere common sense. The income of a country reflects its economic structure and competitive advantages. A growing share of the GNP is accounted for by manufacturing and services, the capital intensity of production increases, demand patterns move towards the consumption of differentiated products and markets grow. Numerous studies show that FDI flow and market size are associated positively (Buckley et al., 2007). When referring to the China case, the level of economic development, which is proxied by GNP per capita plus refinements, is still the main factor explaining China’s rate of ODI (Liu et al., 2005). On the basis of Dunning’s IDP theory, Dunning et al. (2001) present a modern refinement of the IDP hypothesis; involving types of product and industry – mainly measured by GNP per capita – they analyse the effect of inward FDI and ODI in four stages. In Kyrkilis and Pantelidis’ empirical study of macroeconomic determinants of ODI, they stated that the levels of income of a country are associated with outward FDI activity. In our research, we also choose the real GNP as the variable to reflect the income of the country. A higher-income level (GNP) is the base for a country to invest abroad. We therefore derive the first hypothesis:

Hypothesis 1: The higher the income level of China, the greater the outward FDI.

3.2.2 Technology

Technological capability is positively related with FDI and this has received theoretical and empirical support (Prugel, 1981; Grubaugh, 1987; Cantwell, 1981; Pearce, 1989;
Chinese outward direct investment

Under Dunning’s ownership competitive advantage theory, if technology is information-intensive in a country, the exploitation of technologically intermediate goods across national boundaries is internalised by firms via FDI. Owing to the dramatic development of the Chinese technology market, there is a reason that high-tech firms that already captured the domestic market want to exploit the market abroad. In addition, we can use the technology variable to test whether Chinese ODI is asset-seeking or not. It is expected that Chinese MNEs would direct such asset-seeking ODI towards economies with significant levels of human and intellectual capital, and in particular, the industrialised countries to help them strengthen their competitiveness elsewhere (Dunning, 1998; Dunning, 2006). On the basis of recent case studies, many Chinese companies merge and acquire international high-tech companies for internal technology upgrading, such as the Lenovo-IBM deal and the TCL-Thompson deal. Here, the number of patents issued in China annually is employed to evaluate the technological capability of Chinese firms. From this, we derive the second hypothesis:

Hypothesis 2: The number of patents issued annually in China represents the general technological inputs of Chinese firms and therefore is positively related to Chinese ODI.

3.2.3 Interest rate

Interest rate is a sensitive factor influencing the flow of capital. Capital abundance is associated with low interest rate, which in turn decreases the opportunity cost of capital domestically and makes investments abroad profitable (Clegg, 1987; Prugel, 1981; Grubaugh, 1987). The lower the cost of borrowing, the higher the leverage exposure a firm may consider as acceptable, and consequently the greater the investment rate the firm may pursue. If the same reason is applied to ODI, as the opportunity cost of capital becomes lower at home the equity or debt financing of a foreign investment becomes easier (Pantelidis and Kyrkilis, 2003). In general, marginal productivity of capital is associated with the level of interest rate, meaning that low interest rate declares low marginal productivity of capital, and vice versa (Pantelidis and Kyrkilis, 2005). The interest rate of the country is proposed as an approximation of the margin efficiency of capital. On the basis of the theories discussed earlier, interest rate denominates the evaluation of the cost of capital in the home country. If the interest rate in the home country decreases, the capital will be invested abroad to earn more profit, and the ODI will consequently increase. Here, we derive the third hypothesis:

Hypothesis 3: The lower the interest rate, the higher the ODI.

3.2.4 Exchange rate

In international trade, exchange rate is the most important financial tool to adjust import and export. On the other hand, exchange rate, which determines the value of the currency, becomes an important factor affecting ODI. Aliber (1970) argued that firms from countries with strong currencies are able to support financial investments more successfully than firms from countries with weak currencies. A low or undervalued exchange rate encourages export but discourages import and ODI (Kohlhagen, 1977; Stevens, 1993). The real effective exchange rate of the home country is the proposed approximation of the same currency’s external value. The appreciation
of the home-country currency reduces the capital requirement of foreign investments in home-country currency terms (Pantelidis and Kyrkilis, 2005). As the home-country exchange rate appreciates, more profitable opportunities for outward FDI will occur as foreign-currency-denominated assets become cheaper. It is possible that a rapid appreciation of the exchange rate, from a low or undervalued position, will more than proportionately increase outward FDI (Buckley et al., 2007). Furthermore, the appreciation of home-country currency will be a motive for the home country and companies to invest abroad with less transaction costs. However, the economic reality of the Chinese government’s regulation of foreign exchange meant that China should neither stay put with its existing currency regime nor opt for a freely floating RMB and thus completely open capital markets. Instead, China has undertaken a ‘two-step’ currency reform. In 1994, China reformed its double-track exchange rate system and introduced the unification of exchange rates. After the unification, China instituted a managed floating exchange rate regime based on market supply and demand. Before 1997, RMB exchange rate was stable with a slight rise. After China became a member of the WTO in 2001, innovating the exchange rate system and basing it on market supply and demand have been the most urgent tasks for the Chinese government. Looking back on the development of China’s economy over the last three decades, RMB is evolving as a high credit currency and a hard one at present. This stimulated the globalisation of Chinese companies. We therefore derive the fourth hypothesis:

Hypothesis 4: The lower the US Dollar exchange rate against RMB (e.g., RMB appreciates), the higher the Chinese ODI.

3.2.5 The openness of the economy

The liberalisation of a country’s international trade is expected to positively influence the outward FDI (Kyrkilis and Pantelidis, 2003). The more a country is open to foreign economic transactions, the easier for domestic firms to invest abroad. It is clear that the policies on international capital transfers are more likely to greatly influence patterns and trends in Chinese ODI (Buckley et al., 2007). Export and import are tightly connected with China’s government’s open policy, including FDI. Exporting has been a particular priority of government policy in China: foreign partners in JVs have been pressed to build commitments into their agreements to maximise exports and local sourcing (Buckley et al., 2007). These variables reflect the economic explanation for China’s ODI activity. We use export and import to present the degree of openness of Chinese economy. We can derive the fifth hypothesis as:

Hypothesis 5: Both annual export and import positively correlate to the outward FDI.

3.2.6 Foreign currency reserve

We know that foreign currency reserve is one of the most important evaluations for the comprehensive national strength. Evidence shows that Chinese companies are going global to invest in the next generation of global business. One key element of such steady growth comes from the Chinese government’s strong support of international relations, policy and financial loans based on a huge foreign currency reserve. Under the background of strong Chinese economy, high savings rates and abundant foreign reserve amounts motivate Chinese banks to encourage ODI of Chinese companies. There was
$19,056 trillion US dollars worth of foreign currency reserve in China at the end of 2008. Such a huge foreign reserve needs to be invested, and ODI is a logical choice for the Chinese government that owns most of the banks in China. Chinese banks thus form a conglomeration, supporting Chinese companies’ global outreach and expansion. In consideration of this special situation of China, we introduce this variable for analysis and also consider this variable to measure the degree of Chinese government intervention in Chinese ODI. In the empirical research carried out by Wu (2008), it was stated that the increase in the foreign currency reserve is the reason and determinant for the increase in China’s ODI. We therefore derive the sixth hypothesis as follows:

**Hypothesis 6:** Foreign currency reserve is positively related to Chinese ODI.

### 3.2.7 Methodology and data

We use the following model and conduct Partial Least Square (PLS) regression.

\[
\ln{\text{ODI}} = \alpha + \beta_1 \ln{\text{PATENTS}} + \beta_2 \ln{\text{GNP}} + \beta_3 \ln{\text{EXRATE}} \\
+ \beta_4 \ln{\text{EXPORTS}} + \beta_5 \ln{\text{IMPORTS}} + \beta_3 \ln{\text{INTERATE}} + \beta_7 \ln{\text{FR}}
\]

where, ODI = Outward FDI from China annually, PATENTS = the annual numbers of patents registered in China, GNP = Chinese annual GNP, EXRATE = US dollar annual exchange rate against RMB, EXPORTS = the annual export, IMPORTS = the annual import, INTERATE = Chinese annual interest rate, FR = Year-end foreign currency reserve in China.

We selected our data – following the period from 1987 to 2006 – from the annual statistical book and statistics data published by National Bureau of Statistics (NBS) of China. The figures of Chinese outward FDI between 1987 and 2001 came from the Chinese official data in Ministry of Commerce (MOFCOM), and the data from 2002 to 2006 came from NBS. The sources of interest rate and foreign currency reserve are from SAFE. The patents variable is collected from The Ministry of Science and Technology (MOST) of the People’s Republic of China. Exchange rate, annual GNP, export and import are collected from the source of NBS’s year-end statistical books.

### 4 Empirical results

Table 3 gives details on regression results. $R^2$-squared is generally used in explaining the variance in either FDI stock or inflows, which is accounted for by the explanatory variables. The values of the $R^2$-square and adjusted $R^2$-square of the model are 0.958 and 0.933, respectively, for this testing of Chinese ODI, suggesting that the overall explanatory power of the model is very strong. Despite shortcomings owing to the short span of available data, this pioneer study does present an initial insight into Chinese ODI determinants in terms of home-country macroeconomic variables. The regression results show that IMPORTS and Foreign Reserve are found to be positive and highly statistically significant at the 1% level. PATENTS and Exchange Rate (US dollar exchange rate against RMB) is negatively related and statistically significant at the 1% level and Interest Rate is found negative and significant at 5%. GNP and Export are found negatively related but not significant.
Liu et al. (2005) found that per-capita GDP, Exchange Rate and inward FDI together affect the magnitude of Chinese OFDI in the long run, and institutions, location and networks will have an indirect impact on OFDI through per-capita GDP. According to Dunning’s IDP hypothesis, GDP per capita is an important determinant of OFDI and high levels of OFDI are achieved by IDP stage 3. However, national GNP represents the national income level of a country and may not influence OFDI directly since the larger the national GNP, the greater the opportunity for firms serving domestic market and thus decrease their motive investing abroad. These related to the results found for the Exports variable in that motivation of Chinese firms to invest abroad is not positively related with export performance of the economy, but, on the contrary, replacing export to directly serving markets abroad. However, the imports variable is found to both positive and significantly related, thus indicating that China’s ODI is primarily resource seeking and that government support is the main characteristic for China’s ODI in recent years owing to this resource-seeking motive, especially for the SOEs, which are tightly controlled by the government. In the case of the PATENTS variable, it is found negative and significant (at 1%). This indicated that Chinese firms that have ownership advantage mainly focusing on serving the domestic market and the motives of those firms abroad are asset and technology seeking.

Table 3  Regression results

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>t</th>
<th>Lower bound</th>
<th>Upper bound</th>
<th>Correlations</th>
<th>Collinearity statistics</th>
</tr>
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<tbody>
<tr>
<td>(Constant)</td>
<td>3.852</td>
<td>18.292</td>
<td>65.928</td>
<td></td>
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<tr>
<td>LPATENTS</td>
<td>-0.715***</td>
<td>-2.736</td>
<td>-2.167</td>
<td>-0.246</td>
<td>0.748</td>
<td>-0.620</td>
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<tr>
<td>LGNP</td>
<td>-0.505</td>
<td>-1.203</td>
<td>-3.817</td>
<td>1.101</td>
<td>0.842</td>
<td>-0.328</td>
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<tr>
<td>LEXRATE</td>
<td>-1.012**</td>
<td>-3.263</td>
<td>-9.261</td>
<td>-1.845</td>
<td>0.413</td>
<td>-0.686</td>
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<tr>
<td>LEXPORTS</td>
<td>-1.630</td>
<td>-1.236</td>
<td>-8.245</td>
<td>2.277</td>
<td>0.846</td>
<td>-0.336</td>
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<tr>
<td>LIMPORTS</td>
<td>2.064***</td>
<td>2.305</td>
<td>0.221</td>
<td>7.857</td>
<td>0.862</td>
<td>0.554</td>
</tr>
<tr>
<td>LINTERATE</td>
<td>-0.331**</td>
<td>-2.073</td>
<td>-1.989</td>
<td>0.050</td>
<td>-0.873</td>
<td>-0.513</td>
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<tr>
<td>LFR</td>
<td>2.179***</td>
<td>2.211</td>
<td>0.030</td>
<td>4.131</td>
<td>0.756</td>
<td>0.538</td>
</tr>
</tbody>
</table>

*Significant at the 10% level.
**Significant at the 5% level.
***Significant at the 1% level.

Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R square</th>
<th>Adjusted R square</th>
<th>Std. error of the estimate</th>
<th>R Square change</th>
<th>F change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F change</th>
<th>Durbin-Watson</th>
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<tbody>
<tr>
<td>(constant)</td>
<td>0.958</td>
<td>0.933</td>
<td>0.441328897</td>
<td>0.958</td>
<td>38.815</td>
<td>7</td>
<td>12</td>
<td>0.000</td>
<td>2.257</td>
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</table>

Predictors: (constant), LFR, LINTERATE, LEXRATE, LPATENTS, LIMPORTS, LGNP, LEXPORTS.
Dependent variable: LOFDI.
In our research, interest rate is significant in determining China’s ODI (at 5%). In general, the interest rate can arouse the capital inflow and outflow internationally. However, in China’s capital market, there is a strict control over the flow of foreign currency capital to ensure the safety of the capital market. When referred to the outward direct investment, government interference plays an important role on the transaction. Our results showed that interest rate has a negative correlation with Chinese ODI. When referring to the outward investment, if the capital source comes from domestic borrowing, interest rate will be negative with the outward investment. If the capital source comes from outward borrowing, the result is opposite. The value of B is –0.331, which means the capital source of China’s ODI is domestic. The trillions of dollars worth of foreign currency reserve is the key point. Pantelidis and Kyrkilis (2003) stated that, in the case of Italy, the Netherlands and Korea, interest rate is significant according to the expected signs determinants for the outward FDI. Capital markets of these countries are more mature than that of China with less government interference. The correlation between the significant determinant extents of interest rate to ODI and the maturity or openness of the capital market is another issue dealt within our future research.

In our study, exchange rate is a significant determining (at 1%) factor for China’s ODI, and the value of B is –1.012, which is negative to China’s ODI. The result accords with Aliber’s capitalisation theory. Pantelidis and Kyrkilis (2005) pointed out that the statistical significance of the exchange rate variable implied that ODI offered an effective solution to the strong currency’s home country. Despite that the exchange rate is not based on market supply and demand completely, this factor still influences the import and export significantly. The appreciation of Chinese currency RMB decisively influences Chinese SOEs and private companies to invest abroad. The shift to a ‘exchange rate basket’ management system is more likely to lead to a gradual appreciation of the RMB in the long run, which will increase the purchasing power of the Chinese currency, making the acquisition of overseas assets more attractive to Chinese firms.

Foreign currency reserve is a significant determining factor for China’s ODI (at 1%). The value of B is 2.179, the highest among all the variables. It is relatively easy to explain this variable given the Chinese government’s ‘going global’ policy and the special status of SOEs. Looking back over the history of Chinese ODI, only state-owned and local-government-owned enterprises were allowed to invest overseas before 1985. Although private enterprises were permitted to apply for ODI projects, the Chinese government gave only SOEs strong support in international relations, policy and financial loans (such as the relaxation of foreign currency control in 2003 by the SAFE), direct and indirect subsidies and the offering of favourable financing in the form of credit lines, and low interest loans from state-owned financial institutions. Cheng and Ma (2007) argue that the bulk of China’s ODI comes from SOEs, in particular the large multinational companies that are administered directly by the Central Government’s ministries and agencies. These SOEs’ share of FDI outflows in 2003–2005 was 73.5%, 82.3% and 83.2%, respectively. Their shares of ODI stocks by the end of 2004 and 2005 were 85.5% and 83.7%, respectively. Deng (2004) observed that the Chinese government played a crucial role in shaping the structure of China’s approved outward investment. Child and Rodrigues (2005) found that the Chinese government gave encouragement and support to key firms to globalise within the rationales of their own needs and policies, particularly in the context of a dramatic increase in foreign currency reserve.
5 Conclusions

The ‘open door’ policy initiated in 1978 was a key defining event in contemporary Chinese economic history. The change in outward FDI policy accompanying economic reform programmes has greatly altered the economic scene and gradually positioned China as an important global investor among developing economies. The outward FDI activity in the 1980s was quite minimal. In 2002, the Chinese authorities pushed the ‘going global’ strategy to sustain the economic reform process. On 16 July 2004, the authorities made another change in their outward FDI policy: In addition to approving applications, they announced their roles in supervising and providing services. With these changes in the ‘going global’ strategy, Chinese enterprises became quite aggressive in the international capital market. Indeed, Chinese outward investment was brought under the spotlight following some recent attempts to secure natural resources in developing countries and large-scale acquisition activities in the USA (Cheung and Qian, 2008).

Chinese firms’ ODI activities have received relatively great attention, particularly in the resource-based industry, such as oil and gas. The existing literature generally analyses the background and motives for Chinese ODI with a focus on Chinese government initiative policies. Conventional wisdom suggests that there are three principal reasons for Chinese companies to expand abroad. One is to secure natural resources to meet China’s high demand for raw materials and fuel as illustrated by the global expansion of CNOOC or Sinopec. Second is to identify and secure foreign technology and know-how as illustrated by Haier and their use of overseas messaging centres and overseas design centres or Huawei’s globally dispersed research and development laboratories. Third is the desire to escape home market saturation and ruthless price wars as illustrated by Haier, Ningbo Bird, Galanz and Huawei.

Our paper reveals that the macroeconomic variables such as interest rate, exchange rate, import and foreign reserve are important determinants of Chinese outward FDI. Child and Rodrigues (2005) argue that the specific characteristics of the Chinese outward internationalisation process (mainly the active role of the government and its support to companies, and the Chinese culture) need to be analysed using a different perspective. Chinese government policies influenced some variables such as exchange rate, interest rate and the openness of the economy. First, the government has, to a great extent, played a crucial role in shaping the structure of China’s approved outward investment. Second, outward FDI by Chinese multinationals, in contrast, has been triggered primarily by ‘pull’ factors, such as the desire to secure supplies of key natural resources, raise foreign exchange income, circumvent host country trade barriers, penetrate new markets, acquire advanced technology and management expertise, and seek strategic assets. Third, in contrast to most other MNCs in the world, seeking efficiency in terms of cost minimisation is not a major motivation for Chinese companies to invest abroad.

The crucial role the Chinese government plays in outward FDI can largely be explained by the country’s current political and economic systems. According to a survey conducted by the Asia Pacific Foundation of Canada (2005), government policy was one of the most important driving forces underlying the existing Chinese outward FDI. The Chinese Communist Party and the state still play a central role in the country’s economy and exert a close control on Chinese companies and MNEs doing business in the country. Some state-dominated companies have been granted monopoly positions in China’s economy and have become very profitable. These companies are concentrated in energy, resources, infrastructure, telecommunications and finance industries.
The State-Owned Assets Supervision and Administration Commission’s goal is to better manage and promote companies in the ‘strategic and heavyweight’ industries. During the past three decades, there has been a dramatic change in China’s role in the global economy, including the evolution of Chinese businesses from isolation to internationalisation, and even global integration to a large extent. There have been major shifts in corporate strategy, technology management, and human resource and talent management practices, especially among a small set of globally competitive, leading edge Chinese firms.

References


**Bibliography**


