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The determinants of Chinese outward foreign direct investment

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Abstract
This study investigates the determinants of Chinese outward direct investment (ODI) and the extent to which three special explanations (capital market imperfections, special ownership advantages and institutional factors) need to be nested within the general theory of the multinational firm. We test our hypotheses using official Chinese ODI data collected between 1984 and 2001. We find Chinese ODI to be associated with high levels of political risk in, and cultural proximity to, host countries throughout, and with host market size and geographic proximity (1984–1991) and host natural resources endowments (1992–2001). We find strong support for the argument that aspects of the special theory help to explain the behaviour of Chinese multinational enterprises.
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Introduction

This paper investigates the determinants of foreign direct investment (FDI) by Chinese multinational enterprises (MNEs) over the period 1984 to 2001.[1] The process of China's deepening re-integration with the global economy began, in the modern era, with the 'Open Door' policies of the late 1970s, and accelerated with accession to the World Trade Organisation (WTO) in 2001. Studies of this process generally examine China in terms of its position in global trade flows (e.g., Lall and Albaladejo, 2004); its comparative advantage as a manufacturing location (e.g., Chen *et al.*, 2002; Rowen, 2003); and in the volume, distribution and impacts of *inbound* FDI (e.g., Buckley *et al.*, 2002; Buckley, 2004b).[2] In contrast, understanding of a further dimension to this process – namely, the rise in Chinese outward direct investment (ODI) – remains very incomplete. One reason is the paucity of sufficiently disaggregated data to permit formal analysis of the forces shaping Chinese ODI. The result has been a preponderance of descriptive research on FDI trends (e.g., Taylor, 2002; Deng, 2003, 2004; Wong and Chan, 2003; Buckley *et al.*, 2006) coupled with in-depth case studies on a small number of high-profile Chinese MNEs (e.g., Liu and Li, 2002; Warner *et al.*, 2004).

Using official data from one of the key agencies concerned with China's investment approval process, the State Administration for Foreign Exchange (SAFE), this exploratory study is, to our knowledge, one of the first to model formally the forces driving Chinese

ODI. Our focus is on FDI determinants and the extent to which established theoretical explanations of the MNE (much of which concentrates on industrialised country, and especially US, investors) can explain FDI from an emerging economy like China. China is a particularly good test case for the general theory of FDI as it presents many special conditions that are rarely encountered in a single country.

Several indicators point to a strengthening of China's role as an investor country in recent years. By 2004, China was the eighth most important FDI source among developing countries, behind economically more advanced economies such as Hong Kong SAR (Special Administrative Region), South Korea, Republic of China (Taiwan) and Singapore (UNCTAD, 2005a). A recent survey of national investment promotion agencies predicts that China will become a top four source country of FDI over the period 2005–2008 (UNCTAD, 2005b), with African and Asia-Pacific country agencies in particular highlighting the dominant role expected of China, placing it second only to South Africa and the USA in each region, respectively. There is every indication that China will contribute increasingly to global FDI flows over the coming years. These indicators highlight the timeliness of this study.

Chinese outward investors can be regarded as being state-owned in the period under study, since private firms were legally prohibited from investing abroad prior to 2003. Since 1979, when ODI was formally permitted under the 'Open Door' policies, the internationalisation of Chinese firms has been tightly controlled by national and provincial government, either directly, by administrative fiat, or indirectly, via economic policy and other measures designed to advance the economic development agenda (Buckley *et al*., 2006). Initially, ODI was permitted on a very selective basis. However, in recent years administrative controls have been relaxed, approval processes and procedures streamlined, and the ceiling raised on the amount of foreign exchange that can be committed to individual investment projects (Sauvant, 2005). The process of accelerated outward investment liberalisation and growth can be traced from Deng Xiaoping's tour of South China in 1992 through to the government-led 'go global' (*zou chu qu*) initiative, which was instigated in 1999. This initiative aims to promote the international competitiveness of Chinese firms by further reducing or eliminating foreign-exchange-related, fiscal and administrative obstacles to international investment (Sauvant, 2005). In order to properly understand Chinese ODI, it is therefore important that formal empirical analysis takes full account of this changing institutional context and the idiosyncratic response by Chinese firms that it might engender. In other words, it is necessary to understand the extent to which the investment location decisions of Chinese MNEs, when considered in aggregate, are explicable by received theory, or whether the context and institutional environment of the home country exerts a distinctive effect. Such distinctiveness might be a consequence of the continued pursuit of national economic imperatives, for instance, with state-owned enterprises (SOEs) employed as an instrument of policy.

The paper is organised as follows. First, we review the general theory of FDI and discuss the extent to which it holds for an emerging economy like China, where central planning has greatly influenced the development of the external sector. We do this by considering three potential arguments (namely capital market imperfections, special ownership advantages and institutional factors) for a special theory to be nested within the general theory. We then describe a number of economic and policy variables proposed in the literature to have a significant influence on (industrialised country) FDI flows, and hypothesise on their ability to explain Chinese ODI patterns. We go on to test the special theory in a model of Chinese ODI using official data on individual approved Chinese FDI projects. We find that Chinese ODI is indeed distinctive in certain respects that have implications for theory, particularly the finding for political risk, but that familiar explanations of FDI are relevant, too. We conclude by recommending and commenting on future research directions.

The general theory of FDI

The general principles of the theory of FDI are twofold (Buckley and Casson, 1976). They are that: (1) firms internalise missing or imperfect external markets until the costs of further internalisation outweigh the benefits; and (2) firms choose locations for their constituent activities that minimise the overall costs of their operations. Expansion by the internalisation of markets means that firms use FDI to replace imperfect external markets in intermediate products and knowledge (as exemplified by exporting and licensing) and appropriate the profits from so doing. In the case of emerging economy MNEs, there are likely to be particular imperfections in home country capital markets that

may require special applications of the theory, and this, as we shall see, is true of China.

The location aspect of the mainstream or general theory, as encapsulated in Dunning's eclectic paradigm, suggests three primary motivations (Dunning, 1977, 1993):

- foreign-market-seeking FDI;
- efficiency (cost reduction)-seeking FDI;
- resource-seeking FDI (including a subset that is known as strategic-asset-seeking FDI).

The general theory of FDI has been built largely on the experience of industrialised country investors. While in certain respects this can be readily applied to emerging economy investors, there are inevitably gaps. Here, we look critically at the applicability of the general theory. Market-seeking FDI will be undertaken by emerging economy firms for traditional trade supporting reasons – to access distribution networks, to facilitate the exports of domestic producers, and to enhance exports from the host country to other large and rapidly growing markets. Efficiency-seeking FDI will occur when outward investors seek lower-cost locations for operations, in particular in the search for lower-cost labour. Given China's comparatively low labour cost levels this motivation is unlikely, and is not explicitly considered here. Resource-seeking FDI from emerging economies occurs to acquire or secure the supply of raw materials and energy sources in short supply at home. This may well involve Chinese ODI in relatively high-income countries that have significant energy reserves and raw material deposits (e.g., Australia and Canada). It may also involve the search for specific assets such as R&D capacity and output, design facilities and brand names that are embedded in advanced country firms and which can usually be accessed only by takeover of these firms or subdivisions of them (Dunning, 2001).

Various studies also identify an incremental or stages process to firm internationalisation that is linked to geographic and psychic distance (e.g., Johanson and Vahlne, 1977), with firms beginning their international operations in locations geographically close to the home market and in (psychically close) countries where knowledge, relationships and experience have already been established through prior trade business and other interactions. Examples of such behaviour are to be found in work on MNEs from Hong Kong (Lau, 1992, 2003), South Korea (Erramilli *et al*., 1999), India and Argentina in the 1980s (Ferrantino, 1992; Pradhan, 2003), Brazil (Villela, 1983) and Malaysia (Zin, 1999).

A special theory for Chinese ODI?

The question then arises as to whether FDI from emerging economies and, specifically, from China requires a special theory nested within the general theory above. There are three potential arguments: capital market imperfections, the special ownership advantages of Chinese MNEs and institutional factors.

Capital market imperfections

Capital market imperfections in emerging economies such as China may require a special application of the general theory. Such imperfections may mean that capital is available at below-market rates for a considerable period of time, creating a semi-permanent disequilibrium in the capital market that (potential) outward investors can exploit. In this sense, market imperfections may be transformed into ownership advantages by emerging economy firms (Buckley, 2004a). This ability may arise from a number of particular and interrelated imperfections:

(1) state-owned (and state-associated) firms may have capital made available to them at below-market rates (e.g., in the form of soft budget constraints) (e.g., Lardy, 1998; Scott, 2002; Warner *et al*., 2004);
(2) inefficient banking systems may make soft loans to potential outward investors, either as policy or through inefficiency (e.g., Warner *et al*., 2004; Child and Rodrigues, 2005; Antkiewicz and Whalley, 2006);
(3) conglomerate firms may operate an inefficient internal capital market that effectively subsidises FDI (e.g., Liu, 2005 on the diversified Chinese conglomerate Haier); and
(4) family owned firms may have access to cheap capital from family members (e.g., Tsai, 2002; Child and Pleister, 2003; Erdener and Shapiro, 2005).

There are good grounds for believing that all four of these imperfections exist in China. State-sponsored soft budget constraints make acquisition by Chinese enterprises a 'normal' mode of entering and penetrating a host economy (Warner *et al*., 2004). Over-bidding by Chinese MNEs is attributed to the absence of private shareholders and sanguine views of the associated technical, commercial and political risks, to limited fear of failure, close government support and low cost of capital (Ma and

Andrews-Speed, 2006).[3] Indeed, the survival of inefficient Chinese firms in general is attributed to the pervasive nature of soft budget constraints promoted by local government and party officials, resulting in the inability of banks and other financial institutions to impose either restructuring or exit on firms (Lardy, 1998). The 'sizeable venture capital' afforded to SOE is exemplified by the State Council's provision to the China International Trust and Investment Corporation (CITIC) when it was instructed to explore overseas investment opportunities in priority resource sectors (Zhang, 2003). The State Council also directed the transfer of the China Investment and Trust Corporation for Foreign Economic Cooperation and Trade (FOTIC, previously the financial arm of MOFTEC) to the Sinochem Group, effectively giving it an 'internal bank' (Zhang, 2003), while the Beijing steel producer, Shougang Group, was granted the right to start and own a bank, virtually guaranteeing the lifting of a hard budget constraint (Steinfeld, 1998). The acquisition of IBM's personal computer business by Lenovo (concluded in 2005) was generally regarded to have been underwritten by the Chinese government, who at the time held a stake of 57% in the company (*Business Week*, 2004). From this discussion, it appears possible that capital market imperfections may account for the ease with which both natural-resource-seeking FDI (typically in energy and raw materials sectors) and strategic-asset-seeking FDI might be undertaken by Chinese MNEs.

Imperfections in the capital market would become evident if Chinese MNEs had a distinctive foreign investment strategy in terms of location, as exemplified by a perverse reaction to risk and return not predicted by studies on the FDI motivations of industrialised country firms. In the current study, we test for this by including political risk in our determinants of Chinese ODI after controlling for the risk premium, which is proxied by market size and market growth.

Ownership advantages of Chinese MNEs

There is an argument that emerging economy MNEs have developed ownership advantages that allow them to operate certain types of activity in foreign countries more effectively than local firms and industrialised country MNEs. These advantages may include flexibility (Wells, 1983), economising on the use of capital (or resources), benefits accruing from home country embeddedness (i.e., prior familiarity of operating within an emerging market context), and the ability to engage in beneficial relations with firms and other actors in order to provide access to resources controlled by others. The latter advantage, which some term a relational asset (Dunning, 2002; Erdener and Shapiro, 2005), may be revealed as networking skills and may be linked to the Chinese diaspora in the case of Chinese firms.[4] Where these conditions are relatively long-lasting then they provide the case for semi-permanent 'ownership advantages' of emerging economy MNEs – the third element of Dunning's eclectic theory after internalisation and location factors (Dunning, 1993). This argument is less easy to test using aggregate FDI data, however.

Extant theory asserts that the early investments of firms frequently occur in countries with similar cultural background to the home country (Johanson and Vahlne, 1977) or where relational assets in the form of ethnic or familial ties with a specific minority population in the host country can be exploited (Lecraw, 1977; Wells, 1983; Lau, 2003). Within such a network, market information about the most suitable and profitable investment opportunities can circulate with ease, and fruitful commercial relationships can be established that facilitate market entry and development. Investment and commercial risk can be reduced as a consequence (Lecraw, 1977; Zhan, 1995). The importance of networking skills as a special ownership advantage of Chinese firms would be evident if Chinese ODI was associated positively with host countries that are endowed with relevant location-specific relational advantages, such as the presence of an appreciable ethnic Chinese population.

Institutional factors influencing Chinese ODI

The institutional fabric of an emerging economy can determine the ability and will of domestic firms to invest abroad. A straightforward, consistent and liberal policy towards outward FDI will encourage it, while a discretionary and frequently adjusted policy may do the opposite. There is an emerging body of theoretical work that concerns the institution-based view of strategy, or institutional theory for short (North, 1990; Peng, 2002; Meyer and Nguyen, 2005; Wright *et al.*, 2005). This has the potential to help explain distinctiveness in the behaviour of outward-investing Chinese firms. The basic thrust of this contribution is that firms' strategy is shaped by the home institutional environment (more colloquially 'the rules of the game'), which is formally and informally enforced by government and its agents (Scott, 2002) and which bears upon the norms and cognitions that

influence investment, including foreign investment, behaviour. High levels of government support, typically in the form of privileged access to raw materials and other inputs, low-cost capital (discussed above), subsidies and other benefits help emerging country firms to offset ownership and location disadvantages abroad (Aggarwal and Agmon, 1990). On the other hand, such investors also often encounter highly bureaucratic and burdensome administrative FDI approval procedures as government, at various levels, seeks to influence the amount, direction and scope of outward capital flows. If this is combined with discriminatory policy tools against certain industries and ownership forms, flows of ODI can be distorted. In such instances, FDI via informal or illegal routes may occur (or indeed be tacitly encouraged).

Given the extent of state control of the Chinese economy (Scott, 2002), the institutional environment is likely to have had far-reaching and profound effects on the internationalisation decision of Chinese firms. Key periods in the evolution of China's FDI approval process are presented in Table 1. Because various agencies within the state administration have been required to approve each and every outward FDI project from China (predominantly through the control of foreign exchange), this evolution is likely to have influenced strongly the development, strength and orientation of Chinese MNEs. To illustrate, extant research portrays Chinese ODI of the 1980s and early 1990s as having been directed by government towards supporting the export function of state-owned manufacturers; towards providing stability to the supply of domestically scarce natural resources; and towards the acquisition of information and learning on how to operate at an international level (Ye, 1992; Zhan, 1995; Liu and Li, 2002). In particular, FDI in the energy and minerals sectors was encouraged to meet growing needs at home (Lawrence, 2002). In this sense, China has 'built' some of its MNEs, as did Singapore, South Korea and Malaysia (Heenan and Keegan, 1979; Yeung, 1998; Wang, 2002; Dicken, 2003). FDI, and especially natural resources-oriented FDI, was concentrated by value in the developed countries (Buckley *et al*., 2006) (see Table 2). There is some evidence that latterly Chinese MNEs have internationalised to gain better access to foreign proprietary technology, strategic assets and capabilities (brands, distribution channels, foreign capital markets and so forth), often by acquisition; to exploit new markets; and to diversify business activities in a manner that seeks to improve their international competitiveness (Taylor, 2002; Deng, 2003; Zhang, 2003, Buckley *et al*., 2006). This development, which has occurred in conjunction with increasing policy openness and liberalisation over the period under study (Sauvant, 2005), has seen Chinese ODI dispersed more widely, especially among the developing countries (see Table 2), with both defensive (import-substituting and quota-hopping) and offensive (developing new markets) market-seeking FDI increasingly undertaken (Buckley *et al*., 2006). This is in addition to the continuance of natural resources-oriented FDI, which now increasingly encompasses developing countries. The promotion of exports and export-oriented FDI also continues. For example, direct government support in the form of export tax rebates, foreign exchange assistance and financial support was introduced in 1999 to foster FDI in trade-related activities and to promote Chinese exports, especially in the textiles, machinery and electrical equipment sectors (Wong and Chan, 2003). The effect of home country institutions on the investment behaviour of Chinese MNEs would be evidenced by a correlation between a key policy change and a change in the amount or distribution of Chinese ODI, or both.

The determinants of Chinese ODI: hypotheses

We now review the determinants of FDI derived from theory and hypothesise on their ability to influence the distribution of Chinese ODI.

Market-seeking FDI

Host market characteristics, such as market size, are generally recognised as a significant determinant of FDI flows: as markets increase in size, so do opportunities for the efficient utilisation of resources and the exploitation of economies of scale and scope via FDI (UNCTAD, 1998). Numerous studies (surveyed by Chakrabarti, 2001) show that FDI flow and market size are associated positively. Recent work points to the rise of offensive market-seeking motives driving Chinese MNEs (Taylor, 2002; Zhang, 2003; Deng, 2004; Buckley *et al*., 2006) and posits that this activity may increasingly be directed towards large markets. Theory suggests that market-oriented, horizontal FDI will be associated positively with growth in demand. The market growth hypothesis holds that rapidly growing economies present more opportunities for generating profits than those that are

Table 1 Key stages in Chinese ODI policy development

1979–1985	*Stage 1: Cautious internationalisation* With the 'open-door' policy, Chinese ODI is identified by government as one means of opening and integrating China into the world economy. Chinese state-owned firms start to set up their first international operations. Only state-owned trading corporations under MOFERT (later MOFCOM or the Ministry of Commerce) and provincial and municipal 'economic and technological cooperation enterprises' under the State Economic and Trade Commission (now part of the National Development and Reform Commission [NDRC]) are allowed to invest abroad. Some 189 projects are approved, amounting to around US$197m in value.
1986–1991	*Stage 2: Government encouragement* The government liberalises restrictive policies and allows more enterprises to establish foreign affiliates, provided they have sufficient capital, technical and operational know-how and a suitable joint venture partner. Approval is granted to 891 projects, totalling some US$1.2bn.
1992–1998	*Stage 3: Expansion and regulation* Encouraged by domestic liberalisation, initiated by Deng Xiaoping's journey to the South and the incorporation of enterprise internationalisation into the national economic development policy, subnational-level authorities actively promote the international business activities of enterprises under their supervision, especially in Hong Kong to engage in real estate and stock market speculation. The Asian crisis in 1997 and the subsequent collapse of some enterprises slow down this development. Latterly, concerns about loss of control over state assets, capital flight and 'leakage' of foreign exchange lead to a tightening of approval procedures, notably for projects of US$1m or more. Individual ODI project activity declines, despite an increase of total ODI of US$1.2bn in value terms.
1999–2001	*Stage 4: Implementation of the 'go global' policy* Contradictory policies characterise this period. Further measures to control illicit capital transfers and to regularise ODI towards genuinely productive purposes are introduced. By contrast, ODI in specific industries is actively encouraged with export tax rebates, foreign exchange assistance and direct financial support, notably in trade-related activities that promoted Chinese exports of raw materials, parts and machinery and in light industry sectors like textiles, machinery and electrical equipment. In 2001 this encouragement is formalised in the 10th five-year plan which outlines the 'going global' or *zou chu qu* directive. Total approved ODI rises by US$1.8bn, with an average project value of US$2.6m.
Since 2001	*Stage 5: Post-WTO period (included here for completeness)* Heightened domestic competitive pressures, owing to the opening of once protected industries and markets to foreign and domestic competitors, forces some Chinese firms to seek new markets abroad. In the 11th five-year plan the Chinese government stresses again the importance of zou chu qu for Chinese firms and the Chinese economy. Although the approval system is decentralised and streamlined to become less burdensome, contradictory regulations still prevail. Direct, proactive support of ODI continues to be limited, aimed mainly at preventing illegal capital outflows and loss of control of state assets.

Sources: Yu *et al*. (2005), Zhang (2003), Wong and Chan (2003), Wu and Chen (2001), Guo (1984), Ye (1992), Ding (2000).

growing more slowly or not at all (Lim, 1983). We therefore derive the following three hypotheses:

Hypothesis 1a: Chinese ODI is associated positively with absolute host market size.

Hypothesis 1b: Chinese ODI is associated positively with host market size per capita.

Hypothesis 1c: Chinese ODI is associated positively with host market growth.

Natural resource endowment

The Chinese government has used ODI to ensure the supply of domestically scarce factor inputs as the Chinese economy has grown (Ye, 1992; Zhan, 1995). Key sectors include minerals, petroleum, timber, fishery and agricultural products (Cai, 1999; Wu and Sia, 2002). Purchases of stakes in Australian mineral and food companies by CITIC and the acquisition of Canada-based PetroKaz by China National Petroleum Corporation (CNPC) are examples (Wu and Sia, 2002). Internalisation theory asserts the importance of equity-based control in the exploitation of scarce natural resources, and so a positive association between the natural resources endowment of countries and Chinese ODI is expected (Buckley and Casson, 1976). Thus:

Hypothesis 2: Chinese ODI is associated positively with host country endowments of natural resources.

Table 2 Approved Chinese FDI outflows, by host region and economy, 1990–2003 (US$10,000 and %)

	Annual average of ODI stock (%)				
	1990–1992	*1993–1995*	*1996–1998*	*1999–2001*	*2002–2003*
Total Chinese ODI (US$ 10,000)	133,847.53	176,010.77	235,466.77	377,761.70	1,038,208.76
Percentage distribution by region:					
Developed countries	69.44	64.12	49.95	36.11	22.60
Western Europe	2.62	2.63	2.21	1.72	4.15
European Union (15 countries)	2.29	2.38	2.01	1.58	4.08
Other Western Europe (3 countries)	0.33	0.25	0.20	0.14	0.07
North America	41.59	39.86	31.25	23.67	12.82
Other developed countries	25.22	21.63	16.49	10.71	5.62
Developing countries	30.56	35.88	50.05	63.89	77.40
Africa	4.03	5.18	11.02	16.07	8.40
North Africa (6 countries)	0.20	0.19	0.76	1.13	0.85
Other Africa (46 countries)	3.83	4.99	10.27	14.93	7.55
Latin America and the Caribbean	4.87	4.96	10.04	13.83	7.13
South America (12 countries)	3.64	3.19	8.40	8.89	4.18
Other Latin America and Caribbean (18 countries)	1.23	1.78	1.64	4.94	2.95
Central and Eastern Europe (18 countries)	4.17	5.76	4.85	4.44	4.62
Asia	16.61	18.71	22.22	27.87	56.60
West Asia (Middle East) (12 countries)	1.09	1.17	0.98	1.61	1.46
Central Asia (8 countries)	0.09	0.26	0.49	1.50	0.91
South, East and SE Asia (20 countries)	15.42	17.28	20.74	24.75	54.22
The Pacific (9 countries)	0.88	1.27	1.92	1.69	0.67

Source: Calculated from MOFCOM Almanac of China's Foreign Relations and Trade (various years) and China Commerce Yearbook 2004 (2004).
Note: The total number of recipient countries per region is shown in the region heading. Regions are as per UNCTAD (2003).

Asset-seeking FDI

Chinese ODI has been directed to the acquisition of information and knowledge on how to operate internationally, especially in the 1980s (Ye, 1992; Zhan, 1995; Buckley *et al*., 2006). In recent years, an expressed goal of state-directed Chinese ODI has been to access advanced proprietary technology, immobile strategic assets (e.g., brands, local distribution networks) and other capabilities abroad (Taylor, 2002; Deng, 2003; Zhang, 2003; Warner *et al*., 2004), through both greenfield entry and acquisition. 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 to strengthen their competitiveness elsewhere (Dunning *et al*., 1998; Dunning, 2006). It is worth noting that many acquisitions by Chinese firms, especially in Europe and the USA, have involved a target company that was ailing or insolvent. Proprietary ownership advantage endowments can be proxied by the rate of patenting in the host country. Thus:

Hypothesis 3: Chinese ODI is associated positively with host country endowments of ownership advantages.

Political risk

Internalisation theory predicts that in countries experiencing high political risk, market-oriented firms will tend to substitute arm's length servicing modes (exporting or licensing) for directly owned local production, and that resource-oriented firms are discouraged from committing substantial sunk costs in the form of FDI projects (Buckley and Casson, 1981, 1999). Thus high political risk is generally associated with low values of FDI inflow, *ceteris paribus* (Chakrabarti, 2001). The use of a risk index on its own would beg the question of the return on investment. If higher risk host countries also offer higher returns, then FDI will still flow to them, and an increasing relationship between risk and FDI will be observed. In this study, the role of returns is approximated (as it is in many studies on country risk) by market-related variables, so we can argue that returns of a market-related nature have been controlled for. Similarly, the scope for returns on Chinese investment in natural resources (the most likely motive for investment in risky countries of Central Asia and Africa) is controlled for by the natural resources variable. Because the measure of political risk we use assigns higher values to greater political stability, the general theory of FDI would

predict a positive relationship between the dependent and independent variables. Thus:

Hypothesis 4: Chinese ODI is associated negatively with rising levels of host country political risk.

Cultural proximity

The Chinese diaspora is acknowledged to have contributed to the integration of China into the world economy since 1979, especially in positively influencing inbound FDI from Singapore, the Republic of China (Taiwan) and Hong Kong (Henley *et al*., 1999; Yeung, 1999; Sikorski and Menkhoff, 2000; Ng and Tuan, 2002).[5] Strong economic connections among overseas Chinese and the importance of *guanxi* (the ancient system of personal relationships and social connections based on mutual interest and benefit) in Chinese business dealings may also influence patterns of Chinese ODI (Luo, 1997; Standifird and Marshall, 2000; Tong, 2003). A number of scholars argue that ethnic and family *guanxi* networks constitute a firm-specific advantage for Chinese MNEs because these help to reduce the business risk and transaction costs (Sung, 1996; Braeutigam, 2003; Erdener and Shapiro, 2005) associated with the identification of business opportunities in certain foreign markets (Zhan, 1995). These networks may also compensate Chinese MNEs for their relatively late entry into international markets (Li, 2003).

This argument suggests that Chinese firms will invest in countries with a large resident population of ethnic Chinese. Such countries are mostly to be found in Asia, which accounts for some 88% of all ethnic Chinese living outside China. In 1990 there were about 37 million overseas Chinese, with the majority (66%) distributed more or less evenly among Indonesia, Thailand, Hong Kong SAR and Malaysia. A further 8% lived in North and South American countries, 2% in European countries and 1% each in Oceania and on the African continent (Poston *et al*., 1994). Thus:

Hypothesis 5: Chinese ODI is associated positively with the proportion of ethnic Chinese in the host population.

Policy liberalisation

From the discussion above, it is clear that policies on international capital transfers are likely to have greatly influenced patterns and trends in Chinese ODI. Although it is important for completeness that any formal model of Chinese ODI incorporates a policy dimension, lack of transparency in the application of regulations and incentive policies experienced by investors (Wong and Chan, 2003) makes this a difficult aspect to capture. Deng Xiaoping's South China Tour in 1992 was associated with significant domestic market liberalisation. In response to this, numerous subnational-level authorities allowed enterprises under their supervision to internationalise, especially towards Hong Kong SAR, in order to engage in real estate and stock market speculation (Wong and Chan, 2003). Therefore, to investigate the role of institutional liberalisation towards ODI, we introduce a time dummy for 1992. Thus:

Hypothesis 6: Liberalisation of Chinese FDI policy in 1992 increased Chinese ODI.

We control for a number of conventional variables from standard theory to specify correctly the estimated equation, and so to reveal the effects of the main variables, including those to test the special theory applied to Chinese ODI.

Exchange rate

A low or undervalued exchange rate encourages exports but discourages outward FDI (Kohlhagen, 1977; Logue and Willet, 1977; Stevens, 1993). 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. For this reason, the exchange rate is included as a control variable. An appreciation of the home country's currency *vis-à-vis* other countries should increase ODI into these countries as it is effectively a depreciation in the host country's currency (Scott-Green and Clegg, 1999). In the case of China, the yuan Renminbi (RMB) was *de facto* pegged to the US dollar at a constant nominal level over the period under study (Roberts and Tyers, 2003; Hall, 2004). However, the RMB peg against the US dollar allowed for revaluation of the yuan RMB against other currencies so that the real effective exchange rate of the yuan RMB appreciated by more than 20% between 1995 and 2002 (Hall, 2004). Thus:

Hypothesis 7: A relative depreciation of the host country's currency leads to an increase in Chinese ODI.

Host inflation rate

Volatile and unpredictable inflation rates in a host country discourage market-seeking FDI by creating uncertainty and by making long-term corporate planning problematic, especially in respect of price-setting and profit expectations. High rates of inflation may also lead to domestic currency devaluation, which in turn reduces the real value of earnings in local currency for market-seeking inward-investing firms. High inflation rates tend to check the export performance of domestic and foreign investors and thereby discourage export-oriented FDI by increasing the prices of locally sourced inputs, making it harder to maintain a cost advantage in third markets. We therefore expect a negative relationship between Chinese ODI and host country inflation. Thus:

Hypothesis 8: Chinese ODI is associated negatively with host country inflation rates.

Exports and imports

Exports from China proxy the intensity of trade relations between home and host country by capturing the market-seeking motive of Chinese firms. During the 1980s and early 1990s, much Chinese ODI took place to provide a local support function for domestic Chinese exporters and to help them increase their hard currency earnings (Wu and Sia, 2002). Typically, such investments were small scale, with local subsidiaries providing information, international trade, transportation and financial services to their Chinese principals and other Chinese firms (Ye, 1992; Zhan, 1995). In some cases, these were vanguard operations for later and more substantial investment. Thus:

Hypothesis 9: Chinese ODI is associated positively with Chinese exports to the host country.

Imports to a home country from a host country also capture the intensity of trade relations. Since they are an indication of the importance of the resources transferred we would expect home country firms to internalise these strategic flows using outward FDI as the key mechanism (Buckley and Casson, 1976). Thus:

Hypothesis 10: Chinese ODI is associated positively with Chinese imports from the host country.

Geographic distance from China

Internalisation theory predicts that market-seeking firms are more likely to serve geographically proximate countries through exports and more distant markets via FDI (Buckley and Casson, 1981). This suggests a substitution of FDI for other modes as distance increases. However, our dependent variable is in the form of the annual flow of Chinese FDI alone (i.e., not in the form of a ratio with exports). As we predict the flow of FDI to be greatest to nearby countries, so we would expect to capture a negative effect of distance on the flow of FDI (Loungani *et al.*, 2002). A physical distance variable is therefore needed to complement our cultural proximity variable, to isolate its effect. We incorporate distance as a control. Thus:

Hypothesis 11: Chinese ODI is associated negatively with geographic distance from China.

Openness to FDI

The more open a country is to international investment, the more attractive it is likely to be as a destination for FDI (Chakrabarti, 2001). We include openness to FDI in our investigation, as a control:

Hypothesis 12: Chinese ODI is associated positively with the degree of openness of the host economy to international investment.

Our hypotheses, their theoretical justification, the proxies we use and the expected signs are detailed in Table 3, together with our data sources. We expect the distinctive nature of the factors influencing Chinese ODI to be captured by the collective significance in the main variables that we identify in the table.

The model

Our discussion suggests the following log-linear model:

$$\begin{aligned} LFDI = \alpha &+ \beta_1 LGDP + \beta_2 LGDPP + \beta_3 LGGDP + \beta_4 LORE \\ &+ \beta_5 LPATENT + \beta_6 LPOLI + \beta_7 CP + \beta_8 TD92 \\ &+ \beta_9 LERATE + \beta_{10} LINF + \beta_{11} LEXP + \beta_{12} LIMP \\ &+ \beta_{13} LDIS + \beta_{14} LINFDI + \varepsilon_{it} \end{aligned} \tag{1}$$

The data are transformed into natural logarithms as we expect non-linearities in the relationships on the basis of theory and previous empirical work.

Table 3 The determinants of Chinese ODI

Hypotheses and number	*Proxy*	*Expected sign*	*Theoretical justification*	*Main or control variable*	*Data source*
FDI (dependent variable)	Annual outflow of Chinese FDI (see text)				State Administration for Foreign Exchange
Host market characteristics (I): absolute market size (H1a)	*LGDP*: Host country GDP	+	Market seeking	Main	World Bank Development Indicator (2005)
Host market characteristics (II): relative market size (H1b)	*LGDPP*: Host country GDP per capita	+	Market seeking	Alternative main (I)	World Bank Development Indicator (2005)
Host market characteristics (III): market growth (H1c)	*LGGDP*: Annual percentage increase in GDP	+	Market seeking	Alternative main (II)	World Bank Development Indicator (2005)
Natural resource endowment (H2)	*LORE*: the ratio of ore and metal exports to merchandise exports of host country	+	Resource seeking	Main	World Bank Development Indicator (2005)
Asset-seeking FDI (H3)	*LPATENT*: Total (resident plus non-resident) annual patent registrations in host country	+	Strategic asset seeking	Main	World Intellectual Property Organisation (2006)
Political risk (H4)	*LPOLI*: Host country's political risk rating (higher values indicate greater stability)	+	Transaction costs	Main	International Country Risk Guide (2005)
Cultural proximity to China (H5)	*CP*: =1 when percentage of ethnic Chinese in total population is >1%	+	Region-specific transaction costs	Main	Ohio University (2006); Ma (2003); Kent (2003);
Policy liberalisation (H6)	*TD*92: Influence of Deng's South China tour (1992)	+	Institutional factors	Main	United Nations Statistics Division (2006)
Exchange rate (H7)	*LERATE*: Host country official annual average exchange rate against RMB (fixed to dollar)	+	Domestic currency price of foreign assets	Control	World Bank Development Indicator (2005)
Host country inflation rate (H8)	*LINF*: Host country annual inflation rate	–	Macroeconomic conditions	Control	IMF: World Economic Outlook Database (2005)
Exports (H9)	*LEXP*: China's exports to the host country	+	Market seeking	Control	China Statistical Yearbook (2005)
Imports (H10)	*LIMP*: China's imports from the host country	+	Trade intensity	Control	China Statistical Yearbook (2005)
Geographic distance from China (H11)	*LDIS*: Geographic distance between host and home country (capital)	–	Spatial costs	Control	Calculated using www.geobytes.com
Openness to FDI (H12)	*LINFDI*: Ratio of inward FDI stock to host GDP	+	Investment policy	Control	UNCTAD FDI database (2006)

Note: all monetary values are in constant (2000) US$ prices.

Data and method

Our dependent variable is the total amount of foreign exchange approved by SAFE during the project investment process. This includes pre-approved re-invested earnings and intra-company loans, plus in-kind investment up to the total authorised value of a given project, in addition to equity capital.[6] Forty-nine countries are host to Chinese ODI in our data set, of which 22 are members of the Organisation for Economic Cooperation and Development (OECD) and 27 are not (see Appendix).

Two statistical models were used to estimate Eq. (1): pooled ordinary least squares (POLS) and the random effects (RE) generalised least squares

method. A fixed effects (FE) model cannot be used since Eq. (1) includes a time dummy variable. A Lagrangian multiplier (LM) test was conducted to identify whether POLS or RE furnished the better model. A value for the LM test that is significantly different from zero means that RE estimation is preferable to that of POLS.

To investigate heterogeneity within the data we employ a structural break framework. First, we investigate the impact of significant changes in the policy regime dating from 1992. These changes might influence the decision-making of investors across all the variables. Therefore we divide the period into two phases: 1984–1991 and 1992–2001. Second, and as our discussion above has indicated, China's preference to invest in developing countries may indicate a different model of investment behaviour arising from state policy. To investigate this possibility we draw a distinction between developed and developing hosts using their OECD membership status.

Results and discussion

In preliminary regressions, two of the three alternative measures of host market size (growth in GDP and GDP per capita) never attained significance and were therefore not included in the final specification, which is reported in Table 6. The absolute host market size variable is retained to capture the market-seeking motive (Hypothesis 1a) and to act as a control (for market returns) in the estimation of the relationship between Chinese ODI and host country risk. The empirical results obtained from the POLS and the RE equations are similar. However, the large and significant LM value indicates in favour of the RE and therefore only the results from RE are discussed. Tables 4 and 5 present the correlation matrix and variance inflation factor (VIF) test results, which indicate that there are no general problems with the data.

We first discuss the results of the RE model for the main variables (column 2, Table 6). We find that host market characteristics (measured by absolute size of economy, *LGDP*), cultural proximity (*CP*) and policy liberalisation (*TD*92) are all significant and correctly signed. These findings support Hypotheses 1a, 5 and 6. By contrast, political risk (*LPOLI*) is found to be significant but with a sign contrary to expectation as predicted in Hypothesis 4. We find that natural resource endowments (*LORE*) and asset-seeking FDI (*LPATENT*) are both insignificant. Therefore Hypotheses 2 and 3 are not supported. We now discuss each of these main findings in more detail.

Absolute host market size (*LGDP*) has a positive influence on Chinese FDI outflows, with a 1% rise in the variable increasing Chinese ODI by 0.35%. This indicates that market seeking was a key motive for Chinese ODI in the period under study (Hypothesis 1a). Cultural proximity (*CP*) is found to have a highly significant and positive effect on Chinese ODI (Hypothesis 5). This result suggests that the presence of ethnic Chinese people in the host country has promoted inward investment by Chinese firms. The policy liberalisation variable (*TD*92) is also positive and significant. This supports the argument that the qualitative changes in Chinese policy that took place in 1992, the year of Deng Xiaoping's visit to the southern provinces, did mark a significant step towards liberalisation in a number of ODI-related areas, and positively influenced the value of approved Chinese ODI for that year (Hypothesis 6). Our interpretation is that policy changes freed SOEs to invest abroad for reasons other than the promotion of exports, that is, they were able to service foreign markets directly.

Table 4 Correlation matrix

	LFDI	*LGDP*	*LORE*	*LPATENT*	*LPOLI*	*LERATE*	*LINF*	*LEXP*	*LIMP*	*LDIS*	*LINFDI*
LFDI	1.0000										
LGDP	0.2188	1.0000									
LORE	0.0044	0.0274	1.0000								
LPATENT	0.0691	0.6684	0.1918	1.0000							
LPOLI	−0.0432	0.4851	0.1789	0.4618	1.0000						
LERATE	0.0745	−0.2606	−0.1282	−0.2237	−0.2760	1.0000					
LINF	−0.0019	−0.2879	0.1739	−0.1421	−0.4528	−0.0978	1.0000				
LEXP	0.4428	0.6565	−0.1286	0.3747	0.3516	0.0414	−0.3952	1.0000			
LIMP	0.3580	0.7282	0.0881	0.4587	0.4022	−0.1296	−0.3211	0.8545	1.0000		
LDIS	−0.1767	−0.0368	0.2335	−0.0844	−0.0098	−0.3316	0.1982	−0.4947	−0.4217	1.0000	
LINFDI	0.1826	−0.2559	−0.1238	−0.2632	0.1313	−0.0067	−0.1856	0.1248	−0.0073	0.0868	1.0000

Table 5 Variance inflation factor test

Variable	*VIF*	*1/VIF*
LGDP	7.12	0.140471
LORE	1.58	0.632445
LPATENT	2.18	0.458703
LPOLI	2.02	0.494854
CP	2.17	0.459989
TD92	1.05	0.948919
LERATE	1.47	0.682196
LINF	1.64	0.611576
LEXP	6.61	0.151327
LIMP	7.59	0.131727
LDIS	2.89	0.345584
LINFDI	2.43	0.410728

A major finding is that the coefficient on the index of political risk (*LPOLI*) indicates an increasing relationship between host country political risk levels and Chinese ODI. We find that a 1% increase in the host country risk index (i.e., a decrease in risk) is associated with a decrease in Chinese ODI of 1.8%. Thus we find no evidence to support Hypothesis 4. This runs counter to the normal findings for this variable, and requires discussion. In line with theory advanced in this paper, capital market imperfections and institutional factors in China may have induced a perverse attitude to risk, which contrasts with that found among industrialised country firms. In other words, Chinese foreign investors seem not to perceive risk in the same way as industrialised country firms. There are a number of reasons why Chinese firms may not behave in the conventional manner. First, Chinese state-owned firms may not be profit-maximisers, or may be maximising subject to government-led institutional influences. Second, the bulk of Chinese FDI is in developing countries (see Table 2), and these are precisely the countries that, as a group, record higher levels of political risk. Much of this investment may have been promoted by political affiliations and connections between China and the developing host country government concerned. The bargaining position of the Chinese government and Chinese firms may have been further strengthened *vis-à-vis* governments in those host countries that attract only modest amounts of investment from the industrialised nations. Third, China's political and ideological heritage in the modern era may have led to Chinese ODI being preferentially directed to fellow communist or ideologically similar countries, many of which also record higher levels of political risk. Fourth, home country embeddedness (i.e., in the current context, the knowledge of operating in an emerging country environment characterised by tight, centralised economic planning) may have provided Chinese firms with ownership advantages that enable them to mitigate the risk associated with operating in equivalent environments abroad. Fifth, Chinese firms may also be prepared to invest in countries generally avoided by industrialised country firms for ethical (e.g., human rights) reasons, with Sudan being an example. Sixth, we should finally note that the relative inexperience of some Chinese firms concerning the establishment and management of large-scale operations abroad may have led to FDI projects being undertaken with insufficient due diligence and attention to associated risks (Wong and Chan, 2003; Ma and Andrews-Speed, 2006). Our finding for risk also highlights potential shortcomings in familiar measures of political risk, which are typically calculated from the point of view of industrialised country firms (World Bank, 2006). Such indices may need to be recalculated to better capture the perceptions of firms from emerging economies like China. Given that our regression specification controls for market returns, it does appear that Chinese behaviour towards conventionally measured host political risk differs from that of developed country investors. In line with the theory put forward earlier, the evidence suggests that capital market imperfections play a role.

Of the main variables we examine, we find no support for Hypothesis 3. The asset-seeking variable (*LPATENT*) in the RE model is insignificant, which suggests that Chinese firms have not been motivated to acquire strategic intellectual capital assets over the period under study.

We now discuss the results for our six control variables. The finding for exports (*LEXP*) is significant and correctly signed, supporting Hypothesis 9. By contrast, we find that inflation (*LINF*) and imports (*LIMP*) are significant but with signs contrary to expectation as predicted in Hypotheses 8 and 10. Our findings for the exchange rate (*LERATE*), geographic distance (*LDIS*) and market openness (*LINFDI*) are all insignificant. In short, we find no support for Hypotheses 7, 11 or 12.

The two trade-related variables, *LEXP* and *LIMP*, when viewed together, indicate that Chinese ODI has both a conventional and an idiosyncratic nature. As expected, *LEXP* positively affects FDI, which is the conventional finding that FDI follows

exports. It also supports the market-seeking motive (Hypothesis 9). This finding concurs with the view that one of the key motivations of Chinese investment has been to promote domestic exports. We find that *LIMP* is also a significant determinant of Chinese ODI but, against expectations (Hypothesis 10), has a negative effect. A 1% increase in China's imports from a host country is associated with a 0.25% reduction in Chinese ODI. This result could be generated by the practice of Chinese investors relocating production from China to other developing countries. In this account, imports of intermediate products to China for processing and re-export are reduced when Chinese firms relocate processing abroad via FDI. By value, most Chinese ODI is in the developing countries (see Table 2), and outward investment to these countries to circumvent trade barriers in third markets may have been a motive. In essence, it is possible that some Chinese ODI substitutes for intermediate imports to China.

The coefficient on inflation (*LINF*) is significant and positive, indicating that a 1% increase in the variable is associated with an increase in Chinese ODI of 0.19%. This is contrary to expectation (Hypothesis 8). Such an association might suggest that countries with moderate demand inflation are more attractive to Chinese investors. This link between the variables would be reasonable on the assumption that moderate demand inflation accompanies economic growth. It may also support the view that the investment decisions of Chinese firms are unusually tolerant of less stable countries with respect to local economic conditions. This contrasts with the normal behaviour of profit-maximising industrialised country firms, and again suggests that Chinese firms may be influenced strongly by home country capital market failure and institutional factors.

Changes over time

In order to investigate whether or not Chinese FDI has changed in character over the period in question, we divide our data into two time periods around 1992. This procedure is borne out by the results in columns 3 and 4 of Table 6, which contrast sharply. These indicate that different locational determinants and motivations apply over time. Of our main variables, we find that market size (*LGDP*) and cultural proximity (*CP*) were important determinants of Chinese ODI for the period prior to 1991; in the later time period (post-1992), natural resource endowment (*LORE*), political risk (*LPOLI*), cultural proximity (*CP*) and policy liberalisation (*TD*92) are instead significant determinants. We also detect differences across time among the control variables. Before 1991, inflation (*LINF*), geographic distance (*LDIS*) and market openness (*LINFDI*) were important determinants of Chinese ODI, but post-1992 only the two trade-related variables, exports (*LEXP*) and imports (*LIMP*), are significant. These findings are in agreement with the earlier discussion that there has been a significant change in the foreign investment behaviour of Chinese enterprises over time, and that this is at least partly due to the variable policy regime, as suggested by our finding for the policy liberalisation variable (*TD*92), which indicates a surge in ODI for the year 1992. Arguably, this provides further substantiation for the notion that institutional factors have influenced patterns of Chinese ODI. We find that, over the period under study, Chinese firms have moved away from undertaking mainly market-seeking strategies in nearby foreign markets towards the securing of raw materials in riskier markets. These findings reinforce the view that the securement of natural resources has become an imperative in more recent years, in line with Chinese domestic growth, and that this investment has been directed to countries with higher levels of political risk (by Western standards). The fact that *LDIS* is significant and negative for the earlier period but not for the later one shows that geographic proximity of host countries to China was a positive influence only on early Chinese ODI. This development may be an outcome of the growing maturity of Chinese market-seeking investors and the increasing propensity for Chinese firms to engage in natural resources in more spatially distant markets.

The highly significant and positive coefficient for cultural proximity (*CP*) in both time periods (columns 3 and 4) supports our hypothesis that familiarity between populations is important in the flow of Chinese FDI. The facilitating role of the Chinese diaspora persists throughout the period under study, as expected, and suggests that relational assets indeed constitute an ownership advantage for Chinese firms when they invest in countries with a significant Chinese population. In the later period only, ODI is positively associated with Chinese exports, indicating that a significant part of FDI has followed export trade. These results are consistent with a 'stages approach' to internationalisation being applicable to Chinese ODI, and further research is required.

Table 6 Results for the determinants of Chinese ODI

	POLS (1)	*REs* (2)	*REs 1984–91* (3)	*REs 1992–01* (4)	*REs OECD* (5)	*REs Non-OECD* (6)
LGDP (H1a)	0.3463	0.3448	0.5085	0.2448	0.6674	0.3472
	(0.1249)***	(0.1640)**	(0.2787)*	(0.2009)	(0.3650)*	(0.2238)
LORE (H2)	0.1713	0.1447	0.1039	0.2253	−0.0138	0.1820
	(0.0742)**	(0.1057)	(0.1654)	(0.1206)*	(0.3906)	(0.1144)
LPATENT (H3)	0.0223	0.0363	0.0794	0.0516	0.0752	0.0262
	(0.0309)	(0.0359)	(0.0605)	(0.0439)	(0.0773)	(0.0447)
LPOLI (H4)	2.4762	1.7997	0.7347	2.6308	1.8973	1.4560
	(0.5822)***	(0.6974)**	(1.0846)	(0.9750)***	(1.8807)	(0.8903)
CP (H5)	1.4779	1.4929	1.4520	1.5338	2.0464	0.8414
	(0.2588)***	(0.4276)***	(0.6059)**	(0.4634)***	(0.8415)**	(0.6563)
TD92 (H6)	0.6595	0.6961		0.8033	0.9489	0.4104
	(0.2698)**	(0.2534)***		(0.3002)***	(0.3178)***	(0.4021)
LERATE (H7)	0.0471	0.0688	0.1032	0.0246	0.2319	0.0142
	(0.0337)	(0.0463)	(0.0638)	(0.0618)	(0.1866)	(0.0540)
LINF (H8)	0.2406	0.1891	0.4664	0.1323	0.3487	0.1320
	(0.0628)***	(0.0734)**	(0.1167)***	(0.0896)	(0.1579)**	(0.0914)
LEXP (H9)	0.6934	0.6153	0.2731	0.8275	0.4062	0.8375
	(0.1084)***	(0.1291)***	(0.2094)	(0.1803)***	(0.2053)**	(0.1964)***
LIMP (H10)	0.2601	0.2544	0.3087	0.3098	0.1914	0.3677
	(0.0931)***	(0.1027)**	(0.2061)	(0.1204)**	(0.1898)	(0.1374)***
LDIS (H11)	0.1905	0.1554	0.9266	0.2885	0.7452	0.0171
	(0.2035)	(0.2972)	(0.4794)*	(0.3400)	(0.7360)	(0.4259)
LINFDI (H12)	0.0927	0.0510	0.3294	0.0589	0.1181	0.1218
	(0.0886)	(0.1244)	(0.1562)**	(0.0439)	(0.2480)	(0.1546)
N	402	402	116	286	198	204
LM test	$\chi^2(1)=15.43$***					
Adj. R^2	0.3642	0.6019	0.6142	0.6024	0.5763	0.6737

Notes: Standard errors are in parentheses.
***, ** and * indicate that the coefficient is significant at the 1, 5 and 10% levels, respectively.

Host country level of development

Theory suggests that home country market imperfections can exert a significant impact on the decisions of foreign investors. It follows that Chinese government policy may have led to a distinctive pattern of outward FDI by host country. Here, we test this for developed and developing countries by comparing results for the subsamples of OECD and non-OECD countries in columns 5 and 6 of Table 6, respectively. Looking at the main variables, we see that market size (*LGDP*) is a significant determinant of Chinese ODI within the OECD group: that is, Chinese investors preferentially seek out larger markets within the OECD countries. This is a conventional result, and captures that part of Chinese FDI that is market seeking. Also significant is the cultural proximity variable (*CP*). This variable appears to be capturing the tendency for Chinese firms to invest in OECD countries where a sizeable population of ethnic Chinese can be found. The highly significant and positive policy liberalisation variable for OECD countries alone (*TD92* in column 5 of Table 6) again yields insight into the relatively undeveloped state of the FDI decision process by Chinese investors. The policy change in 1992 is associated with a large increase in FDI to the developed world. This implies that the decision to invest was previously tightly circumscribed by government, and this may be the reason why a full and conventional pattern of significance is not observed. However, the pattern of investment flows to the developed economies fits with Chinese government priorities during liberalisation.

It is clear that Chinese ODI in non-OECD countries is not motivated by host market size, and that other motives must therefore be at play. Looking at the control variables, the positive significance of the *LEXP* variable applies to both OECD and non-OECD countries. This suggests that

Chinese ODI follows trade for both categories of country. The strong result for *LEXP* captures FDI that follows Chinese exports, and is an indicator of the role of host market demand. As we would expect from the argument above concerning the mechanism through which the Chinese import variable (*LIMP*) associates with Chinese ODI, it is the non-OECD group of hosts that records a negative effect. These results indicate that it is specifically those developing countries from which China imports least to which Chinese investors have been attracted. Inflation (*LINF*) is significant for OECD countries only. This suggests that moderate inflation is a characteristic of those buoyant markets that attracted Chinese firms.

One of the most compelling earlier findings – that our main variable political risk (*LPOLI*) is significant – is lost in both estimations (5) and (6). From this, we infer that, while Chinese ODI is associated with higher levels of host country political risk, the difference in risk in the data is primarily that between developed and developing countries, rather than within these two country groupings. The apparent preference for less developed and risky host countries as against developed hosts is consistent with our argument on the lower cost of capital enjoyed by SOEs, as well as with the relatively unsophisticated country risk evaluation processes of Chinese investors. This result supports our theoretical contention that capital market imperfections in China have been crucial to outward FDI over the period in question.

Conclusions

This paper is one of the first attempts to formally model Chinese ODI. Our motivation is to test the extent to which the mainstream theory that explains industrialised country FDI is applicable to emerging country contexts, and whether special explanations nested within the general theory are needed. We develop a theoretical framework that draws on this body of theory but which allows for both conventional and novel hypotheses to be tested. This is done within a well-specified model using previously unexamined official data on Chinese ODI and by employing a wide range of main and control variables. We find that Chinese ODI has both a conventional and an idiosyncratic dimension.

In terms of our main variables, we find a conventional result for market size. We infer from the significant role played by host country natural resource endowments that the institutional environment has strongly shaped Chinese ODI, leading to significant natural resources-seeking FDI. We also find that policy liberalisation has had a positive influence in stimulating Chinese ODI. This is further evidence of a distinctive explanation, to the effect that home country institutions have played a significant role in determining the flow and direction (OECD compared with non-OECD) of Chinese ODI. Viewed together, these findings are in agreement with the well-publicised expansion of natural resources-seeking activities of Chinese MNEs in recent years, especially to the industrialised countries, in response primarily to domestic economic imperatives (Taylor, 2002; Deng, 2003, 2004). Although there are indications that Chinese firms have become increasingly acquisitive in recent years, we find that, prior to 2001 (when our data end), ODI was not driven by the motive to acquire strategic assets. Arguably, the asset-seeking hypothesis is more likely to be supported on data for more recent years: for example, as China's 'go global' policy becomes fully implemented and acted upon by firms.

Cultural proximity is found to be a significant factor, indicating that reduced transaction costs and network effects are important in attracting Chinese investors, and that relational assets constitute a special ownership advantage, even for state-owned firms. This supports a role for reduced psychic distance in explaining Chinese ODI. When we examine differences over time, we find that market size, geographic proximity, inflation and market openness are important locational determinants for the period 1984 to 1991, with the distance variable suggesting that the Chinese diaspora and market familiarity have positively influenced the destination of earlier Chinese investment outflows. However, the finding that the cultural proximity variable does not change over time suggests that Chinese ODI is still in an early stage of development, and that more familiar cultures in host countries continue to help promote Chinese inward investment. These findings warrant further investigation on a longer time series of data.

More challenging is the unprecedented finding that Chinese ODI is attracted, rather than deterred, by political risk (as measured conventionally and with market returns controlled for by market size). This suggests that Chinese firms do not perceive or behave towards risk in the same way as do industrialised country firms. In accordance with our theory, we attribute this to the low cost of capital that Chinese firms (for the most part SOEs)

enjoy as a consequence of home country capital market imperfections. Indeed, state ownership can be considered as a firm-specific advantage for many Chinese MNEs in this context (Ding, 2000). However, the experience of operating in a highly regulated and controlled domestic environment (i.e., home-country embeddedness) may also be relevant. This experience may have equipped Chinese MNEs with the special ownership advantages needed to be competitive in other emerging economies. Moreover, further augmentation of the ownership advantages of Chinese firms is likely to occur as Chinese MNEs become more experienced internationally (Deng, 2004) and as the Chinese government and its agencies continue to provide political, financial and other support, as implied by our discussion of institution-based theory.

Our study of Chinese outward FDI offers the opportunity to examine how a country with distinctive home country institutions fits with the emerging body of theoretical work on the 'institution-based view of strategy'. Chinese firms that invest abroad have to straddle environments, institutions and rules that differ probably more than for any other outward-investing country in the world. In this paper we have expected contrasts with the conventional model, and we have found evidence for these. Theorising on the strategy of firms, especially those from emerging countries, needs to pay greater attention to the influence of home country institutions. It is arguable that Chinese firms seek foreign investment opportunities in environments that resemble their home environment. Further, it is tenable that Chinese investors are unconstrained by the ethical and governance obligations that are normally expected of Western MNEs today. If so, they may resemble outward investors from the West in an earlier period, and future changes in Chinese firms' behaviour and location decisions can be envisaged, contingent upon the evolution of institutions and rules of the game at home. For the present, Chinese outward investors clearly present marked contrasts from the conventional model in key respects.

There are implications of this research for our understanding of the outward FDI strategies of firms from other emerging markets, such as the other 'BRICs' (Brazil, Russia and India). First, state direction over firms (whether formal or informal) is likely to generate a signature in the locational pattern of outward investment that would not be predicted by the general theory of FDI, which assumes that firms are profit maximisers. The second implication is that liberalisation is a very powerful instrument for emerging economies. This does not simply mean trade liberalisation, but includes the whole range of internal liberalisations possible for countries with a significant state sector or dominant (private or public) firms, or both. The behaviour of domestic firms changes dramatically once competition, or its prospect, is introduced. Firms that performed a social role, such as the SOEs, once divested of this, are able to seek growth. However, China remains distinctive from other emerging economies in that many of its MNEs remain in state hands, even though corporatised in order to focus on commercial objectives. State direction means that these firms still align their operations, whether at home or abroad, with the five-year plans and national imperatives. This is a model that is not replicated, in any general way, in any of the other leading emerging economies.

With respect to further work, an issue requiring investigation, possibly of a qualitative nature, is whether or not and how Chinese investors are influenced (as are industrialised country firms) by concerns of due diligence, risk evaluation and ethical considerations in host countries. Similarly, how patterns of FDI are affected by formal and informal political links between China and other countries (i.e. the supranational institutional framework) also merits further examination.

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Notes
[1]In this paper, we take the standard UNCTAD definition of FDI as being an investment involving a long-term relationship and reflecting a lasting interest and control by a firm in an enterprise resident in a foreign country (UNCTAD, 2005a). FDI normally has three components: (1) equity capital (the purchase of shares in the foreign enterprise); (2) reinvested earnings (those earnings not distributed as dividends by foreign affiliates or remitted to the investor enterprise); and (3) intra-company loans or debt transactions (borrowing and lending between parent and foreign affiliate enterprises) (UNCTAD, 2005a).

[2]In this study, the terms 'China' and 'Mainland China' are used interchangeably to refer to the People's Republic of China (PRC). For our purposes, the PRC

excludes the special autonomous regions of Hong Kong and Macau, unless specifically stated. The Republic of China (Taiwan) is treated as a separate economy. Regions with disputed borders (e.g., the Spratly Islands) are excluded from our definition of the PRC.

[3]Although it post-dates the time frame of the current study, the establishment of a special state fund (valued by some at around US$15bn) available to qualifying Chinese firms for the acquisition of foreign brands and companies underscores these points (Swystun *et al*., 2005).

[4]We are grateful to one of the reviewers for this point.

[5]Overseas Chinese are defined by Poston *et al*. (1994: 633) as 'all Chinese living outside mainland China and Taiwan, including *Huaqiao* (Chinese citizens residing abroad), *Huaren* (naturalized citizens of Chinese descent) and *Huayi* (descendants of Chinese parents)'.

[6]This also reflects the regulatory framework of Chinese ODI over the majority of the period under study. Until quite recently, Chinese firms were obliged to repatriate overseas earnings to financial authorities at home, while the ability to make inter-company loans was highly restricted under China's foreign exchange controls.

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Appendix

Countries host to Chinese ODI in the data set

OECD countries
Australia, Austria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Japan, Mexico, Netherlands, New Zealand, Poland, Portugal, South Korea, Spain, Sweden, United Kingdom, United States

Non-OECD countries
Algeria, Argentina, Armenia, Brazil, Bulgaria, Chile, Colombia, Croatia, Cyprus, Ecuador, Egypt, Ghana, Hong Kong SAR, India, Indonesia, Israel, Malaysia, Morocco, Nigeria, Philippines, Russia, Singapore, South Africa, Sudan, Thailand, Ukraine, Venezuela

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