Exporting National Champions: China’s OFDI Finance in Comparative Perspective

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Abstract

Scholars have compared China’s liberalization, inward FDI attraction, and export promotion policies to those of its “Asian Miracle” predecessors to assess China as a ‘developmental state.’ We build on that literature by drawing a new but similar comparison: the extent to which Chinese development banks have financed the globalization of China’s ‘national champion’ firms. We focus on the role of state finance in promoting China’s outward foreign direct investment (OFDI) in comparative perspective. In order to answer this research question, we created a database of Chinese finance for OFDI and compared our results to the existing literature on previous developmental states. We estimate the total value of China’s OFDI finance from 2002-2012 at $140 billion. As a percentage of total OFDI, China’s lending is roughly three times 55% higher than Japan, the previous global leader in OFDI finance. Like Japan and South Korea at earlier developmental stages, China’s lending also goes overwhelmingly toward natural resource acquisition, though to a much greater degree. Unlike Japan or Korea, we find that China’s market entry has more to do with developing project expertise and supporting exports than it does with tariff-hopping or outsourcing industries that are fading on the mainland. We identify two major reasons for China’s high (31%) ratio of OFDI lending to total OFDI. First, China has a greater incentive to give OFDI loans than Japan or Korea ever did because its borrowers are state-owned so it can more easily dictate how they use the money. Second, China has a greater capacity to give OFDI loans because it has significantly higher savings and foreign exchange reserves than Japan and Korea, both today and especially during equivalent developmental stages.
Introduction

Numerous studies compare the policies behind China’s rise to those of its “Asian Miracle” predecessors, including liberalization, inward FDI attraction and export promotion. In this paper, we focus on the less researched tool of outward foreign direct investment (OFDI) promotion by state development banks. Starting in the 1950s, Korean and Japanese policy banks gave billions of dollars in loans to “national champion” companies in order to encourage overseas investment. In 2003, Solís correctly labeled Japan the “undisputed leader” of OFDI lending (Solís 2003b 153). Today, Chinese state-owned banks are loaning billions to state-owned companies to invest abroad as part of the government’s ‘Go Global’ policy. This paper compares China’s OFDI lending to that of Japan and Korea today and during their ‘developmental’ periods.

We also consider the motives for the Chinese loans and compare them to Japan and Korea. Scholars have suggested that in the case of Japan, the loans were designed to acquire primary resources, gain access to advanced technology, enter foreign markets, and outsource declining industries. The Chinese government and numerous scholars agree that China encourages OFDI mainly for the three former motives. These scholars base their arguments about the government’s motives on OFDI figures, which represent the priorities of China’s diverse companies, not the government’s intentions. We consider the state’s own OFDI lending to be a better indicator of its motives. Using our OFDI loan database, we evaluate both the sectors and motives behind China’s OFDI lending.

In the sixty years since Japan began a period of unprecedented economic expansion, Korea and now China have used similar tools to achieve record economic growth. Scholars have documented the policies of these “Asian Tigers” and discussed the lessons their example sets for other developing countries (Wade 1990; World Bank 1993; Krugman 1994; Stiglitz 1996; Amsden 2001). While other East Asian countries have achieved high growth, the state-led industrialization strategies of Japan, Korea and Taiwan bear the strongest similarities to China’s strategy today (Perkins 1994). Yet today, as China shatters records for sustained growth, much of the literature fails to draw parallels back to these examples.

Scholars have documented how the Asian Tigers used the state to coordinate a structural shift toward industrialization. They show that Japan, Korea, and Taiwan gradually liberalized trade, investment, and finally capital markets after using state policy to achieve a certain level of industrialization and per capita income (Johnson 1982; Wade 1990; Amsden 1992; Amsden 2007). Alongside industrial policy and gradual liberalization, the Asian Tigers gave strong state financial support to
“national champion” companies to groom them for international competition. Since infant Asian industries could not compete with Western companies, the governments of Japan, Korea, and Taiwan launched two-pronged strategies of protection and promotion. They protected domestic exporters in capital-intensive industries through import tariffs, foreign exchange controls, and in Japan’s case direct blocks on foreign investment (Johnson 1982). The governments also purchased technology licenses to learn from more advanced economies (Komiya et al 1988). In exchange for the loans, they required and incentivized borrowers to export in order to force them to become competitive (Amsden 1989; Lawrence and Weinstein 1999). Scholars disagree on the extent to which the Asian Tigers’ active efforts to support national champions contributed to the success of these industries but it is clear such policy played some role (Galenson 1979; Amsden 1989; Wade 1990; Lawrence and Weinstein 1999; Ozawa 1999).

Perhaps the most undisputedly important feature of state promotion was subsidized finance for these national champions. Indeed, one of the most critical studies on the role of industrial policy in the East Asian Miracle singled out subsidized credit as being the only successful policy in state-led industrialization in the region (World Bank 1993). Japan offered its industrial exporters funding through the Japan Development Bank (JDB) and Export-Import Bank of Japan (JEXIM). JDB and JEXIM focused their financing on “rationalization,” or merging domestic companies to create national champions that would gain efficiency through reorganization and economies of scale (Johnson 1982). Korea went further, nationalizing all banks. It created the Korea Development Bank (KDB) and Export-Import Bank of Korea (KEXIM) to support the textile, steel, and shipbuilding industries. Since Korea could not afford as much subsidized finance as Japan, KDB and KEXIM arranged and guaranteed foreign loans (Amsden 1989; Stern 1995). In Taiwan, the government also offered substantial amounts of concessional credit to exporters (Wade 1990).

Western countries recognized the attractiveness of these national champion export subsidies for developing nations and thus sought to ban them. Under the Washington Consensus, Western nations argued that eliminating restrictions on free trade would benefit the world economy. Once the Asian Tigers began taking market share away from the West in industries like steel and shipbuilding, Western leaders began pressuring them to end the export subsidies. By the 1970s, Japan and Taiwan were under substantial pressure to end these subsidies (Komiya 1988 317; Wade 1990 96). Since Korea emerged later, the West was even quicker to challenge its subsidies (Perkins 1994; Amsden 2007). Beginning in 1975, developed countries agreed to ban subsidized export loans through the Organization of Economic Cooperation and Development (OECD) (Moravcsik 1989).
At the same time, the leading economic powers have largely ignored another tool of the Asian Miracle: government funding for outward foreign direct investment (OFDI). Europe and the U.S. have occasionally toyed with public financial support for companies that invest abroad. But in addition to the problem of identifying the right companies to support, scholars have shown that overseas investment support suffers from moral hazard, since governments are unable to force companies to use the funds to follow government priorities (Safarian 1993, Solís 2003b 156). Governments worry that companies will use this support to move jobs and profits overseas (Ahn 2005). Why pay a company to remove value from your economy?

Japan became a pioneer in government-subsidized OFDI in the 1950s, with little competition. Even before the government liberalized OFDI in the 1960s, the government began to offer subsidized loans to companies investing abroad. In 1953, it started a branch of JEXIM focused on OFDI, which gave almost $70 billion by 1999. Solís argued in 2003 that “No other country in the world is as active as Japan in financing its corporations’ foreign investment” (2003a 103). Indeed, while Japan’s OFDI lending continues today, other nations have displayed little interest in this strategy. While Japan’s public FDI financing comprised 10.3% of its total OFDI from 1953 to 1999, the German equivalent of JEXIM has contributed OFDI financing equivalent to only 0.53% of German OFDI. In the U.S., the Overseas Private Investment Corporation (OPIC) is explicitly prohibited from lending in support of OFDI that might hurt American employment or exports. As a result, OPIC’s OFDI financing comprises 0.08% of American OFDI (Solís 2003b 156). There are no WTO or OECD rules limiting public OFDI financing. While Japan leads, most of the world wonders why the Japanese would possibly want to pay companies to outsource jobs.

With time, Japan’s leadership in this area has only grown. Japan Bank of International Cooperation (JBIC), the successor to JDB, has evolved from almost entirely giving export credits in 1950 to giving 74% OFDI loans in 2012 (JBIC 2013 12). When Japan met its “lost decade” in the 1990s, many critics in Japan railed against the hollowing-out of Japanese industry (kudoka) that resulted from outsourcing labor-intensive production (Solís 2003a 106). But rather than backing off of FDI funding, the government broadened FDI loans to small and medium enterprises (Solís 2003a 116).

The Korean state has also backed OFDI, though less enthusiastically than Japan. From 1976 to 1999, KEXIM’s OFDI loans comprised 9% of Korea’s total OFDI, only 1.3% short of Japan (Solís 2004 16). However, the Korean figure is high largely because total OFDI is low. In 1995, nine years after the state relaxed its grip on OFDI controls, FDI as a percent of GDP was only 2.24%, versus 6% in Japan and 9.8% in the U.S. (Solís 2004 214). The 9% ratio is due mainly to the fact that Korea had little
OFDI in the denominator. Most of the OFDI lending in the numerator was for scarce natural resources. By the 1990s, OFDI lending in both Korea and Taiwan grew substantially, but it still lagged OFDI rather than leading it. Most OFDI came from Korea’s chaebol groups, since they were able to borrow enough funding internationally to invest abroad without help from the government.

**Enter China**

It is well known that China has followed Japan, Taiwan and Korea in subsidizing capital-intensive domestic industries and supporting national champions with export subsidies (Amsden 2001 281). Scholars have traced China's state-led industrial development and export strategy back to the legacy of Japan, Taiwan and Korea (Buckley 2007). Scholars began using the phrase “China, Inc.” to describe China’s state-led capitalism, just as they had used “Japan, Inc.” in the 1960s and 1970s and “Korea, Inc.” in the 1980s (Downs 2011; Pempel 1987; Lee and Han 2006). Just like in Japan and Korea, the Chinese government created China Development Bank (CDB) and China Export-Import Bank (CHEXIM) in 1993 as two new policy banks that would lend according to government priorities rather than commercial success.

CDB and CHEXIM have become the major forces behind China’s “Go Global Policy.” In 1998, then President Jiang Zemin championed the internationalization of Chinese investment and lending. He argued that “Regions like Africa, the Middle East, Central Asia, and South America with large developing countries [have] very big markets and abundant resources; we should take advantage of the opportunity to get in” (Chen 2009). Scholars have shown that CDB is the main bank funding the overseas expansion of Chinese companies (Downs 2011; Gallagher et al 2012; Sanderson and Forsythe 2012; Shambaugh 2013). CHEXIM has also been a key player in China’s global financial reach (Bräutigam 2009; Gallagher et al 2012).

Recently, China has also emerged as a major OFDI lender. As with Japan and Korea, China initially blocked OFDI to conserve foreign exchange. Through the 1990s, the policy banks prioritized domestic lending. However, beginning in 2001, Jiang Zemin’s Go Global policy expanded to encourage Chinese OFDI. The state created tax incentives and signed double taxation treaties. CDB and CHEXIM began backing this policy with large loans and lines of credit. In 2004, Chinese authorities relaxed oversight restrictions on OFDI and OFDI exploded. Since 2007, Chinese OFDI has averaged over 30 billion dollars a year, easily exceeding Korean OFDI during the same period.
Scholars applying the lessons of the East Asian Miracle to China have paid little attention to public OFDI lending. First, this is because China’s OFDI lending is relatively new. But perhaps more significantly, public OFDI lending has received little attention and certainly little consensus as a “lesson” from the East Asian Miracle in general. It is not mentioned as a key strategy, and barely mentioned at all, in the studies of Japan’s economic miracle (Johnson 1990; Ozawa 1999). We begin by situating Chinese public OFDI lending in the context of the East Asian Miracle.

**Estimating Chinese OFDI Finance**

In this section, we estimate the size, composition, and terms of Chinese loans and lines of credit to support OFDI by domestic firms and we compare those estimates to figures in the literature on Japan and Korea.

China does not publish disaggregated data on CDB or CHEXIM financing. Thus, we constructed a database by combing through English- and Chinese-language news articles like the Wall Street Journal and the People's Daily, company filings with the U.S. Securities and Exchange Commission (SEC), government reports from both China and the host countries, and bank reports from CDB and CHEXIM—all documented in Appendix 1. We include only loans that were confirmed by multiple reliable sources. We compare our Chinese lending estimates with Japanese OFDI loans from the Japan Bank for International Cooperation (JBIC) and Korean OFDI from KEXIM, both today and in historical context.

Our China estimates should only be considered estimates. Neither the Chinese government nor the lending institutions publish official data on OFDI lending. Unlike Japan and Korea, its lending is spread across multiple banks, making it even more difficult to track down. It is also difficult to distinguish between OFDI and trade finance. CDB and CHEXIM provide three main types of foreign lending: loans to support foreign governments and companies, trade finance loans to support China’s exports and imports, and loans that support Chinese companies’ physical operations abroad. The two former types of loans have been catalogued for Latin America and Africa in previous research (Gallagher et al 2012; Gallagher and Bräutigam 2014). Only the latter qualifies as OFDI lending. Still, there is a significant gray area in distinguishing between FDI loans and export finance. Chinese banks

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1 CHEXIM did begin reporting “overseas investment loan” disbursement in 2009 (See Operational Highlights section of CHEXIM Annual Reports). Since CHEXIM does not report commitments, define “overseas investment loan,” or give examples of these loans, we used these numbers simply for ballpark confirmation of our estimates.
have lent billions to Chinese construction companies and their customers to build dams, ports, and telecom infrastructure abroad. We only count these loans if the Chinese firm is the owner rather than the contractor, since contractors are trading in goods and services rather than investing. However, we do consider loans supporting Build-Own-Operate-Transfer (BOOT) projects to be OFDI loans, since the contractor will own the project for a significant length of time.²

We report a lower and upper bound in addition to our main estimate because many of these loans were split between OFDI and other purposes. In many cases, the purpose of a loan was simply described as “to support the company’s Going Global strategy.” Since Jiang Zemin spearheaded China’s Go Global strategy in 1998, global expansion has become a buzzword that every company tacks on in order to receive funding. Upon closer inspection, “Going Global” finance includes not only OFDI lending, but also the financing for contractors’ customers described above and traditional export financing (as well as industrial restructuring and any domestic venture to become more internationally competitive). Often one loan will claim to cover all of these areas. We address these “all of the above loans” by giving a lower and upper bound to our estimates. The lower bound comprises all the lending that included OFDI as a possible use, while the upper bound comprises only the lending that explicitly named OFDI as its single purpose. Thus, the lower bound includes all the lending that Chinese companies could have used for OFDI, while the upper bound includes only the lending that Chinese companies did use for OFDI.

² One could complicate the boundary between loans and investment even further. Many loans promote investment on the surface but support trade on a deeper level. If a car manufacturer gets a “tariff-jumping” loan to build an assembly plant overseas, the loan will directly support overseas investment, but it also supports the export of car designs, assembly technology and unassembled car parts. If a wind turbine manufacturer gets a loan to set up a wind farm overseas, it will use the loan largely to buy its own exports. We attempt to draw a line that mirrors the definition of overseas investment finance used by JBIC and KEXIM—finance with a stated main purpose of supporting domestic companies’ overseas investment.
As shown in Table 1, since 2002, we constrain China’s OFDI lending between a lower bound of $88 billion and an upper bound of $192 billion. Using a simple average, we estimate China’s OFDI lending at $140 billion. As with China’s lending to foreign governments and companies, and despite CHEXIM’s public notices in support of OFDI lending, CDB provided the lion’s share. Gallagher et al (2012) find that CDB provided 82% of Chinese lending to Latin American governments and companies, with CHEXIM adding 12%. Our database of China’s OFDI lending revealed 64% from CDB, 24% from CHEXIM, and 9% from the Bank of China. CHEXIM is better represented in OFDI lending than foreign lending. This is not surprising since CHEXIM issued a joint notice with China’s main economic planning agency, NDRC, that both bodies “will jointly set up a credit support mechanism for overseas investments” (NDRC 2004). Still, while CDB has not issued notices on its OFDI lending policies, it provides 2.5 times more OFDI lending than CHEXIM.

A recent company survey in China suggests that despite these large loans, companies primarily finance their overseas investments through retained earnings. China Council for the Promotion of International Trade’s 2013 China Outbound Foreign Direct Investment Survey reports that only 21% of foreign-investing firms rely primarily on bank loans, while 52% rely on retained earnings (Zhang 2013). Thirty percent report using bank loans as a major source of funding, compared to 70% for retained earnings. However, this survey polls thousands of private and state-owned companies in China, mostly with revenues below $1 billion. As will be shown later, the vast majority of China’s OFDI funding goes to state-owned enterprises (SOEs) with revenues over $10 billion. Since the survey reports the results by number of firms, rather than by total revenue, its results cannot be taken as representative for our discussion of national champions. Still, it is useful to remember that companies are using retained earnings to fund OFDI in addition to these loans.

<table>
<thead>
<tr>
<th>Bank</th>
<th>Amount</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDB</td>
<td>$92,860</td>
<td>64.32%</td>
</tr>
<tr>
<td>Ex-Im</td>
<td>$34,151</td>
<td>23.66%</td>
</tr>
<tr>
<td>BoC</td>
<td>$12,310</td>
<td>8.53%</td>
</tr>
<tr>
<td>ICBC</td>
<td>$770</td>
<td>0.53%</td>
</tr>
<tr>
<td>CCB</td>
<td>$475</td>
<td>0.33%</td>
</tr>
<tr>
<td>Multiple</td>
<td>$3,800</td>
<td>2.63%</td>
</tr>
<tr>
<td>Total</td>
<td>$144,366</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 1. Chinese OFDI Finance by bank, in millions of $


<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>% of GDP</th>
<th>% of OFDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>139.9</td>
<td>0.31%</td>
<td>58.0%</td>
</tr>
<tr>
<td>Japan</td>
<td>140.7</td>
<td>0.26%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Korea</td>
<td>37.1</td>
<td>0.38%</td>
<td>20.3%</td>
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</tbody>
</table>

Table 2. Chinese, Japanese and Korean OFDI finance, 2003-2011, in billions of $

In Table 2, we compare the quantity of OFDI lending today in China, Japan and Korea. We find that they give in roughly equal proportions to GDP, but China gives far more as a percentage of OFDI. Since 2002, we constrain China’s OFDI lending between a lower bound of $88 billion and an upper bound of $192 billion. Using a simple average, we estimate China’s OFDI lending at $140 billion. Japan’s OFDI lending through JBIC since 2002 sums to $145.2 billion. Korea’s OFDI loans plus guarantees through KEXIM since 2002 total $37 billion. Since one would expect a larger, wealthier country to give more OFDI loans, we also compare these figures as a percentage of GDP. China’s OFDI lending comprises 0.31% of GDP, while Japan’s comprise 0.26% and Korea’s loans and guarantees make up 0.38%. Loans as a percentage of GDP appear fairly constant across the three countries. Finally, we compare these figures as a percentage of total OFDI, since one would expect a nation with more OFDI to invest more in OFDI loans. China’s loans come to 31% of total OFDI, Japan’s to 16%, and Korea’s loans and guarantees to 20%. China lends roughly three times more than Japan or Korea as a percentage of total OFDI. This looks very different from the GDP comparison, since China’s total OFDI comprises only 0.6% of GDP, compared to 1.4% for Japan and 1.8% for Korea.

It should be noted that our Korean OFDI figures are also imprecise. KEXIM’s Annual Report lumps together OFDI loans and guarantees. As a result, all of the KEXIM OFDI figures are overestimates because they include guarantees in addition to loans. Our Japan data includes only OFDI loans, as does the China data. KEXIM also differs by recording disbursements rather than commitments.

It appears that China is encouraging OFDI more proactively than Japan or Korea. We compared OFDI finance to total OFDI, as reported by Japan and Korea to the OECD. China’s OFDI statistics are notoriously difficult to acquire, since the Ministry of Commerce’s official statistics show most OFDI flowing to tax havens rather than

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3 KEXIM also introduced a new OFDI loan category in its 2012 Annual Report. In addition to the reported $7.2 billion in Overseas Investment Finance, it also gave $1.9 billion in Natural Resources Finance, which includes loans and guarantees to resource-related, Korean-held companies operating abroad (KEXIM 2012).

4 http://stats.oecd.org/Index.aspx?DataSetCode=FDI_FLOW_PARTNER
actual OFDI destinations (MOFCOM 2011). We used publicly available OFDI data from the Heritage Foundation's China Global Investment Tracker, created by Derek Scissors. This database most likely overestimates Chinese OFDI since it includes portfolio investment and reports publicly announced commitments rather than actual disbursements (Bräutigam 2013). Though Japan was the “undisputed leader” in OFDI loans in 2003 (Solís 2003b 153), today China gives at least 55% more OFDI finance per dollar of OFDI. From 2002 to 2012, China’s OFDI lending comprised 31% of total OFDI, in contrast to 16% for Japan and 20% for Korea. In addition, since our OFDI total is an overestimate, this 31% ratio should be considered an underestimate. China’s high loan-to-OFDI ratio suggests that the state banks are more invested in encouraging OFDI than the companies themselves. This makes sense in today's world, where South Korea and Japan’s firms have grown out of their ‘infancy’ and can finance their expansion without government support through international capital markets.

It seems more appropriate to compare China’s OFDI lending today with that of Japan and Korea when they were at equivalent stages of development. China’s OFDI encouragement makes sense, since Chinese companies have relatively little experience investing abroad and need subsidized loans to make the leap. Japanese and Korean companies, by contrast, do not need the help. They have already built global supply chains, acquiring natural resources and shipping to cheap-labor assembly plants. Indeed, JBIC’s predecessor Japan Development Bank gave enormous subsidies to the infant shipbuilding and computer manufacturing industries. Today, we find little evidence of state support for these industries because the state removed the subsidies as they became globally competitive (Shinjo 1988; Yonezawa 1988). If Japan and Korea ever mirrored China’s heavy OFDI push, it would have been decades ago.

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
<th>% of GDP</th>
<th>% of OFDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>139.9</td>
<td>0.31%</td>
<td>58.0%</td>
</tr>
<tr>
<td>Japan, 1971-1984</td>
<td>8.4</td>
<td>0.08%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

Table 3. Chinese and Japanese OFDI finance during industrialization.

When comparing China’s OFDI today to that of Japan in the 1960s and Korea in the 1980s, we find that China still stands out. First, we compare China’s 2002-2012 period with Japan in the late 1960s and 1970s, when it had equivalent per capita GDP. Japan’s OFDI lending as a percent of GDP was 0.08%, or roughly a fourth of China’s 0.31%. As Solís (2004) discusses, Japan engaged in little OFDI before 1972.
China started lending in earnest by 2003, a few years shy of reaching the same per capita GDP as Japan in 1972. Japan’s OFDI in 1972-1973 easily exceeded total OFDI from the previous two decades (Solís 2004:42). But even in 1973, when Japan gave its largest OFDI finance push of the century in response to the collapse of the Bretton Woods fixed exchange rate system and the oil crisis, OFDI lending only reached 0.20% of GDP.\(^5\) The ratio of OFDI lending to OFDI increased from 10% in 1972 to 18% in 1973 and 20% in 1974. For the periods 1951-1970 and 1971-1984, Japanese OFDI lending reached 12% of total OFDI. This ratio decreased to 9% from 1985-1999.\(^6\) Korean OFDI lending similarly comprised 9% of total OFDI from 1976 to 1999 (Solís 2004:16). All of these percentages are dwarfed by modern-day China’s 31% average.

As more companies follow the Chinese state’s enthusiastic lead, we expect Chinese OFDI to greatly increase. Japan’s lending history suggests that OFDI lending pushes do increase OFDI. Solís (2003a) demonstrates that Japan’s manufacturing OFDI loans in the 1960s through the 1980s resulted in corresponding increases in manufacturing OFDI. If OFDI lending translates to OFDI in China as well, it will cause OFDI to grow. We expect that it will happen, since Reform and Opening has required Chinese companies to act boldly upon perceived shifts in state policy. Just as city governments used Deng Xiaoping’s Southern Tour to justify economic reforms, companies endlessly cite “Going Global” as the foundation of their international ambitions. With the state pushing OFDI so strongly, it seems inevitable that companies will recognize the push and join the bandwagon.

<table>
<thead>
<tr>
<th>Country</th>
<th>Borrower</th>
<th>Rate</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Yen rate</td>
<td>0.88%</td>
<td>2011</td>
</tr>
<tr>
<td>China</td>
<td>Chinalco</td>
<td>L+0.01%</td>
<td>2008</td>
</tr>
<tr>
<td>Japan</td>
<td>$ rate</td>
<td>L+0.25%</td>
<td>2010</td>
</tr>
<tr>
<td>Japan</td>
<td>$ rate</td>
<td>L+0.44%</td>
<td>2004</td>
</tr>
<tr>
<td>China</td>
<td>TCL</td>
<td>L+0.6%</td>
<td>2004</td>
</tr>
<tr>
<td>Japan</td>
<td>Yen rate</td>
<td>2.50%</td>
<td>2005</td>
</tr>
<tr>
<td>China</td>
<td>Huawei</td>
<td>L+2%</td>
<td>2009</td>
</tr>
<tr>
<td>China</td>
<td>CNOOC</td>
<td>4.05%</td>
<td>2006</td>
</tr>
</tbody>
</table>

Table 4. Chinese and Japanese interest rates on OFDI loans (L=LIBOR)

\(^5\) Calculated with data in Solís 2004 (40) and other data compiled by Solís.

\(^6\) Calculated with data in Solís 2004 (40) and other data compiled by Solís.
We also compared the interest rates on Chinese and Japanese OFDI loans, finding that while both Japan and China subsidize their loans, Japan’s rates may be lower on average. We were able to find a few Chinese OFDI loan interest rates through interviews and newspaper articles. At the high end, China National Overseas Oil Corporation (CNOOC) reportedly took out a 4.05% fixed-rate loan in 2006. At the low end, Chinalco paid 0.01% over LIBOR, the rate that banks charge each other, for a loan in 2008. CNOOC’s loan is not particularly cheap, while Chinalco is essentially paying the lowest possible rate. We found interest rates on similar Chinese loans as well—export loans to telecom and infrastructure companies. Huawei and TCL paid spreads over LIBOR of 2% and 0.6% in 2009 and 2004, respectively. The former is a fairly typical commercial rate, while the latter is clearly subsidized. By contrast, JBIC’s reported OFDI loan interest rates all appear subsidized. Over the past decade, its rates range from 0.25% to 0.5% over for foreign currency loans and from 0.875% to 2.5% (fixed-rate) for yen-denominated loans. All of these rates were reportedly lowered further for highly encouraged projects (JBIC 2013). While China has a reputation for “cutthroat” finance, its OFDI loan rates vary widely, and many exceed Japan’s rates.

**Comparison of Motives**

In this section, we break down China’s OFDI lending by sector and motive to compare it on a more detailed level with Japanese lending. Inter-sectoral comparisons are difficult because of China’s lack of data. Some sectors were more likely to receive clear-cut OFDI lending tied to specific projects (e.g. mining and oil), while manufacturing usually received “all of the above” loans for export credits, overseas investment and overseas contracting. Including these loans would overestimate OFDI lending to manufacturing and infrastructure sectors, while excluding them would underestimate these sectors. For the purposes of comparison with Japan, we applied a strict test that seemed closest to the definition of OFDI lending used by JEXIM—finance intended primarily to support OFDI—that disqualified the “all of the above” manufacturing loans. As a result, our sectoral analysis underestimates the amount of Chinese manufacturing lending.

Solís (2003a) categorized Japan’s OFDI lending into three stages; the literature agrees that the first stage focused on natural resource acquisition (Farrell et al 2004 164; Komiya and Wakasugi 1991 51; Solís 2003a). From 1953 to 1970, JEXIM gave

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7 While the OECD has banned subsidized export finance for fear of competition, it does not regulate OFDI loans because there is no need—only Japan and Korea really use them.
35% of its loans for natural resource acquisition. In addition, another 34% went to the lumber and steel industries, largely to acquire raw materials (Solís correspondence; Solís 2003a 104). It was during this period that OFDI loans in the iron, steel and nonferrous metals sector reached 55% of total manufacturing OFDI (Solís 2003a 106). Still, it is important to note that Japan’s OFDI and OFDI lending in this period were miniscule compared to future stages. Japan lent twice as much in 1973 as it did in this entire period.

Japan’s counterintuitive second stage began in the mid-1960s, when the government began paying to outsource industries. It gave loans to support “industrial adjustment,” or getting rid of industries that were on the way out anyways (Mah and Noh 2012 310). By the mid-1960s, the government recognized that Japan would not be competitive in the labor-intensive textile industry. Preferring outsourcing to bankruptcy, JEXIM gave subsidized loans to help Japanese textile firms move to China and Southeast Asia, (Solís 2003a 105; Ogawa and Lee 1996; Mah and Noh 2012 310). After the end of the Bretton Woods fixed exchange rate system in 1972 and the 1973 oil crisis, Japan’s metal and oil-refining industries suddenly lost competitiveness. So from 1971 to 1984, the majority of Japan’s manufacturing OFDI loans went to outsourcing unprofitable heavy industry. The chemicals and iron, steel and nonferrous metals sectors alone received over two thirds of OFDI lending for manufacturing, up from 24.9% in the first period (Solís 2003a 105).

In the third stage, from 1985 to 1999, the Japanese government continued to use OFDI lending to outsource other “sunset industries.” As wages rose, low-margin, low-wage sectors began losing money, and the government pushed them overseas. OFDI loans for vehicle and electronics assembly rose from 13.8% of manufacturing OFDI lending in the second stage to 44.7% in the third (Solís 2003a 104). Heavy industry latergoers in the chemicals and iron, steel and nonferrous metals sectors added another 41.0%. According to the literature, despite fears of “hollowing-out,” Japan’s state support for outsourcing did not hurt its domestic economy (Solís 2004).

Beginning in the third stage, Japan also engaged in OFDI to tap into overseas markets and acquire technology, though it is unclear how much OFDI lending went to support these efforts. Japan had large incentives to engage in market-access FDI beginning in 1977, when the U.S. banned TV imports from Japan. Similarly, in 1981 the U.S. placed a quota on Japanese car imports (Solís 2004 42). In the early 1990s, Japanese companies used OFDI to “tariff-hop” into Europe after the 1992 European

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8 Calculated with data in Solís 2004 (40) and other data compiled by Solís.
Community integration and into the U.S. after NAFTA in 1994 (Farrell et al 2004 172, Komiya and Wakasugi 1991 55). Even in China, much of Japan’s OFDI in the 2000s went to open the Chinese market through joint ventures (Mah and Noh 2012 314). Recently, Japanese OFDI has also used mergers and acquisitions (M&A) to acquire foreign technology as opposed to the traditional licensing method (Komiya and Wakasugi 1991 56; Farrell et al 2004 174).

Korean OFDI lending began with the same first stage of acquiring natural resources. In the 1960s and 1970s, almost all OFDI went to acquire primary resources (Kim and Mah 2006 887). In 1975, the government finally began granting OFDI permits for companies that needed to outsource to “regain international competitiveness” (UNCTAD 2006 208). Still, even into the mid-1980s it remained more concerned about preventing capital flight than promoting OFDI (Kim 2000 109; Kumar and Kim 1984 52). Over 60% of OFDI lending from 1976 to 1984 still went to secure natural resources (Solís 2004 210).

Like Japan, Korea then entered a stage of industrial adjustment, which began in the mid-1980s. In 1985, Korea Export-Import Bank (KEXIM) performed an about-face and began giving FDI loans mostly to the manufacturing sector. Between 1985 and 1997, manufacturing received 89.8% of all FDI lending (Solís 2004 210). Once the Asian Financial Crisis began in 1997, KEXIM largely abandoned FDI lending in favor of its traditional export financing. Since KEXIM Annual Reports only disaggregate the sectors of export loans, not OFDI loans, we are unable to reliably compare the sectoral breakdown of China and Korea’s OFDI lending today.

While Korean and Taiwanese companies have outsourced labor-intensive industries en masse and acquired foreign technology through M&A, they have done it mostly without government assistance. In the last decade, Korean companies have outsourced most labor-intensive production to China, which currently absorbs most Korean OFDI (Athukorala and Hill 2002; Kim and Mah 2006 883). Korean OFDI also focuses on M&A to gain foreign technology and open up new markets by jumping tariff barriers (Kim 2000 111). But despite the growth in outsourcing, tariff-hopping and technology-seeking OFDI, the state did not proactively push these motives with OFDI lending (Kim 2000).

The Chinese government and numerous scholars agree that China encourages OFDI to acquire primary resources, gain access to advanced technology, and enter foreign markets, but not to outsource dying industries. The existing studies on China’s OFDI draw from the literature on OFDI in general and in emerging economies. The international business literature on firm internationalization highlights four main motivations: outsourcing for cost reduction, resource acquisition, technological
learning, and market entry (Buckley 1976; Dunning 1977). China scholars agree that outsourcing is not a significant factor in China’s OFDI lending. Although the government’s OFDI data is unusable due to tax havens, scholars have begun to use other OFDI sources to analyze the reasons for Chinese OFDI. They have published case studies, descriptions of overall trends, and quantitative analyses (Child and Rodrigues 2005; Buckley 2007; Deng 2009). These studies conclude that China’s OFDI follows the latter three drivers above while they reject outsourcing, citing China’s relatively low labor costs (Zhang and Daly 2011; Ye forthcoming). The Chinese government has confirmed the latter three motives in both its Five-Year Plan for 2010-2015 and in a joint notice by CHEXIM and China’s main economic planning agency, NDRC (NDRC and CHEXIM 2004; Luo 2010).

These scholars base their arguments about the government’s motives on OFDI figures, which represent the amalgamated priorities of China’s diverse companies, not the government’s intentions. In the interest of using available data, most studies rely on databases of China’s OFDI. Yet China’s OFDI comes from many different types of companies, including small and large private companies as well as local, provincial and national SOEs. Even the national SOEs do not act according to the central state’s priorities.\(^9\) Thus, a study on how much companies are investing in particular countries and industries can only suggest the motives of the various companies, rather than the motives of the government. Existing studies do report on the government’s OFDI policy statements and policies, which include restrictions abolished, tax incentives created, loans encouraged and treaties signed. But since the government does not publish data on its OFDI lending, the literature on the government’s motives has not moved beyond policy descriptions and case studies.

We assess the state’s actual motives by cataloguing its OFDI lending by sector and purpose and comparing them to Japan’s JBIC lending today and in the past. Today, JBIC provides a detailed sectoral breakdown of manufacturing, natural resource and other loans in its annual reports, and it was relatively straightforward to assign the Chinese loans to the same categories. The main difference lay in sectors like steel, since China’s steel companies are investing abroad in raw materials (iron), while Japan’s are more likely to be building steel mills abroad. We categorized iron investments by China’s steel companies as Mining and Oil rather than Manufacturing. In Japan’s case, we had no details on the Japanese projects, and the reported totals for natural resource and manufacturing loans often overlapped. We had to make some educated guesses when simplifying JBIC’s sectoral breakdown.

\(^9\) To complicate matters further, the central state itself does not speak with one voice. The major relevant actors here include the Politburo Standing Committee, National Development and Reform Council (NDRC), SASAC, banking sector leaders, and the Ministry of Commerce (MOFCOM).
As Table 5 shows, the main takeaway from China’s sectoral breakdown since 2002 is that the mining and oil sector remains completely dominant. The mining and oil sector absorbed roughly 80% of China’s OFDI loans from 2002 to 2012. Another 12% went to infrastructure and 4% to manufacturing. Services received just over 1%, and agriculture and textiles received less than 1%. As discussed earlier, the manufacturing share would have been roughly three times greater if we had counted “all of the above” loans designed primarily as export credits.

<table>
<thead>
<tr>
<th>By sector</th>
<th>Japan</th>
<th>Percent</th>
<th>China</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and Oil</td>
<td>$63,797</td>
<td>45.3%</td>
<td>$73,742</td>
<td>79.94%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>$180</td>
<td>0.1%</td>
<td>$1,560</td>
<td>1.69%</td>
</tr>
<tr>
<td>Textiles</td>
<td>$421</td>
<td>0.3%</td>
<td>$40</td>
<td>0.04%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$19,540</td>
<td>13.9%</td>
<td>$3,378</td>
<td>3.66%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$19,050</td>
<td>13.5%</td>
<td>$10,928</td>
<td>11.85%</td>
</tr>
<tr>
<td>Services</td>
<td>$8,307</td>
<td>5.9%</td>
<td>$2,600</td>
<td>2.82%</td>
</tr>
<tr>
<td>Other</td>
<td>$29,393</td>
<td>20.9%</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$140,689</td>
<td>100.00%</td>
<td>$92,248</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 5. Chinese and Japanese OFDI Lending By Sector, 2002-2012, in $ millions

<table>
<thead>
<tr>
<th>By sector</th>
<th>Japan, 1971-1984</th>
<th>Percent</th>
<th>China</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and Oil</td>
<td>$2,693</td>
<td>32.0%</td>
<td>$73,742</td>
<td>79.94%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>$118</td>
<td>1.4%</td>
<td>$1,560</td>
<td>1.69%</td>
</tr>
<tr>
<td>Textiles</td>
<td>$278</td>
<td>3.3%</td>
<td>$40</td>
<td>0.04%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$5,184</td>
<td>61.6%</td>
<td>$3,378</td>
<td>3.66%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$10,928</td>
<td>11.85%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>$2,600</td>
<td>2.82%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>$143</td>
<td>1.7%</td>
<td>$0</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$8,415</td>
<td>100.00%</td>
<td>$92,248</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 6. Chinese and Japanese OFDI Lending By Sector during Industrialization in $ millions

As seen in Tables 5 and 6, Japan spread its OFDI lending out between sectors much more evenly than China, both historically and today. In the first stage from 1953-1970, mining and oil received the largest share at 32%, followed by lumber at 19%, steel at 15%, and textiles at 14%. From 1971-1984, steel moved into the top slot.
with 33% as Japan outsourced its heavy industry. Mining and oil followed with 32% and chemicals with 13%. From 1985-1999, transport and electrical machinery received 30%, steel 14%, chemicals 13%, and mining and oil 11%. From 2002-2012, 45% of JBIC’s loans went to mining and oil, 14% each to manufacturing and infrastructure, 6% to services, and 21% to other sectors. It is interesting that today, mining and oil has become even more dominant than it was in the first stage. Even so, its 45% share of total OFDI lending falls well short of China’s 80%.

<table>
<thead>
<tr>
<th>Sector</th>
<th>OFDI Loans</th>
<th>Total OFDI</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>$57,760</td>
<td>$101,640</td>
<td>56.8%</td>
</tr>
<tr>
<td>Oil</td>
<td>$45,850</td>
<td>$148,530</td>
<td>30.9%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>$1,560</td>
<td>$12,310</td>
<td>12.7%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>$22,962</td>
<td>$34,990</td>
<td>65.6%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$13,593</td>
<td>$18,220</td>
<td>74.6%</td>
</tr>
<tr>
<td>Services</td>
<td>$2,600</td>
<td>$77,000</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$144,366</strong></td>
<td><strong>$399,780</strong></td>
<td><strong>36.1%</strong></td>
</tr>
</tbody>
</table>

Table 7. Chinese OFDI Lending as a Percent of OFDI By Sector, 2002-2012, in $ millions

From Table 7, it is evident that the Chinese government is pushing OFDI harder in some sectors than in others. The ratio of OFDI lending to total OFDI varies from 3% in services to 75% in infrastructure. Chinese companies investing overseas in real estate, the financial sector, and agriculture are receiving little state support. At the other end, the state is heavily involved in supporting overseas manufacturing and infrastructure projects. Interestingly, mining receives almost twice as much support as oil. When compared to developing Japan, China is pushing most sectors quite vigorously. Japan’s average ratio was 10%, and its “most extreme” support went to the mining sector from 1953-1970, with a loans-to-OFDI ratio of 55% (Solís 2003a 106). In China, all sectors except services exceed Japan’s 10% average. Three sectors exceed Japan’s all-time high of 55%.

We also catalogued China’s stated motives for each of its individual OFDI loans in order to compare them to JEXIM’s three stages of lending. In our China search, loan descriptions included enough information to reliably determine whether the loan addressed natural resource acquisition, market access, technological learning through M&A, or industrial adjustment. While a bank may have had multiple reasons for providing an individual loan, we maintain that each loan had one of these four motives as its primary raison d'être. Unfortunately, the same data was not available for Japan or Korea today. While JBIC offers data disaggregated by
sector, neither JBIC nor KEXIM reports data on its motives or provides information on enough individual loans for us to make estimates.

As with Japan and Korea’s first stages, China’s leading OFDI loan motive is natural resource acquisition. It is responsible for 81% of China’s OFDI loans since 2002. In the mining and oil sector, all but one loan was aimed at acquiring resources. The outlier, a $230 million loan to Sinochem, went to acquire advanced oil drilling technology from Norway. While there were other loans funding acquisitions of developed country mining and oil operations, those operations were valuable for their resources rather than their technology. China’s 81% exceeds the over 60% of Korean lending that went to natural resource acquisition from 1976 to 1984 (Solís 2004 210), as well as Japan’s 47% share for mining and oil loans in its modern-day stage. The main purpose of OFDI lending in China is still the basic acquisition of resources.

China’s focus on OFDI lending for natural resource acquisition suggests that China’s overseas investments in natural resources are far from slowing down. As Solís (2003a) showed for Japan, OFDI lending leads OFDI. This suggests that the Chinese government is mounting a strong push for OFDI, and that Chinese companies are still in the process of reacting. It may come as a surprise to those who raise alarm over China’s growing natural resource OFDI that in fact this OFDI is likely to grow considerably.

It is also apparent that China is not using its OFDI loans to fund “industrial adjustment.” In the entire textile sector, we found only one loan for $40 million, to build a textile factory in Mauritius. CHEXIM justifies this loan by stating that it will improve overseas business management and aid economic development in Mauritius, with no hint of industrial adjustment.10 All other manufacturing loans aimed to gain access to either new markets or advanced technology. It could be that, as was mostly the case for Korea, the state feels that sunset industries are already outsourcing smoothly enough on their own. Either that, or China is not so keen on seeing them go. This would be understandable given China’s regional inequalities. Far away from the East Coast, where rising wages are dragging down labor-intensive industries, China’s West holds hundreds of millions of workers willing to work for a fraction of East Coast wages. Rather than following Japan’s lead and helping East Coast companies move abroad, the Chinese government is attempting to coax the factories west through tax incentives and new infrastructure.

China’s second-largest OFDI lending motive is increasing market share, surprisingly dominated by power companies. This motive comprised 15% of total OFDI lending. Infrastructure projects accounted for 81% of these, including ports, dams and power plants. Other than Three Gorges Group and China Merchants Group, the recipients were all major power companies: Huadian, Huaneng, and State Grid Corporation. Exporting power projects have received no attention in the literature thus far, though they do not fit neatly into the conventional explanation of tariff-hopping. While Japan and Korea began OFDI lending to support tariff-hopping in the 1980s and 1990s in response to new quotas and trade blocs, (Mah and Noh 2012 310, Kim 2000 109), it still has not become a major motive in the case of China.

Perhaps more importantly, the power company loans double as export loans for Chinese goods and services. Of the investments with known destinations, only a few are in the U.S. and Europe. Others seek to build experience in developing markets. Infrastructure projects in Sri Lanka and Indonesia involve a Build-Own-Operate-Transfer (BOOT) model, requiring the company to own and operate the facility for a specified number of years before it sells back to the government. This could be beneficial from the perspective of learning overseas business management, though that is not one of China’s sanctioned reasons for OFDI lending. Instead, we suggest that the banks are supporting these investments for the dual purpose of market access and export subsidy. Most of the loans are for solar, wind, hydropower and grid projects, which the parent companies will equip with Chinese solar panels and turbines. It is well known that China’s wind and solar manufacturing is in oversupply and needs added demand. From this point of view, an OFDI loan for a solar farm looks very similar to an export subsidy for solar panels.

The third OFDI lending motive is acquiring advanced technology through M&A, an approach rarely employed by industrializing Japan or Korea. Chinese companies in the manufacturing, oil, auto and chemical sectors received $3.6 billion in OFDI loans to acquire foreign companies with desirable technology. This comprises only 4% of China’s total OFDI lending, but even so it represents a departure from its Asian counterparts. Japan and Korea industrialized by licensing advanced technologies from Western industry leaders, who in order to protect their lead offered overly expensive, second-rate technologies (Amsden 1989 150; Shinjo 1988 342). For a developing country drowning in foreign currency surpluses during a global economic downturn, acquiring Western companies at a discount does not sound like a bad alternative. One disadvantage of this strategy is stirring up anti-Chinese sentiment in the host country. The U.S. Congress has blocked China’s attempts to purchase American oil, telecommunications and appliance companies, citing...
national security threats. OFDI loans for technology acquisition would be twice as high if these loans had gone through.

**Explaining China’s High Lending**

One major reason for China’s disproportionately high OFDI lending compared to Japan and Korea is that the Chinese state has more power to dictate how its borrowers use the money. Scholars have noted that one major stumbling block for OFDI loans has been the fact that governments cannot control the spending priorities of the borrowers. Governments would lend more if they could ensure that the companies would only use the money for the government’s stated goals (acquiring natural resources and foreign technology, increasing global market share and perhaps outsourcing sunset industries), but they cannot prevent companies from using the money to outsource or outcompete domestic industries the government wants to protect (Safarian 1993, Solís 2003b). While the “national champions” in Japan and Korea are privately held, the Chinese state is lending primarily to state-owned enterprises (SOEs). Through additional analysis of our database, we found that SOEs receive 95-97% of the total finance. This agrees with Dussel Peters (2012), who argues that SOEs are responsible for lion’s share of OFDI.

It is worth noting that China’s economic planners do not exercise perfect control over its SOEs. These SOEs range from nationally-owned oil companies to locally-held manufacturing companies. China scholars have noted that the Chinese government is not a monolith and it does not retain perfect control over the SOEs. In fact, Ye (forthcoming) argues that SOEs are investing abroad partly because by reinvesting company profits they can avoid paying dividends back to the state.

Still, it seems clear that the Chinese government can control the SOEs more easily than earlier developmental states could control their privately-held national champions. The Communist Party appoints the corporate heads of these state-owned companies, and accordingly these officials hold the government rank of “Minister.” As a result, they are certainly paying close attention to government policy (Chin 2009). In the case of national SOE, the State-Owned Assets Supervision and Administration Commission (SASAC) owns a controlling portion of their shares (Reilly and Na 2007). Even the private companies receiving 3-5% of the OFDI lending, including Huawei and Geely, are intimately tied to the state. Indeed, foreign governments consider Huawei to be so close to the Chinese state that they classified it a national security risk. NDRC, the economic planning giant that signed the notice encouraging OFDI lending with CHEXIM in 2004, holds veto power over all major investment projects in China today. It also coordinates China’s economic
restructuring process in general, giving it immense power to punish and reward companies. In general, this national regulatory framework has relaxed considerably since the beginning of the Go Abroad policy (Reilly and Na 2007). Since the Chinese state is lending to SOEs and close friends, it exercises far more control over their priorities, and thus can justify greater lending.

China’s SOEs may not be dictating the government’s lending priorities, but so far neither has shifted away from natural resource acquisition. We have seen that over 70% of OFDI lending goes to natural resource acquisition. According to data from the Heritage Foundation, foreign direct investment by China’s SOEs is also concentrated in natural resource acquisition, including 46% in energy, 22% in mining, and 5% in agriculture (Scissors 2014). This does not mean that the government will continue to pattern its investment after the existing makeup of China’s OFDI, however. When Japan and Korea shifted from natural resource acquisition to industrial adjustment it happened abruptly rather than gradually. Japan’s abrupt shift responded to sudden global events, including the collapse of Bretton Woods and the oil crisis. China may encounter similar triggers. Or as China’s currency appreciates and its heavy industry stagnates, the government may gradually choose to shift its support to industrial adjustment, technology-seeking M&A, tariff-hopping, or other motives.

It is unlikely that disproportionate Chinese lending results from Chinese companies needing greater state support because of limited access to private capital, as some have suggested. It is true that Western investors may have been more comfortable funding emerging Japanese and Korean private companies than they are funding Chinese SOEs today. Korean companies in particular sought out foreign loans to finance OFDI in the late 1980s and 1990s. However, Kim (2000) points out that foreign finance allowed only the largest Korean business groups, or chaebol, to invest abroad. Even the wealthiest chaebol had to rely on host country finance, a precarious situation that almost bankrupted Daewoo when the Asian Crisis hit in 1999.

Indeed, we found that 69% of China’s OFDI funding went to companies that have access to foreign capital. They sell shares on the New York Stock Exchange, issue international dollar- and Euro-denominated bonds, and/or receive loans from syndicates of international banks. An additional 6% sell shares on the Hong Kong Stock Exchange. While all of these funding sources are dependent on both their economic performance and the implicit backing from the Chinese government, their access to foreign capital is at least as good as that of Korean and Japanese companies during equivalent stages of development. Thus, China’s high OFDI lending does not appear to stem from a need to compensate for external funding constraints.
If anything, the explanation seems to be the opposite—that China gives more OFDI loans because it has fewer funding constraints, since the central bank is awash with savings and foreign exchange reserves. China’s gross savings as a percent of GDP climbed from 40% in 2002 to 51% in 2012. Over the same period, Japan’s savings fell from 25% to 22% and Korea’s rose from 30% to 31%. In addition to saving more than its Asian Miracle counterparts, China has the highest savings rate in the world. Its foreign exchange reserves have climbed to $3.8 trillion, roughly three times as high as second-place Japan. In 2002, China’s ratio of reserves to GDP was 15%, compared to 17% for Korea and 10% for Japan. In 2012, despite the fact that China’s GDP more than quintupled, its reserves-to-GDP ratio reached 40%, with Korea and Japan at 27% and 22%, respectively. This ratio is higher than at any time in its recent history, or in the recent history of Japan or Korea. Its significance is quite clear when one considers that Japan and Korea both limited OFDI lending until they had amassed significant forex reserves (Komiya and Wakasugi 1991 51; Kim 2000 109). OFDI lending only increased as the governments became confident in their reserves. China has reached this point much earlier in its development. With this rapid accumulation of savings and reserves, China has had to diversify its investment strategy away from U.S. debt. In 2007 it established China Investment Corporation, a $500 billion sovereign wealth fund. But it has also sought to directly invest its dollars abroad. It seems highly plausible that this excess of foreign capital could explain the government’s proactive OFDI efforts, as illustrated by the 3158% ratio of OFDI lending to total OFDI.

Conclusion

Numerous studies compare the policies behind China’s rise to those of its “Asian Miracle” predecessors, including liberalization, inward FDI attraction and export promotion. In this paper, we focus on the less conventional tool of outward foreign direct investment (OFDI) promotion. Starting in the 1950s, Korean and Japanese banks gave billions of dollars in loans to “national champion” companies in order to encourage overseas investment, and until recently has remained the global leader in OFDI lending. Today, Chinese state-owned banks are loaning billions to state-owned companies to invest abroad as part of the government’s Go Global policy. By cataloguing loans to China’s leading companies, we estimate the total value of China’s OFDI lending from 2002-2012 at $140 billion. This is remarkably close to Japanese and Korean OFDI lending as a percentage of GDP during the same period. As a percentage of total OFDI, though, China’s lending is roughly 55% higher, 31% compared to under 20% for Japan and Korea. It is higher than Japan’s most concentrated lending during industrialization. It appears that Chinese development
banks are pushing OFDI more proactively than Japan ever did. Japan’s lending history suggests that increasing OFDI lending does increase OFDI. Thus, as more companies follow the Chinese state’s enthusiastic lead, we expect Chinese OFDI to greatly increase. The two chief lenders are China Development Bank (CDB) and China Export-Import Bank (CHEXIM), “policy banks” created to support government policy rather than to attain commercial profits. Over 95% of the loans go to China’s SOEs rather than private companies. China’s OFDI loans bear interest rates that are roughly equal, or if anything higher, compared to those of Japan.

In terms of motives, scholars have suggested that in the case of Japan, the loans were designed first to acquire primary resources, then to outsource dying industries, and finally to enter foreign markets and gain access to advanced technology. The Chinese government and numerous scholars agree that China encourages OFDI for all of these motives except for outsourcing. These scholars base their arguments about the government’s motives on OFDI figures, which represent the priorities of China’s companies, not of the government. We argue that the state’s own OFDI lending is a better measure of its motives. We use our OFDI loan database to evaluate both the sectors and motives behind China’s OFDI lending. We find that the mining and oil sector received 80%, followed by infrastructure at 12% and manufacturing at 4%. In terms of motives, natural resource acquisition comprised 81% of the loans, followed by 15% for market entry and 4% for advanced technology. These breakdowns show that China seeks to secure resources far more single-mindedly than either Japan or Korea. Also, China’s market entry has more to do with developing power project expertise and supporting energy exports than it does with tariff-hopping, unlike Japan and Korea. Finally, China’s M&A loans for advanced technology bypass the expensive foreign licensing process that Japanese and Korean firms underwent.

We note two major reasons for China’s high (31%) ratio of OFDI lending to total OFDI. First, China has a greater incentive to give OFDI loans because it greater has more power to dictate how its borrowers use the money. Second, China has a greater capacity to give OFDI loans because it has significantly higher savings and foreign exchange reserves.
## Appendix I: Complete list of Chinese OFDI finance

<table>
<thead>
<tr>
<th>Number</th>
<th>Parent company</th>
<th>Project Year</th>
<th>Amount ($m)</th>
<th>Source</th>
<th>Could use</th>
<th>Will use</th>
<th>Sector</th>
<th>Purpose</th>
<th>Own-</th>
<th>Foreign</th>
<th>Access?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shanghai Baosteel Group</td>
<td>2003</td>
<td>10000</td>
<td>CDB</td>
<td>Yes</td>
<td>Steel</td>
<td>A</td>
<td>SGE</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Shanghai Baosteel Group</td>
<td>2012</td>
<td>20000</td>
<td>No</td>
<td>Yes</td>
<td>Steel</td>
<td>A</td>
<td>SGE</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Shanghai Baosteel Group</td>
<td>2010</td>
<td>11760</td>
<td>BoC</td>
<td>Yes</td>
<td>Steel</td>
<td>A</td>
<td>SGE</td>
<td>Y</td>
<td></td>
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Primary purpose: A=Natural resource acquisition, B=Technology acquisition, C=Market access, D=industrial adjustment

Sources: see Appendix 2
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Appendix 2

Listed here are the most detailed and/or most reliable sources found for each loan (by loan number from Appendix 1).

Loan 1


Loan 2


Loan 3


Loan 4


Loan 5


Loan 6


Loan 7

Loan 8


Loan 9


Loan 10


Loan 11


Loan 12


Loan 13


Loan 14


Loan 15


Loan 16


Loan 17


Loan 18


Loan 19


Irwin, Amos. Interview with Chinalco official. Lima, Peru, June 2011.

Loan 20


Loan 21

Loan 22

Loan 23

Loan 24

Loan 25
Loan 26


Loan 27


Loan 28


Loan 29


Loan 30

Loan 31


Loan 32


Loan 33


Loan 34


Loan 35


Loan 36


Loan 37


Loan 38


Loan 39


Loan 40


Loan 41


Loan 42


Loan 48


Loan 49


Loan 50


Loan 51

Loan 52


Loan 53


Loan 54


Loan 55


Loan 56


Loan 57

Loan 58

Loan 59

Loan 60