MAPPING CHINESE MINING INVESTMENT, WITH A FOCUS ON LATIN AMERICA: POLITICS OR MARKET?

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Abstract

Analyses of Chinese foreign direct investment (FDI) sometimes question the investment criteria of Chinese state-owned enterprises (SOEs), suggesting that market rules are not fundamental but secondary to political and geostrategic concerns. This, supposedly, challenges the competence of Chinese FDI and its ability to award well-functioning regimes for their 'good business environments'. While questioning the apolitical nature of markets, the present article uses the internationalization of China's mining industry as a case study to ascertain the criteria that guide Chinese FDI. It examines quantitative data which suggests that Chinese mining companies prioritize mature mining economies and respond chiefly to economic incentives informed by their own perspectives of risk and opportunity. Besides, owing to their ability to commit to large infrastructure development, they are increasingly able to outbid other transnational companies in less-established mining economies. The article discusses the implications of these trends for the future developmental trajectories of Latin American countries.

Introduction

Academic research and media coverage tend to emphasize what is new and different about China's growing engagement in the global economy. Often unintentionally, this has created the perception that there exists an insurmountable gap between the ways in which China and western countries conduct their international businesses, failing to acknowledge the increased internationalization of the Chinese state and companies¹. With regards to mining, this is translated in a view that China has a uniquely geostrategic approach to natural resource extraction, that Chinese mining companies operate more comfortably in coalition with authoritarian rulers, and that together they antagonise the

¹ Ruben Gonzalez-Vicente, "The decentred internationalization of the Chinese state: Transnational sovereignties, power and culture", working paper.

purportedly high social and environmental mining standards of western companies. This article conducts a quantitative analysis of China's overseas mining investment that shows that Chinese mining companies invested primarily in mature liberal mining economies during the 2000-2010 period. This quantitative data is combined with insights acquired through qualitative interviews conducted in China and Peru during 2010-2011, together with secondary sources. Instead of favouring a centralized macro perspective where central government geostrategic criteria is the major investment driver, Chinese overseas mining investment is better explained by considering a micro perspective that takes into consideration the perceptions of risk and opportunity gauged by individual firms.

The next section reviews the internationalization of China's mining industry, and offers a discussion of the two major views about Chinese overseas investment, one holding that it responds to political and geostrategic interests, and the other explaining it as a market process. However, 'the market' is not presented here as neutral, but as a political institution to which norms Chinese mining companies are increasingly (yet not linearly) adapting. The second section presents and discusses data on the global allocation of Chinese mining investment. The third section focuses on Latin America specifically to offer a discussion of the developmental opportunities and challenges carried by Chinese mining investment in the region. A conclusion summarizes the findings.

The Internationalization of China's Mining Industry

The technological capabilities of Chinese mines, as opposed to agriculture and other sectors, began to lag behind Western mining in the 16th century, with the gap becoming particularly evident by the early 20th century². Previous to the foundation of the People's Republic of China in 1949, there were only 200 trained geologists in China³. In sight of the country's weak industrial base, and due to a lack of autochthonous expert knowledge, the Chinese Communist Party decided to seek technical assistance from the USSR as early as the 1950s, with remarkable success⁴. At that point, the

² Peter J. Golas, *Joseph Needham's Science and Civilisation in China, Volume 5. Cheistry and Chemical Technology Part XIII* (Cambridge: Cambridge University Press, 1999).

³ Wang Xiaoling, "Mineral Resources in China: Geological Exploration and Exploitation", in James P. Dorian and David G. Fridley (eds.), *China's Energy and Mineral Industries: Current Perspectives* (Boulder, Colorado: Westview Press), pp. 105-116.

⁴ For example, Dorian explains how in the years from 1949 to 1958 steel-making capacity increased to more than 11 times that of pre-1949. James P. Dorian, *Minerals, Energy and Economic Development in China* (Oxford: Clarendon Press, 1994), p. 57.

industrialization of mining was deemed essential so as to provide the heavy industries and agricultural sectors – which the CCP had prioritized in its modernization schemes – with abundant raw materials, machinery and fertilizers. While previous to 1978 external trade was limited, the reliance on the USSR's technical training and advice illustrates the early internationalization of Chinese mining industries⁵.

It was however with the open-door policy initiated in 1978 that China's mining industries started to integrate in the international capitalist system, most significantly through the trading of minerals and an initial shy receptiveness towards inward FDI. The China Metallurgical Import-Export Corporation (an arm of the Ministry of Metallurgy) joined MINMETALS (under control of the Ministry of Foreign Economic Relations and Trade) in the early 1980s as the two international mineral traders in China; and were soon to be followed by a number of producers able to acquire export licenses from provincial governments⁶. As of 1991, China's exports still exceeded its imports in a number of minerals such as coal, crude fertilizers and non-ferrous metals, while the country increasingly needed to rely on imports of iron and steel⁷.

FDI in Chinese the mining sector grew at a slow pace during the 1980s and 1990s, as China opened to investment as a quick route to attract foreign technology, know-how and capital. Inward FDI was limited by high risk perceptions, and by a mining FDI legislation that was not sector-specific but borrowed from manufacturing, thus ignoring exploration risks in mining projects. Some of these high risk perceptions persist today. For instance, critics hold that, while the current Mineral Resources Law provides that companies involved in exploration have first preference in the acquisition of exploitation rights in a given area, there is no transparent procedure for the transfer from exploration rights to an exploitation right. In the 2000s China became more opened to FDI (although not as much as investors had expected in light of China's GATS commitments), but the domestic mining sector started experiencing fewer liquidity problems thanks to the rise in mineral prices, and the need for foreign investment became lower. Inward FDI is now thus focused in specialized hi-tech

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⁵ In the early 1970s, and due to the lack of USSR assistance that followed the Sino-Soviet divergences after 1961, a number of Japanese delegations were welcomed in China, leading to important exchanges of technology.

⁶ Dorian, Minerals, Energy and Economic Development in China, p. 119.

⁷ Ibid. p. 149.

⁸ Suxun & Chenjunnan, "Private capital: What impedes its entry into China's mineral industry", *Resources Policy*, 33, 1, 2008, pp. 23-28.

equipment. Foreign investors also try to persuade Chinese partners of the potential benefits of sharing their technology for in-depth mining, know-how about 'sustainable mining practices', management expertise for economic efficiency and experience in dealing with social and environmental issues in overseas projects¹⁰.

During the 1990s, a small number of Chinese companies pioneered outward FDI in mining sectors, as illustrated by the Shougang Corporation's acquisition of an iron ore mine in Peru in 1993, Sinosteel Corporation's chrome mining in South Africa, and China's Nonferrous Metal Mining investment in the Chambishi copper mine in Zambia. Nonetheless, the most vigorous push for the internationalization of China's mining industries was given by the 'Going Out' strategy, which began to be implemented throughout the 2000s. The strategy encourages Chinese firms to invest abroad, at times through financial incentives such as low interest loans from state-owned policy banks. Its main objective is to prepare Chinese businesses to compete internationally, hoping to serve both as a springboard for successful internationalization and a preparation for Chinese firms to resist competition from transnational firms domestically as China opens up to international investment.

Around a 24 percent of China's outward FDI is concentrated on extractive sectors¹¹, and mining firms have been particularly active in acquiring overseas assets during the recent world economic crisis. China's economy growing demand for commodities is another underlying reason for the internationalization of its mining firms, as China is now the world's major consumer of iron ore, steel, coal, zinc, lead, tin, nickel, copper and aluminium ¹². Following decentralization ¹³ and

⁹ Scholars frequently dispute the possibility of a 'sustainable mining', given the natural limits to extraction. There are however ways to mine with a lower negative environmental impact.

¹⁰ China International Mining Group, "Benefits from FDI in China's Mining Sector", accessed at http://cimg.org.cn/article/benefits-fdi-chinas-mining-sector, 21 February 2011.

 $^{^{11}\} http://english.people daily.com.cn/90001/90778/90861/7184039.html$

¹² Bateman Beijing Axis, "China's role in the global iron and steel sector: A perspective on demand and strategic capital from China", accessed at <a href="http://www.batemanbeijingaxis.com/en/news-a-media/bba-presentations/doc_download/6-chinas-role-in-the-global-iron-and-steel-sector-a-perspective-on-demand-and-strategic-capital-from, 22 February 2011

¹³ China's central government standpoint on mining industry's decentralization has evolved through the reform era. While during the 1990s central planning was relaxed and companies at different levels were allowed to pursue autonomous economic targets, there is a more recent trend towards consolidation in order to phase out inefficient mining Town and Village Enterprises (TVEs) and create a group of national champions capable of competing with leading global mining giants. Rui Huaichuan, "Development, transition and globalization in China's coal industry", *Development and Change*, 36, 4, pp. 691-710.

privatization trends in China, there is nowadays a wide range of companies conducting overseas direct investment, including major SOEs (some of them partially listed in stock markets), provincial level SOEs, and privately owned firms. Table one provides a ranking of the top Chinese mining companies by number of overseas projects¹⁴. As Chinese mining FDI becomes an important source of revenue for natural resource-endowed economies, important questions are raised regarding the nature, criteria and objectives of these investments. The two sections below discuss two opposite positions on Chinese extractive FDI, one claiming that geopolitical calculations, political alliances and non-market criteria explain the allocation of Chinese mining FDI, and another holding that this is instead based on economic and market factors.

--- Table 1 here ---

The "Political" Factor

Political economy and international relations analyses that emphasize the political nature of Chinese investment focus on what they reckon are China's unique internal ideological burdens and geostrategic expansion in the developing world. In an article that advocates further market-oriented reforms in China, Chan contends that economic nationalism is the underlying force explaining Chinese SOEs behaviours, 'with public administration and state economic management at the forefront and free market development as only secondary interest' Most of the critics of Chinese companies' alleged political priorities come from think tanks and media commentators in the US, a country where government and businesses have historically looked out for each other on international ventures ¹⁶, but where mainstream discourses routinely attack governmental involvement in "the" market. Nobel Prize winner and New York Times columnist Paul Krugman

¹⁴ Oil and gas are not covered in this paper due to the political and strategic singularities of these energy resources, and as the Raw Materials Database does not provide data on oil and gas investment. However, resonating with some of the findings in this paper, a recent report prepared by the International Energy Agency argues that Chinese state-owned oil firms are not government-run, and that instead 'their observed behaviour is the result of a complex interplay between individuals and groups associated with the firms, and whose interests are not always aligned, and where commercial incentive is the main driver'. Julie Jiang & Jonathan Sinton, *Overseas Investments by Chinese National Oil Companies* (Paris: International Energy Agency, 2011)

¹⁵ Hon S. Chan, "Politics over markets: Integrating state-owned enterprises into Chinese socialist market", *Public Administration and Development*, 29, 1 (2009), pp. 43-54.

¹⁶ For an empirically and theoretically enlightening account of these dynamics view for instance Mitchell's classical analysis of the collusion between the US government and the Arabian American Oil Company. Timothy Mitchell, "The limits of the state: Beyond statist approaches and their critics", *The American Political Science Review*, 85, 1 (1991), pp. 77-96.

does not hesitate to depict China as an "international bad actor", holding that China's "predatory" currency policy is impeding the "natural" flow of money from wealthier to depressed nations ¹⁷. While economists may point out to the "voracity" of China's international engagement and its disregard for the established rules of capitalist system, international relations pundits that are critical of China's global engagement describe the Asian country as a challenger to a ratified geopolitical "status quo" based on American hegemony and unipolar leadership¹⁸. Moses Naim, writing from the pages of Foreign Policy, contends that China's "rogue aid" unfairly outbids western donors, pushing an alternative development model that underwrites "a world that is more corrupt, chaotic, and authoritarian" 19. The relevance of these views and perceptions is given by their ability to transcend scholarship and inform politics and nationalistic attitudes, as observed in the heated reactions against certain attempts of Chinese firms to purchase Western companies²⁰.

Regardless of the validity of the empirical data that these analyses advance, they tend to portray China as a political and ideological entity that disrupts the natural functioning of apolitical markets. This is a discourse that needs to be critically assessed and challenged. Critical geopolitics alerts against polarizing Western perspectives that perpetuate the image of the "other" as a villain, hence rejecting "the realist ontologies of traditional geopolitical analysis" ²¹. It asks us to rethink geopolitical ethics and the omissions and selectiveness in politics of international shaming²². Much in line with Gramscian critiques of "common sense", critical geopolitics scrutinizes the discursive techniques ("epistemological enforcers"²³) by which certain institutions are naturalized (e.g. the market) and others are vilified. In this paper, I present Chinese mining companies as market entities not to reject the argument that they are political, as this would imply denying the existence of power

¹⁷ Paul Krugman, "Taking on China", *The New York Times*, 30 September 2010. Paul Krugman, "The World as He Finds It", *The New York Times*, 14 November 2010.

¹⁸ Literature on the China Threat is abundant. View for instance Bill Gertz, *The China Threat: How the People's Republic Targets America* (Washington: Regnery Publishing, 2000).

¹⁹ Moises Naim, "Rogue aid", Foreign Policy, 159 (2007), p. 95.

²⁰ Two widely cited examples are CNOOC's unsuccessful bid for Unocal in the US, and Chinalco's equally unsuccessful attempt to increase its share ownership in Rio Tinto.

²¹ Emma Mawdsley, "Fu Manchu versus Dr Livingstone in the Dark Continent? Representing China, Africa and the West in British broadsheet newspapers", *Political Geography*, 27, 5 (2008), pp. 509-529.

²² Samuel J. Spiegel & Philippe Le Billon, "China's weapons trade: From ships of shame to the ethics of global resistance", *International Affairs*, 85, 2 (2009), pp. 323-346.

²³ John Agnew & Stuart Corbridge, *Mastering Space: Hegemony, Territory and International Political Economy* (New York: Routledge, 1995)

struggles at multiple scales in the market system, but to remark their growing integration in the international capitalist market, in which they navigate following profitability targets and market ideologies that build up on their specific understandings of risk. As argued by Power and Mohan, a critical assessment of China's role in the world must not separate the geopolitical from the geoeconomic and techno-developmental, and must "acknowledge the Orientalisms at work in western characterisations of China as an exception" and recognize the similarities between China's vision of development and those of western powers²⁴.

The Market Explanation

Business literature, on the other hand, approaches FDI from a micro perspective that takes into consideration the benefits and challenges gauged by individual firms in their internationalization strategies. Dunning's eclectic theory distinguishes three major motivations for FDI, namely firmspecific advantages that prepare a firm for competition in a given market, locational advantages, and internalization advantages (that is, the benefits of internalizing processes that could otherwise be sought in the market)²⁵. Within these main parameters, there are various factors that could incline a firm to invest overseas. Firms that aim to compete for market presence may for instance consider market and culture similarity²⁶, as well as market size. Locational and internalization advantages are even more variegated, including for example lower wages, good infrastructures, preferential policies, research and development capabilities, network linkages and industrial agglomeration. Natural resource-seeking FDI, which is the primary focus of the present paper, is a text-book example of the relevance of locational advantages, as the availability of a certain resource is essential for a firm to consider internationalization in the first place. However, other factors are also significant. Naturalresource FDI tends to be particularly wary of political risks – often in the form of expropriation and tax raises ²⁷ – as it is perceived that so-called 'resource nationalisms' may hinder extractive operations, whose assets cannot be de-localized. Certain studies on natural resource-seeking FDI also emphasize liberalization, adequate information on resource availability, and existence of transparent

²⁴ Marcus Power & Giles Mohan, "Towards a critical geopolitics of China's engagement with African development", *Geopolitics*, 15, 3 (2010), pp. 462-495.

²⁵ John H. Dunning, *International Production and the Multinational Enterprise* (London, UK: Allen & Unwin, 1981).

²⁶ William H Davidson, "The location of foreign direct investment activity: Country characteristics and experience effects", *Journal of International Business Studies*, 11, 2, pp. 9-22.

²⁷ Janie M. Chermak, "Political risk analysis – Past and present", *Resources Policy*, 18, 3 (1992), pp. 167-178.

and permissive mining-specific legislation and taxes as decisive factors²⁸. Nonetheless, Bridge's aggregate analysis of global mining investment allocation during the 1990s suggests that widespread liberalization did not erase uneven patterns of mining investment. Instead, only a few 'rising stars' benefited from neoliberal policies in the 1990s, yet the inflow of mining investment to these economies was conditioned on rising flows of investment overall²⁹.

On their study of Chinese outward direct investment (ODI) between 1984 and 2001, Buckley et al. find that while standard FDI theory explains some trends apparent in Chinese multinationals' investments, there are certain particularities to Chinese ODI. Specifically, the authors explain cultural and geographical proximity as ordinary ODI vectors, and underscore high levels of political risk as a differential variable specific to the Chinese case. The authors subsequently explain that this can be due to the fact that SOEs may not be profit-maximizers, to the concentration of Chinese investment in developing countries and, most importantly, to the limitations of familiar measures of political risk, "which are typically calculated from the point of view of industrialised country firms"³⁰. Hong & Sun indicate that Chinese outward FDI is unlike that of other third-world countries in that Chinese multinationals will typically establish joint ventures within China before making overseas investment, and use equity joint-venture and M&A in order to attain strategic asset seeking ventures 31. This assessment holds true for efficiency-seeking FDI and some Chinese natural resource-seeking FDI, for example China Minmetals' joint ventures with Codelco in Chile and Chinalco's purchase of Rio Tinto's share capital. But it fails to reflect a majority of Chinese natural resource-seeking FDI in the developing world, where the Chinese firm is an independent actor or the controlling firm in joint ventures. In sum, business literature sees Chinese firms as market agents making decisions with a shorter or longer-term profitability target. Whereas Chinese business strategies are sometimes criticized, and while it is accepted that there may be specific criteria determining Chinese investment patterns, little doubt is placed on the ultimately economic outlook of Chinese firms.

²⁸ K.K. Chatterjee, "Imperatives for attracting investment and technology in the Indian mining sector", *Resources Policy*, 28, 3-4 (2002), pp. 105-115.

²⁹ Gavin Bridge, "Mapping the Bonanza: Geographies of mining investment in an era of neoliberal reform", *The Professional Geographer*, 56, 3 (2004), pp. 406-421.

³⁰ Peter J. Buckley, L. Jeremy Clegg, Adam R. Cross, Xin Liu, Hinrich Voss & Ping Zheng, "The determinants of Chinese outward foreign direct investment", *Journal of International Business Studies*, 38, 4 (2007), pp. 499-518

³¹ Eunsuk Hong & Laixiang Sun, "Dynamics of internationalization and outward investment: Chinese corporations' strategies", *China Quarterly*, 187 (2006), pp. 610-634.

A cautionary note should be included here on business literature's conceptual naturalization or neutralization of "the market", the "rules of the market" (which Chinese businesses are seemingly internalizing), and the firm as a purely technical and indispensable agent of development. The idea of markets as apolitical scientific systems might be first challenged from a historical perspective, pointing out how market paradigms are socially-constructed, something that is easily noticed if one looks at them in historical perspective (we may for example consider the changing understandings of businesses' social responsibilities throughout the 20th century). On this count, Nally contends that "the assumption that markets are 'natural systems' operating outside of power and politics is itself an invention of the 19th century that takes for granted the violent manner in which the state must eliminate all behaviour that is now deemed aberrant or undesirable"³². Also from a post-foundational perspective, Timothy Mitchell calls for the need to rethink the economy, suggesting that the economy is not a static supra-social ideal, but "a series of competing projects, or rival attempts to establish metrological regimes, based upon new technologies of organization, measurement, calculation, and representation"³³. Therefore, in adapting to the international capitalist system and in following market criteria for FDI, Chinese firms are taking a very particular political stance, one that reflects the mainstream Western conceptualization of the "right" world order.

Mapping Chinese Mining Investment

Methodological Issues

There are multiple methodological challenges to analyzing the allocation of mining investment. As Gavin Bridge explains on his 2004 article for The Professional Geographer, country-level databases and statistics of mining investment are hardly comparable, as methods of collection and accounting vary considerably between countries³⁴. The solution suggested by Bridge is to collect project-level data, which can be achieved through a few available industry databases. While Bridge chooses to rely on MineSearch, a database organized by the Metal Economics Group, Raw Materials Data is selected in this study for its wide coverage of 30 different mineral commodities, which allows us to identify the kind of commodities that Chinese firms seek in their international operations. This database is organized by the Raw Materials Group, based in Sweden, contains more than 24,000 mining industry entities, and includes specific information on 5088 mines and 2807 entries on

³² David Nally, "The biopolitics of food provisioning", *Transactions of the Institute of British Geographers*, 36, 1 (2011), pp. 37-53.

³³ Timothy Mitchell, "Rethinking economy", *Geoforum*, 39, 3 (2008), pp. 1116-1121.

³⁴ Bridge, "Mapping the Bonanza", pp. 406-421.

mergers and acquisitions since 1995³⁵. The Raw Materials Group uses a wide range of sources to compile its data, including company and country sources, newsletters and research.

Two obvious limitations of these data are the difficulty to access information on small-scale mining, and most importantly the reluctance or inability of some countries or non-public companies to disclose information on certain operations. This is particularly acute in the case of Chinese mining SOEs operating in countries with rather opaque investment regimes. In order to minimize the impact of this factor, additional research was undertaken to complement the data provided by the Raw Materials Group, with an internet search of Chinese mining investment on a country by country basis, as well as research on the websites of all the main Chinese mining companies. An additional difficulty derived from this was how to combine these newly acquired data on investment quantities. Therefore, this study chooses to principally take into consideration the number of Chinese overseas mining projects rather than the amounts of money invested. This is not considered inadequate for the current analysis, as the primary objective is to examine what kind of countries and regimes receive Chinese mining investment, rather than to understand the criteria for larger investments.

In order to analyze the first decade of mining investment following China's 'Going Out' policy, the data presented here corresponds to Chinese overseas mining investment in the 2000-2010 period. Exploration activities are not covered, as these are often undertaken by companies other than those that will eventually construct and operate the mines³⁶. Only mining projects (from the conceptual study onwards), mines in construction and mines in operation are included.

Chinese Overseas Mining Investment Allocation

As figure one illustrates, the global allocation of the 112 recorded instances of Chinese-controlled overseas mining investment shows a marked tendency towards two mature and developed mining economies (Australia and Canada), countries in the geographical proximity of China, and a group of African and South American destinations. Not shown in the map, there are two countries (Cambodia and Armenia) where certain media and researchers have detected Chinese-controlled mines, but where the current research was not able to find proof of any specific project, other than exploration

35 http://www.rmg.se/index.php?option=com_content&task=view&id=25&Itemid=89

³⁶ Including data on exploration could distort the information. For example, 111 Chinese companies hold exploration licences in Botswana, while at the time of the research no Chinese company was known to have projects for the construction of a mine in the country yet. http://www.afrik-news.com/article15849.html

activities. Furthermore, numerous Chinese mining companies are involved in exploration in other countries such as Botswana, Madagascar and Philippines. Information was also found on previous or ongoing negotiations by Chinese mining companies to operate in Algeria, Bolivia, Brazil, Cameroon, Eritrea, Ethiopia, Guinea, Jamaica, Malaysia, Mauritania, Nepal, Senegal, Sierra Leone and Vietnam. Also excluded from this list are those mining projects where the Chinese mining company holds a minority non-controlling share through capital investment, as in the example of Chinalco in Rio Tinto projects, and joint ventures in which the Chinese company is not the major shareholder³⁷.

--- Figure 1 here ---

Table two focuses on the countries with a higher number of Chinese-controlled projects, and compares this figure with the world's percentage of non-Chinese mergers and acquisitions in each given country, and with the total number of projects in the country. Australia and Canada top the list, jointly hosting more than 36 per cent of the overseas mining projects controlled by Chinese mining companies. The major reason behind their high ranking is evidently their abundant resource stocks. But the large amount of Chinese mining companies in these countries also reflects that they operate comfortably in Western countries with liberal resource regimes and democratic institutions, contrary to the often held perception that Chinese firms prefer to invest in non-transparent, undemocratic and illiberal destinations. Chinese firms emulate other transnational investors in their predilection for Australia and Canada, as the Engineering and Mining Journal's Annual Survey of Global Investment indicates that in 2009 these were the two preferred destinations for global mining investment, absorbing 11 percent of the world's mining investment each³⁸.

Tajikistan is a less obvious candidate to receive significant investment flows, but ranks third in the list. Following the 1993-1997 civil war the country was considered the most risky destination for mining investment in Central Asia³⁹. During the 1993-2001 period, a 89 percent of Tajikistan's inward FDI came from the United Kingdom, the Republic of Korea and Italy, and was mainly

³⁷ Examples of Chinese companies holding a minority share in joint ventures are China Guangdong Nuclear Power's deal with Kazatomprom to mine uranium in Kazakhstan and Shandong Iron and Steel Group's agreement with African Minerals to mine iron ore in Sierra Leone, where the Chinese company will pay 1.5 billion USD for a 25 percent share in the Tonkolili iron ore mine.

³⁸ Magnus Ericsson & Viktoriya Larsson, "E&MJ's annual survey of global mining investment", *Engineering* and *Mining Journal*, January/February (2010), pp. 24-29.

³⁹ Allen L. Clark, "Investment in the mineral sectors of the Central Asian republics", *Resources Policy*, 24, 2 (1998), pp. 105-114.

oriented to the mining and textiles sectors⁴⁰. Whereas certain analysts link the growth of Chinese investment in Tajikistan to a strategic expansion in Central Asia⁴¹, it should be noted that the Chinese mining firms currently operating in the country are not large Beijing-controlled SOEs, but a large private company as Zijin, which operates a gold mine and plans to develop four more, and two junior mining companies, one of them based in Xinjiang, the Chinese province bordering Tajikistan. Geographical proximity is thus a key factor here, but Chinese mining investment can also be contextualized within a wider trend, as Tajikistan ranked 16 in the world in the United Nations FDI Inward Performance Index in 2006, illustrating important FDI inflows at a level that is above the country's expected potential⁴².

--- Table 2 here ---

Peru ranks fourth in the list by number of projects, but the size of the mining projects that Chinese companies are undertaking in the Andean country is by far much larger than those in Tajikistan. Peru is also a much more typical destination for mining investment, ranking fifth in the world according to the Engineering and Mining Journal's Annual Survey of Global Investment⁴³. Chinese mining investment in Peru therefore needs thus to be contextualized within the wider trends of privatization and transnationalization of the country's mining industries since the early 1990s⁴⁴. Peru's liberal mining regime and its location in the Pacific Rim are undoubtedly attractive to Chinese firms, but equally important is the history of Chinese investment in the country prior to the 2000s. Shougang Corporation became the first Chinese SOE to undertake an overseas mining project when it acquired the Marcona mine in Peru as early as 1992. China National Petroleum Corporation (CNPC) followed shortly when it was granted a service contract in the Talara field in 1993. According to the general manager of a Chinese mining company operating in Peru 'you need to understand Chinese culture...

The main reason why there are more and more Chinese companies in Peru is because of Shougang. Nobody wants to be the first to arrive to a country. If there is more Chinese people and companies

⁴⁰ United Nations Economic and Social Commission for Asia, 'Investment climate in Tajikistan: Country report', Regional Round Table on Foreign Direct Investment, 3-4 April 2003.

⁴¹ Alexander Sodiqov, "China boosts investment in Tajikistan", *Central Asia-Caucasus Institute Analyst*, 7 January 2009.

⁴² United Nations Conference on Trade and Development, World Investment Report 2007.

⁴³ M. Ericsson, "E&MJ's annual survey", pp. 24-29.

⁴⁴ Jeffrey Bury, "Mining mountains: Neoliberalism, land tenure, livelihoods, and the new Peruvian mining industry in Cajamarca", *Environment and Planning A*, 37, 2(2005), pp. 221-239.

already there, this will attract others who will find it easier".45. Chinese mining investment in Peru during the 'Go Out' policy thus responds to previously existing business relations, availability of resources and opportunities for green field investment, geographical advantages, a highly liberal mining investment regime, stable political relations, and to a certain extent the large Chinese community present in the country since the 19th century.

The high number of Chinese mining projects in Ecuador is on the other hand due to the recent acquisition of Canada's Corriente Resources by a joint venture formed by Tongling Nonferrous Metals Group and China Railway Construction Corporation. The joint venture controls 17 deposits organized in four mining projects in the Corriente Copper Belt in southeast Ecuador 46. Ecuador is a country also geographically located in the Pacific Rim, with a consolidated oil extraction industry, and a mining sector with significant development potential, even though social resistance to mining expansion remains high⁴⁷. While President Correa's current government initially appeared to hold a 'post-neoliberal' attitude towards the governance of natural resources, receptive to the views of environmentalists, fiscal concerns and internal and external pressures have in fact underpinned the expansion of extractive activities⁴⁸. Moreover, Chinese mining investment in the country is preceded by important investment in the oil sector undertaken by Sinopec and CNPC⁴⁹.

In Zimbabwe too, the high number of Chinese mining projects is due to the strong presence of a Chinese company, Sinosteel, which through its 92 percent share in Zimasco controls four mining projects in the country since 2007. It might as well be related to Zimbabwe's "Look East Policy", initiated in 2003. As part of this strategy, Zimbabwe has sought aid and economic cooperation with China and other Asian countries since the international donor community's reacted negatively to Zimbabwe's forceful land redistribution programme and allegedly fraudulent presidential elections in

⁴⁵ Personal interview, Beijing, July 2010.

⁴⁶ Chinamining.org, "Tongling, China Railway to Invest \$3b in Ecuador mine", 16 August 2010, accessed at http://www.chinamining.org/Investment/2010-08-16/1281941036d38289.html, 15 March 2011.

⁴⁷ Glen D. Kuecker, "Fighting for the forests: Grassroots resistance to mining in northern Ecuador", *Latin* American Perspectives, 34, 2 (2007), pp. 94-107.

⁴⁸ Anthony Bebbington & Denise H. Bebbington, "An Andean Avatar: Post-neoliberal and neoliberal strategies for securing the unobtainable", New Political Economy, 16, 1 (2011), pp. 131-145.

⁴⁹ Ruben Gonzalez-Vicente, "Chinese extractive investment in Peru and Ecuador: Natural resource regimes, business backgrounds and local contexts", Working Paper.

2002⁵⁰. While there is a perception that Chinese companies have filled in the vacuum that followed the international rejection to President Mugabe, it is important to remark that large transnational mining companies such as Rio Tinto or Anglo American continue to operate in the country. Furthermore, the fact that Chinese firms may benefit from the reorientation of political ties in the African country – and from China's foreign policy non-interventionist rhetoric – is not enough to put into doubt the economic objectives that drive their investment decisions. For instance, this can be compared to the benefits that US firms receive at times to invest in countries allied to the US, or the ways in which international organizations underwrite business environments that are beneficial to the preferences of companies that adopt an Anglo-American model of corporate governance.

The last two countries in the top eight positions of the ranking of destinations for Chinese mining investment are Laos and Myanmar. The most obvious factor attracting Chinese investment to these two Southeast Asian countries is geographical proximity. The major investors in Laos are countries in its vicinity, particularly Thailand, China and Vietnam⁵¹, while Southeast Asia specialist William Case remarks how Laos has become more receptive to the US to counterbalance China's growing role in the region⁵². Major mining investment in Laos is conducted by companies based in Australia, China, Thailand and Belgium. Laos currently hosts two Chinese mining companies: China Nonferrous Metals Mining (CNMM), with a project in the Bolaven Island Bauxite Deposit acquired prior to 2000, and China Minmetals, currently operating two mines and with an additional project at the conceptual stage of mining development. Interestingly, China's mining investment in Laos is channelled through Australia, as CNMM operates through a joint venture with Australia's Ord River Resources (of which 20.1 per cent belongs in turn to CNMM) since 2006, and Minmetals invests in Laos through its Australian subsidiary, Minerals and Metals Group Ltd. Australia, which acquired its Laos mining rights from Australian-based miner Oz Minerals.

The case of Myanmar is more unique, as Chinese mining companies are the only major international investor in the country's mining sector. In Myanmar, apart from geographical proximity, Chinese mining companies have benefited from the uniquely stable political ties between China and the

⁵⁰ Friedrich-Elbert-Stiftung, "The 'Look East Policy' of Zimbabwe now focuses on China", Policy Briefing Paper (2004), accessed at http://library.fes.de/pdf-files/iez/50063.pdf, 15 March 2011.

⁵¹ Brian McCartan, "Big is beautiful", *Asia Times Online*, June 23 (2010), accessed at http://www.atimes.com/atimes/Southeast_Asia/LF23Ae01.html, 20 March 2011.

⁵² William Case, "Laos in 2010: Political stasis, rabid development, and regional counter-weighting", *Asian Survey*, 51, 1 (2010), pp. 202-207.

country's military regime, which provides a good investment environment for Chinese firms while other foreign companies gradually retreat. For example, China's Norinco acquired rights in the Monywa mine in 2010 after Canada-based Ivanhoe Mines abandoned a joint venture to run the mine with a Myanmar state-owned company in 2007⁵³. The other Chinese mining company with projects in Myanmar is CNMM, with two projects acquired in 2004 currently at the conceptual stage. While Myanmar's military junta has benefited from economic engagement with China and thus opened its doors to Chinese companies, scholarly analyses point towards China's acknowledgement of the junta as problematic ⁵⁴. Conversely, they have also emphasized that Myanmar political elite hold an ambiguous stance towards China's role in the country ⁵⁵. Myanmar may thus be an uncharacteristic destination for Chinese mining investment, as illustrated by the particular backgrounds of the two Chinese companies involved in the country's mining sector: a weapons' manufacturer (Norinco), and a mining firm with an exceptionally diversified portfolio (CNMM, with operations in six countries – Australia, Chile, Laos, Mongolia, Myanmar, Zambia).

--- Table 3 here ---

The above paragraphs portray a picture of Chinese mining firms that is not too different from other transnational investors, as they respond to economic incentives – while gauging them with their own perspectives of risk and opportunity – and their overseas investment chiefly gravitates towards mature mining economies with consolidated liberal mining regimes. However, as the data shows that mining investment destinations are far from homogeneous, it is important to adopt a micro perspective on Chinese mining investment that allows understanding criteria in specific cases. While economic profitability is the guiding principle, it is also important to acknowledge that the acceptance of market dynamics is a political stance. Moreover, there are three major particularities to Chinese mining investment that distinguishes it, for the most part, from western mining investment. Whereas market mechanisms are a guiding principle for Chinese mining firms, their particular modes of market engagement are shaped by their particular organizational structures.

⁵³ Ba Kaung, "Chinese weapons maker to mine Monywa Copper", *The Irrawaddy*, 24 June 2010, accessed at http://www.irrawaddy.org/article.php?artid=18798, 21 March 2011

⁵⁴ Ian Holiday, "Beiijng and the Myanmar problem", *The Pacific Review*, 22, 4 (2009), pp. 479-500.

⁵⁵ Juergen Haacke, "China's role in the pursuit of security by Myanmar's State Peace and Development Council: Boon and bane?", *The Pacific Review*, 23, 1 (2010), pp. 113-137.

A first particularity to Chinese investors is their capacity to undertake significant infrastructural development to accompany their mining projects, in certain cases easily outbidding other transnational competitors in countries where infrastructural development is deemed a priority. This model of investment, most prevalent in Africa and Asia, is facilitated by the close ties between different Chinese SOEs in the mining, construction and engineering sectors. Table 3 ranks the top 20 Chinese overseas mining projects by estimated or promised investment. Among these top positions we find projects in developing countries with different levels of consolidation as liberal mining economies, such as Afghanistan, Democratic Republic of Congo, Ecuador, Gabon, Liberia, Myanmar and Papua New Guinea. Interestingly, infrastructural projects are often part of package offers that emulate the deals offered by Japan and the West to tap China's resources decades ago⁵⁶. For example, the Aynak project in Afghanistan will entail the building of a 400 MW power station and a railway line from Logar province to Afghanistan's borders⁵⁷. This project has been bitterly received by some western media which affirm that 'while the United States and other North Atlantic Treaty Organization countries are providing the bulk of the security for Afghanistan (...) the firms that are profiting from the resource boom are primarily Chinese',58. This example explains how in some cases Chinese firms make successful use of their networking advantages to penetrate certain countries' mining sectors, while it also illustrates how western companies (American in this case) would also expect to benefit from dubious 'market mechanisms', such as NATO's military intervention in Afghanistan in this case.

A second particularity of Chinese mining firms is their limited reliance on stock markets and shareholder investment, which allows them to undertake projects where profits will only materialize in the medium and long term. As Ha-Joon Chang explains in several of his writings, the increased power of shareholders in western firms runs in detriment to long term corporate development, as shareholder value maximisation forces managers to deliver short-term results and minimize

⁵⁶ Deborah Brautigam, *The Dragon's Gift: The Real Story of China in Africa* (Oxford: Oxford University Press, 2009)

⁵⁷ Afghanistan Investment Support Agency, "Afghanistan will soon become one of the world's major copper producing countries: Ainak Copper Mine", accessed at http://www.aisa.org.af/files/media/news/english/Ainak%20Copper%20Mine%20.pdf, 21 March 2011.

⁵⁸ Charles Wallace, "China, not U.S., likely to benefit from Afghanistan's mineral riches", *Daily Finance*, 14 June 2010, accessed at http://www.dailyfinance.com/story/investing/china-us-afghanistan-mineral-mining/19515409/, 21 March 2011.

investment in projects with long-term results⁵⁹. Large Chinese mining firms are not constrained by these operational structures, and in fact benefit from easy access to credit from state-owned policy banks in China. Finally, and precisely because of this organizational structure, Chinese investment choices are not constrained by civil society campaigns in the same ways as major transnational companies. This allows them certain flexibility to invest in countries ruled by so-called 'rogue regimes'. Nonetheless, to be fair, civil society campaigns against the involvement of western extractive companies in controversial countries occur precisely because this involvement has existed.

Discussion: Chinese Mining and Development Futures in Latin America

As illustrated above, Peru and Ecuador receive the main bulk of Chinese mining investment in Latin America, but Chinese mining firms also acquired rights to mining exploitation in countries such as Argentina, Chile, Guyana, Mexico during the 2000-2010 period, as illustrated in Table 4. The fact that all of these projects were acquired from other transnational mining companies is indicative of the preference given by Chinese mining companies in Latin America to market mechanisms, eluding direct dealings with national governments for the acquisition of mining rights. In addition to the projects in the list, Peru and Chile host a Chinese project each which was acquired previous to the 2000s. Furthermore, Chile (where state-owned Codelco has also an important joint venture with Minmentals) and Brazil are major exporters of minerals to China, and Chinese companies' recent interest in Colombia is also remarkable. But countries with important mineral reserves such as Bolivia and Brazil do not currently host Chinese controlled projects.

--- Table 3 here ---

Chinese mining investment allocation in the region responds to similar perceptions than investment by other transnational companies. The Fraser Institute published a survey of mining companies' perceptions towards investment destinations in 2010 which, while biased in its views about what makes a good mining destination, reflects some general perceptions among (mostly western) mining companies⁶⁰. The survey ranks a number of Latin American mining destinations from best to worst as follows: Chile (82.5 points), Mexico (62), Peru (59.1), Colombia (56.9), Brazil (56.5), Argentina

⁵⁹ Ha-Joon Chang, "Getting capitalism right", *The Guardian*, 16 September 2010, accessed at http://www.guardian.co.uk/commentisfree/2010/sep/16/getting-capitalism-right-lehman-brothers-collapse, 21 March 2011.

⁶⁰ Fred McMahon & Miguel Cervantes, *Survey of Mining Companies 2009/2010: 2010 Mid-Year Update* (Vancouver: Fraser Institute, 2010)

(44), Venezuela (12.5), Bolivia (10.2) and Ecuador (3.8). Except for Ecuador, which case was described in more detail above, Chinese mining companies have invested or made important attempts to invest in high ranked countries and avoided so far Venezuela and Bolivia. This stays in contrast to Africa, a region where Chinese mining companies have not invested in the two highest ranked countries (Botswana and Ghana), but have done so significantly in the two lowest ranked ones (Zimbabwe and Democratic Republic of Congo). Chinese perceptions of mining investment risk in Latin America are hence more attuned to those of other transnational investors.

Nonetheless, Chinese mining firms are not immune to the politicized dynamics of natural resource extraction in the region⁶¹. This has resulted in a number of conflicts of different magnitude, and managed with different levels of success. In some cases certain Chinese companies have faced conflicts with mine workers, as for example in the cases of China Metallurgical Group in Argentina or Shougang since its arrival to Peru in the early 1990s⁶². In other cases, major problems have emerged in the negotiations (or lack of them) to obtain informed consent from communities at the places where mining development is planned to take place. While Chinalco in Peru has managed to successfully negotiate the relocation of a whole town, Zijin is immersed in a highly problematical and emblematic case of resistance against the mining activities that the company and Peru's central government try to push forward. Zijin's conflict in Rio Blanco was inherited from the previous company managing the project, Monterrico Metals, which is being sued in an English court for alleged responsibility in the deaths and torture of a number of peasants in a clash between police forces and locals who protested against the mine. Community relations are often managed by local staff, but as these two cases illustrate, the methods vary greatly from one company to the other.

Regarding the general management of the company, some Chinese companies are managed by Chinese people who work on short rotational periods in Latin America, but others such as Chinalco and China Minmetals in Peru are attempting to build up more diversified managing teams, hiring both nationals from the host country and foreigners from other countries with mature mining industries such as the US, Canada or Australia. These cases highlight how Chinese mining

⁶¹ For a conceptual discussion view for example Ruben Gonzalez-Vicente, "The political economy of Sino-Peruvian relations: A new dependency?", forthcoming in the Journal of Current Chinese Affairs.

⁶² Gonzalez-Vicente, "Chinese extractive investment in Peru and Ecuador"; No a la Mina, "An eye-opener for the Chinese at the Sierra Grande mine", 6 April 2010, accessed at http://www.noalamina.org/english/argentina/rio-negro/an-eye-opener-for-the-chinese-at-the-sierra-grande-mine, 23 March 2011.

companies, not unlike western ones, conduct their Latin American operations with different corporate approaches to each other and subsequently with different developmental impact. In this sense, it is important to note how the largest, most internationalized, national level SOEs (China Minmetals and Chinalco) have avoided significant conflicts in Latin America so far, which indicates that, as in the case of western companies, junior firms with less resources and subject to less public scrutiny tend to more often mishandle the social and environmental dimensions of mining. Also interestingly, larger and more emblematic national SOEs have an emphasis in products, that is, a stable supply of resources, having for instance signed loans for supply in Chile. Smaller private firms focus on benefits instead.

Given the differences and convergences between Chinese companies, as well as between Chinese companies and western ones, much of the developmental progress to be made with regards to mining investment is up to the particular national politics of resource governance. More specifically, I prefer to distinguish between the policies (regulations designed to impel industrial development through mining investment) and the politics (actual implementation and shifting power relations resulting of different scales of governance and resistance) of resource governance. Significant amounts of scholarly literature emphasize the necessity to regulate mining investment, creating incentives for upstream and downstream linkages that could enhance technological development, encouraging the parallel development of infrastructures that could benefit other sectors of the economy, designing taxation systems that take into account the non-renewable nature of minerals and that maximize state revenues, negotiating on case to case basis the responsibilities that a country and its communities would like to demand from a company, severely punishing companies unable to meet requirements, and even halting mining projects when optimal conditions cannot be achieved⁶³. As mining activities create few job opportunities, governments in the region should attempt to diversify their economies through these policies. While countries like Chile and Brazil have been more careful in maintaining a certain control of their resource sectors, others like Peru rely instead on 'free market' precepts, which in the case of the Andean country inevitably favour static comparative advantages (natural resource exploitation) and provide little or no incentive for enhancing the competitiveness of other sectors.

⁶³ Ruben Gonzalez-Vicente, "China's engagement in South America and Africa's extractive sectors: New perspectives for resource curse theories", *The Pacific Review*, 24, 1 (2011), pp. 65-87; Paul Jordan, "Minerals to support a democratic developmental state: Towards a resource-based developmental strategy", Presented at the Mining for Change Conference, September 2010, Johannesburg; Macartan Humphreys, Jeffrey D. Sachs & Joseph E. Stiglitz, *Escaping the Resource Curse* (New York: Columbia University Press, 2007).

At a different level, the *politics* of mining raise further questions about how to integrate long term industrial development strategies with the current concerns of the populations whose livelihoods are endangered by the expansion of mining. As Bebbington and Bebbington manage to demonstrate⁶⁴, both liberal and 'post-neoliberal' governments in the region are under pressure to expand extractive activities, to an extent that has ignited conflicts with local populations. For liberal governments in the region, such as Peru's, the case for mining expansion is merely based on a belief in 'free market' and the unequivocal goods of FDI. On the other hand, post-neoliberal governments, such as Bolivia and Ecuador's, are under pressure to seek the financial means that could support their social and industrial programs within the short-term mandates that they are granted by systems of democratic representation. The power structures underpinned by centralized ideologies of development that require sacrificing livelihood-supporting land uses is powerfully reflected in political ecology scholarship. In this literature, 'subaltern strategies of localization' 65, or the defence of local conceptualizations of 'place', are contrasted with globalocentrism and externally designed strategies of development. Respecting the diversity of understandings of development, decentralizing not just state bureaucracies but also legitimacy, and ultimately incorporating a sensible understanding of the politics of mining to the policies of resource governance, remain key challenges in the region and across the world. The ways in which governments throughout Latin America juggle with the policies and politics of natural resource governance will shape to a great extent the impacts of Chinese mining investment, which most defining characteristic is being mining investment rather than being Chinese.

There are however a few features that characterize Chinese mining firms which are of relevance to understand their immersion in Latin American natural resource sectors. A World Resources Institute report published in 2007 distinguishes seven types of risk to which extractive companies are exposed: financial risk, construction risk, operational risk, reputation risk, credit/corporate risk, host government risk, and host country political risk⁶⁶, to which I would add home country legal risk. Due to their organizational structures, Chinese companies are less exposed to some of these risks than western companies are. Financial and corporate risks (the possibility that financial institutions or

⁶⁴ Bebbington & Bebbington, "An Andean Avatar"

⁶⁵ Arturo Escobar, "Culture sits in places: Reflections on globalism and subaltern strategies of localization", *Political Geography*, 20, 2 (2001), pp. 139-174.

⁶⁶ Steven Herz, Antonio La Viña & Johathan Sohn, *Development Without Consent: The Business Case for Community Consent* (Washington DC: World Resources Institute, 2007)

investors may decrease their current and potential financing) are limited, as companies are at most only partially listed, and it is unprecedented that Chinese policy banks reprimand major Chinese SOEs cutting their financial lines, despite the existence of regulatory procedures through which central state authorities could halt overseas investment projects. Reputational risks exist, yet the negative impacts on public opinion on market value are less important than potential reluctances to the future projects of a company. For example, Chinese firms in Peru have been so far reluctant to participating in multilateral initiatives of transparency such as the Extractive Industries Transparency Initiative, or to integrating groups such as the International Council on Mining and Metals. Finally, home country legal risk is at this point virtually inexistent, as there are no cases of Chinese mining companies sued in Chinese courts for social or environmental failures in their overseas operations. These differences highlight some limitations in the strategies usually adopted by civil society to pressure mining firms in Latin America. Civil society organizations, in sight of weak states in the region, and making use of transnational networks, often pursue campaigns in the country where a company is based. This approach is very limited in the case of China, except for constructive critiques and campaigns for capacity building and raising awareness of potential risks.

This is not to deny the potential for civil society engagement with Chinese mining firms. In interviews that I have conducted over the last year Chinese companies and academics show a sincere concern about the adaptation of Chinese businesses to Latin American contexts. But the particularities of Chinese firms call for the need of a restructuration of the ways in which mining conflicts are 'rescaled' by civil society. On a more positive note, it should not be left unspoken that Chinese mining firms have undergone more structural transformations in the last two decades than any other western firms, in order to adapt to international standards and increased market competition. This predisposition to learn and adapt, as well as China's foreign policy rhetoric of non-intervention in state sovereignty, may be used by Latin American governments in creative ways to negotiate requirements that other western firms would be unwilling or incapable to fulfil. This may include the kind of infrastructural developments that Chinese mining investment has enhanced in certain African countries, but also any further inputs that the host country deems necessary. Chinese mining firms, still at an early stage of internationalization, and backed by the significant financial capacities of the Chinese state, could potentially develop the capacity of negotiating conditions that go beyond the rigid mechanisms of 'the market' as this its currently understood.

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⁶⁷ Håvard Haastard & Arnt Fløysand, "Globalization and the power of rescaled narratives: A case of opposition to mining in Tambogrande, Peru", *Political Geography*, 26, 3 (2007), pp. 289-308.

Conclusion

This paper has provided a quantitative analysis of the global allocation of Chinese mining investment that shows important convergences with international mining investment overall. The analysis has been subsequently situated between two seemingly contradictory analytical trends: one holding that Chinese investment is political and geostrategic, and the other focusing instead on the market incentives that encourage Chinese investment. Market risk and opportunity, gauged at the firm level, are the main criteria determining Chinese mining investment allocation. However, the market is not a natural or neutral playing field, but a dynamic institution produced, contested and reproduced by the political preferences of competing actors. The fact that Chinese mining firms increasingly accept the rules of the game of the market is hence an inherently political process. The internationalization plans drawn by a central state wary of increased domestic and international market competition, the growing autonomy of firms that design their own internationalization strategies, and the contingencies encountered in different countries shape the decentred internationalization of the Chinese state and of China's mining industry⁶⁸. The ways in which the politics of market transform mining firms in different manners suggest the necessity of a research agenda that acknowledges difference at the micro level. Therefore, to the task of analyzing the political pressures of the market over Chinese mining firms we should add that of disaggregating and contextualizing Chinese mining investment in order to understand its variegated developmental impacts.

The paper has briefly illustrated this difference with cases of Chinese mining investment in Latin America. Some commonalities were described, as for instance the ways in which the structural organization of Chinese firms hinders their engagement with civil society forces, as well as their potential adaptability to the political requirements of central governments. But important differences were recognized (particularly between larger central SOEs and smaller and less experienced companies), regarding issues such as community engagement, relationships with the workforce, and internationalization of the managing positions. The challenge for Latin American governments remains mostly in the particular policies and politics of resource governance of individual countries. The task for academic research is to reflect Chinese overseas mining investment as a *process* in which China's industrial and foreign policies, Chinese firms' corporate strategies, host countries' policies and politics of resource governance, and different actors' developmental cultures are interwoven in shaping developmental trajectories in the Latin American context.

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⁶⁸ Gonzalez-Vicente, "The decentred internationalization of the Chinese state".

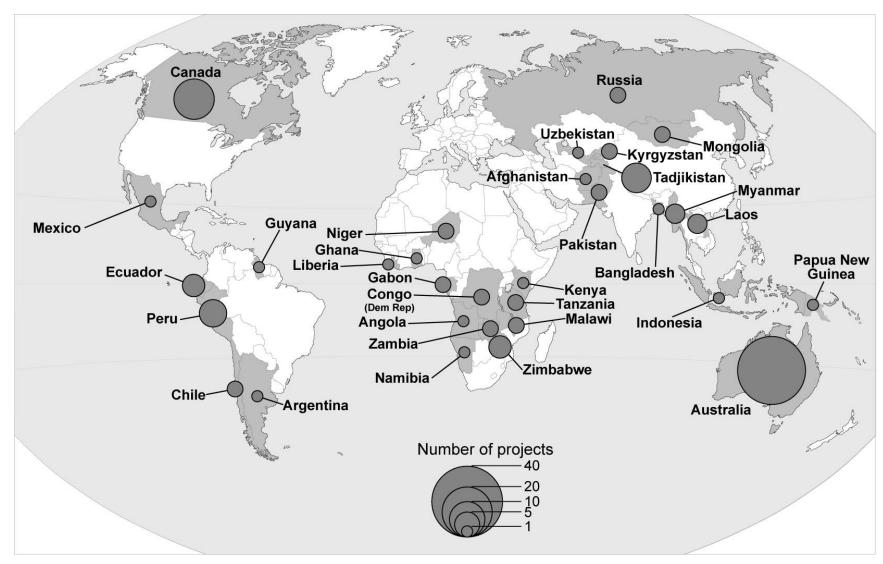
Table 1: Top Chinese Mining Companies by Number of Controlled Overseas Projects (2000-2010)

		Number of	Number of	
Company	Ownership	Projects	Countries	Main Target Minerals
China Minmetals	State-owned	16	4	Copper, Gold, Lead, Zinc
Yankuang Group	State-owned	12	1	Coal, Iron Ore
Sinosteel Corporation	State-owned	10	2	Iron Ore, Uranium
China Nonferrous Metal Mining	State-owned	7	4	Copper, Gold, Zinc, Nickel
Jilin Horoc Nonferrous Metals Group	State-owned	7	1	Nickel
Zijin Mining Group	Private ^a	7	3	Copper, Gold, Zinc
China Metallurgical Group Corporation	State-owned	6	6	Copper, Iron Ore, Zinc, Nickel
Shaanxi Non-Ferrous Metals Holding Group	State-owned	4	1	Zinc, Copper
Tongling Nonferrous Metals Group Holdings	State-owned	4	1	Copper, Gold
Zhongjin Gold Co. Ltd	State-owned	4	1	Zinc, Copper
East China Mineral Exploration & Development Bureau	State-owned	3	2	Rare earths, Lead

Notes: a 32% state-owned

Source: Raw Materials Database (2011) and various media. Author's elaboration.

Figure 1: Allocation of Chinese Overseas Mining Investment (2000-2010)



Source: Raw Materials Database (2011) and various media. Author's elaboration, with assistance from the Department of Geography's Cartography Unit at the University of Cambridge.

Table 2: Top Destinations for Chinese Mining FDI 2000-2010 (by number of controlled projects)

	Chinese	Percentage of	2000-2010 non Chinese FDI M&Q	Country's total
Country	Projects	Chinese Projects	(Percentage of world's total)	mining projects
1. Australia	37	33.04%	15.30%	1046
2. Canada	13	11.61%	13.20%	540
3. Tajikistan	7	6.25%	0.10%	27
4. Peru	6	5.36%	3.30%	188
5. Ecuador	4	3.57%	0.10%	29
5. Zimbabwe	4	3.57%	1.60%	59
7. Laos	3	2.68%	0.30%	8
7. Myanmar	3	2.68%	0.00%	12
TOTAL	112	100.00%		6643

Source: Raw Materials Database (2011) and various media. Author's elaboration.

Table 3: Top 20 Chinese Overseas Mining Projects by Acquisition Price and Promised Investment (2000-2010)

Rank	Company	Project	Mineral	Country	Acquisition	Estimated or
					Price ¹	Promised
						Investment ¹
1	Nanjinzhao Group	Pampa de Pongo	Iron Ore	Peru	200	3280
2	China Metallurgical Group	Aynak Project	Copper	Afghanistan		3000
2	China Railway Engineering &	Dikuluwe & Mashamba Mines	Copper & Cobalt	Congo (Dem Rep)		3000
	China's Sinohydro					
4	China Minmetals	Galeno, Hilorico & Pashpap	Copper & Gold	Peru	436	2500
5	Chinalco	Toromocho Deposit	Copper	Peru	762	2150
6	China Union Investment	Bong Mine	Iron Ore	Liberia		2600
7	Shunde Rixin Development	Vallenar Mine	Iron Ore	Chile		1900
3	Zijin Mining Group	Rio Blanco Deposit	Copper	Peru	182	1440
9	China Metallurgical Group	Ramu Mine	Nickel & Cobalt	Papua New Guinea		1370
10	Tongling Nonferrous Metals	Panantza Deposit	Copper	Ecuador	652²	1300
11	Shougang Corporation	Marcona Mine	Iron Ore	Peru		1000
12	Norinco	Monywa Mine	Copper	Myanmar		997
13	China Metallurgical Group	Cape Lampert Deposit	Iron Ore	Australia	400	550
14	China Nonferrous Metal Mining	Tagaung Taung Mine	Nickel	Myanmar		850
15	Tongling Nonferrous Metals	Mirador Mine	Copper & Gold	Ecuador	652²	418
16	China National Machinery Import &	Belinga Project	Iron Ore	Gabon		790
	Export Corporation					
17	Sinosteel Corporation	Weld Range Deposit	Iron Ore	Australia		655
18	China Minmetals	Izok Lake Base Metal Deposit	Zinc, Lead,	Canada		539
			Silver, Copper			

19	Shougang Corporation	Mount Gibson Deposit	Iron Ore	Australia	538
20	Luneng Group	Berezov Deposit	Iron Ore	Russia	494

Sources: Raw Materials Database (2011), Media Reports. Author's elaboration.

¹ Amounts in million US dollars

² Paid to buy Canada's Corriente Resources

Table 4: Chinese Mining Projects in Latin America (acquired 2000-2010)

Year	Company	Project	Stage	Country	Estimated or
					Promised Investment ¹
2007	China Metallurgical Group	Sierra Grande Iron Ore Mine	Operating	Argentina	97
2007	Bosai Minerals Group	Montgomery Bauxite Mine	Operating	Guyana	Not available
2007	Zijin Mining Group	Rio Blanco Copper Deposit	Feasibility	Peru	1440
2007	Chinalco	Toromocho Copper Deposit	Prefeasibility	Peru	2150
2008	Jichuan Group Ltd	Bahuerachi Copper Deposit	Conceptual	Mexico	Not available
2009	China Minmetals	Galeno Copper Deposit	Prefeasibility	Peru	2500 ²
2009	China Minmetals	Hilorico Gold Deposit	Conceptual	Peru	
2009	China Minmetals	Pashpap Copper Deposit	Conceptual	Peru	
2010	Shunde Rixin Development	Vallenar Iron Ore Mine	Project	Chile	1900
2010	Tongling Nonferrous Metals	Mirador Copper/Gold Mine	Feasibility	Ecuador	418
2010	Tongling Nonferrous Metals	Mirador Norte Copper/Gold Mine	Conceptual	Ecuador	Not available
2010	Tongling Nonferrous Metals	Panantza Copper Deposit	Conceptual	Ecuador	1300
2010	Tongling Nonferrous Metals	San Carlos Copper Deposit	Conceptual	Ecuador	Not available
2010	Nanjinzhao Group	Pampa de Pongo Iron Ore Deposit	Conceptual	Peru	3280

Sources: Raw Materials Database (2011), Media Reports. Author's elaboration.

¹ Amounts in million US dollars

² Total investment planned for the Galeno, Hilorico and Pahspap deposits altogether