17. Foreign Investment and the Capital Account

For decades, China has been one of the world's most important destinations for foreign direct investment (FDI). FDI played an essential role in China's industrialization and in the overall process of reform, especially in the 1990s. Yet there have always been peculiar characteristics to China's welcome of FDI, and in recent years the relationship between FDI and the rest of the economy has begun to shift in fundamental ways. FDI has continued to grow, but much more slowly than overall GDP, and as a result, the relative weight of incoming FDI in the economy has been eroding for years.

Even as the weight of incoming FDI has decreased, new forms of inward and outward investment have grown in importance. When FDI poured into China, the overall capital account in China was closed: most kinds of financial investment, in both directions, were restricted. Today, many of those restrictions are being lifted as China moves toward an open capital account. At the same time, China's high saving rate means that, with continued growth, China has emerged as a significant source of outbound investment. That outbound investment has taken place in three forms successively: First, Chinese accumulation of official foreign exchange reserves became very large in the 2000s; second, Chinese outbound FDI increased very quickly after 2007; and third, diverse financial flows—both official and private—began to come out of China after 2011. As of 2015, China is a major source of saving and investment on a global scale.

The first half of this chapter is a description and analysis of (incoming) FDI in China; the second half broadens the perspective to consider all incoming and outgoing foreign investment.

17.1 FDI in the Chinese Economy

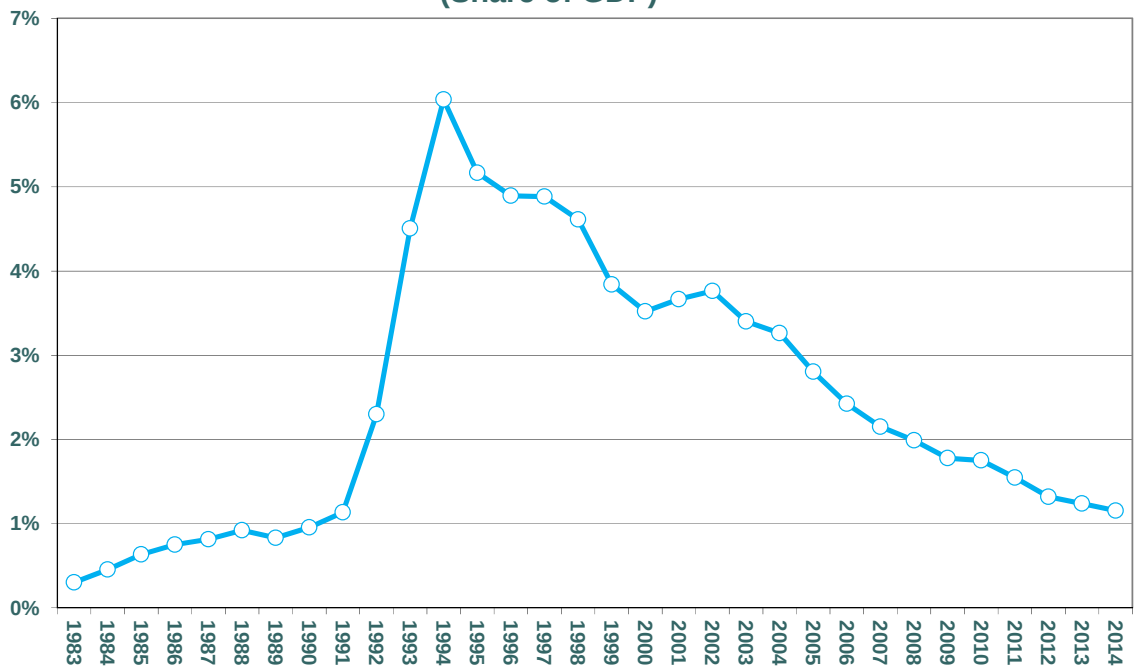
FDI began to pour into China after 1992, and have been by far the largest of any developing country, accounting for about one-third of total developing country FDI inflows in recent years. There is no doubt that the global manufacturing networks created by FDI in China will continue to play a critical role in the world economy.

17.1.1 Overall Patterns

Over this past decade, there have been three distinctive characteristics to investment in China. First, foreign direct investment has been the predominant form in which China has accessed global capital (as opposed to portfolio capital or bank loans). Second, an unusually large proportion of Chinese FDI inflows are in manufacturing industry, as opposed to services or resource extraction. Third, FDI inflows have

predominantly come from other East Asian economies, especially Hong Kong and Taiwan. In each of these respects, China diverges from average world patterns. Each of these characteristics reflects the dominant role played by the cross-border restructuring of export-oriented production networks that originally developed in other, neighboring East Asian economies.

Figure 17.1 Foreign Direct Investment
(Share of GDP)



China decided to accept foreign investment in 1978, and broke sharply with socialist orthodoxy in establishing Special Economic Zones (SEZs) in 1979 and 1980. Subsequently, through most of the 1980s, policy and institutional changes were more cautious, incremental and geographically localized. Incoming foreign direct investment (FDI) grew steadily through the 1980s, and wrought important changes in the regional economies of Guangdong and Fujian. Nationwide, the impact of FDI was moderate until the early 1990s. As Figure 17-1 shows, beginning in 1992-93, the stream of incoming FDI turned into a flood. Investors from Hong Kong and Taiwan moved in first and became quantitatively most important. Developed country investors followed close behind and FDI inflows became large enough to fundamentally transform the Chinese economy.

What changed in 1992 to unleash a flood of foreign investment into China? Chinese policy shifts were signaled by a string of remarkable speeches Deng Xiaoping made during a famous “Southern Tour” in the spring of 1992. This was one of the last times that Deng placed his personal stamp on Chinese policy, hoping to rehabilitate the

reform agenda and dissipate investor uncertainty created by economic retrenchment after the 1989 Tiananmen debacle. But grand policy pronouncements often have little impact on economic developments. Why was this one so momentous? Two factors made the difference. First, for over a decade, China had been gradually building credibility with foreign investors, gaining experience while liberalizing and building institutional infrastructure. However, the impact of these measures had been muted by concerns about China's future after the Tiananmen incident. When Deng succeeded in relieving the anxiety about China's overall policy direction, foreign investors responded quickly because the institutional foundations and FDI-friendly policies had already been put in place. Second, up until that time, China had largely confined incoming FDI to export manufacturing, and access to the Chinese market had been dribbled out to only a few selected foreign firms. From 1992, China began selectively opening its domestic marketplace to foreign businesses. New sectors—especially real estate—were opened to foreign participation, and manufacturers were increasingly granted rights to sell their output on the Chinese market. For the first time, the huge potential size and rapid growth of the Chinese market played a direct role in attracting foreign investment.

Figure 17-1 shows the dramatic rise and fall of foreign direct investment as a share of Chinese GDP. During the 1980s, although FDI never exceeded 1% of GDP, inflows crept steadily upward, and then surged to 6 percent of GDP in 1994. Since that time, FDI has grown more slowly than nominal GDP, and has accounted for around 5% of GDP in the mid-1990s, 4% around the turn of the century, and then trending steadily down to just over 1% in 2014. We can use these ratios to situate China in the context of other Asian countries with respect to openness to FDI. In the "Northeast Asian" pattern of China's development forerunners, Japan, Korea, and Taiwan, incoming FDI was always considerably less than 1% of GDP in Japan and Korea during their periods of most rapid growth, and only slightly more in Taiwan. In recent years, FDI inflows into Korea (especially) and Japan and Taiwan have increased, but FDI inflows have never amounted to as much as 2% of GDP in either Japan, Korea or Taiwan. In the developing Southeast Asian economies of Malaysia, Thailand, the Philippines and Indonesia inflows around 4-6% of GDP have been common. Generally speaking, then, China has gone from a closed economy, to a "Southeast Asian" pattern in which economies are quite open to FDI, particularly in export-oriented manufacturing, and now seems to be returning to a "Northeast Asian" pattern in which reliance on incoming FDI is curtailed.

The decline in FDI share may be slightly less marked than appears. In many sectors, foreign firms are well established and able to fund their expansion through retained profits. In theory, retained profits of foreign firms are supposed to count as new FDI, but they are rarely counted in Chinese statistics. Moreover, regional differences in Chinese FDI are large. Some regions of China are more open to FDI than a "typical" Southeast Asian nation, even today. Inflows into Guangdong and Fujian, scaled to GDP,

are well above the Chinese national average. For the 11 years from 1993-2003, the average annual incoming FDI/GDP ratio for Guangdong was 13% and for Fujian was 11%. Other open coastal areas were only a step behind Guangdong: Inflows to Shanghai average 9% of GDP and those to Jiangsu and Beijing averaged 7%. These inflows were sufficiently large to transform these regional economies.

17.1.2 The Role of FDI

FDI's impact is multi-faceted. First, FDI is fixed capital formation financed by foreign companies; it increases total saving and investment and thereby contributes to structural change. Chapter 6 discussed China's extremely high domestic saving and investment rate. At the turn of the century, gross fixed capital formation was around 35% of GDP, so FDI at the rate of 3.5-4% of GDP accounted for a little over 10% of total investment. This is close to—but slightly below—developing country averages. According to UN figures, all developing countries excluding China experienced incoming FDI equal to about 15% of gross fixed capital formation in 1999-2001, compared to 11% in China. Since that time, overall investment in China has climbed, while FDI has waned, so FDI after 2009 accounts for only about 3% of total fixed investment, quite low in comparative terms.

Foreign direct investment by definition includes some control by the investor company over the production process. As a result, FDI should not be thought of simply as a resource inflow. Even more important is that FDI brings a bundle of skills and knowledge: management experience, marketing channels, production technology, and supply chain management, to name just a few. Indeed, FDI was China's predominant source of technology transfer for over a decade: As Chapter 15 described, the transfer of technology to production facilities in China by multi-national corporations over-shadowed other forms of technology transfer up until the mid-2000s. Moreover, FDI is typically thought of as "patient capital" that remains in the host country over the long term, regardless of short-term fluctuations. Thus, incoming FDI is often viewed as advantageous to the host country, and many locations actively court investments. In addition, Chapter 16 has already described the central role that FIEs played in China's export expansion in the 1990s. Between 1992 and 2005, almost two-thirds of the increment to China's exports came from foreign-invested firms. Thus, FDI has played an important role in industrial growth, overall investment, technology transfer and trade expansion.

At the same time, foreign firms provide competition for domestic firms. While competition can certainly be productivity-improving, local firms may also be overwhelmed by strong foreign competitors. Moreover, concessionary policies designed

to attract FDI may sometimes create competitive advantages perceived by domestic rivals as unfair. These issues have been prominently discussed in China.

17.1.3 FDI Spill-overs

Foreign-owned enterprises (FIEs) create a clear demonstration effect. Domestic firms can quickly understand and copy the business model of most FIEs. The circulation of workers and managerial personnel among firms—which takes place at a high rate in China—spreads hard and soft technologies from FIEs to domestic firms. In the first wave of FDI into China, the knowledge spillover was especially important. China had been cut off from all types of knowledge of global business for decades; the early-mover Hong Kong and Taiwan firms had rich experience of developed-country markets and modern business practices. Those early investors brought with them fairly simple production technologies for garments, toys and shoes that were relatively easy to imitate.

One of the most important spill-over mechanisms is through supplier relations. Medium and high-technology industries typically have complex networks of suppliers to final assembly firms. When these industries first moved to China, they imported most of their supplies. Automobiles, for example, at first assembled imported "kits" and computer manufacturers assembled imported components. But in competitive industries such as these, no manufacturer can maintain such a high cost business model for long. Auto manufacturers, for example, quickly saw the need both to convince their partner firms producing parts and sub-assemblies to invest in China, and also to help domestic firms develop into low-cost suppliers. This provided a potent impetus to create a network of supplier firms, both domestic and foreign-based, to supply the auto industry. Final product firms in competitive industries have a strong incentive to help local, low-cost suppliers qualify in terms of quality and reliability.

At the same time, FIEs also have an incentive to protect their core technologies, intellectual property, and business models. While the spill-over of knowledge to suppliers can create a competitive advantage, the spill-over of knowledge to competitors weakens a firm. Foreign companies often elect to keep their most sensitive research and development and intellectual property in the home country (where, to be fair, high quality research can often be more efficiently carried out). Electronics firms especially often manage production chains in which a few core components embody the most valuable intellectual property, and these technologies can be relatively easily screened from the adjacent processing and assembly steps. China's EP trade regime makes it easy for firms to import a small number of high value components. These business adaptation protect the investing firm, but also limit the positive spill-overs from FDI to domestic Chinese firms.

17.2 “Zones”: Gradual Liberalization of the Investment Regime

One of the peculiarities of China’s FDI landscape is the proliferation of special investment zones of various kinds. The establishment of the first Special Economic Zones (SEZs) in China, in 1979, was a strikingly visible signal of commitment to economic opening. In subsequent years, China has marked every major wave of liberalization with the establishment of a new batch of zones. In 2013, the Shanghai Pilot Free Trade Zones was launched to test implementation of new, more liberal regime with respect to services and financial transactions. Over time, special zones have become “less special,” as concessionary policies for foreign investors have been scaled back across the board. Yet even so, much foreign investment is still located in zones of various kinds, and the rules of business are still subtly different inside the zones. Why does Chinese policy have this proclivity for special zones? The use of zones is consistent with the dualistic system which was such a prominent feature of the trading regime (Chapter 16). More broadly, SEZs are a form of “dual track” reform strategy. Zones permitted rapid incremental progress within the confines of a rigid system.

Politicians in Guangdong began to lobby for a special zone during 1978, even before the adoption of national reform policies. Endorsement by Beijing in 1979, and, crucially, by Deng Xiaoping, meant that the SEZs became a symbol of the government’s commitment to external liberalization. Zones permitting foreign businesses free operation in China were inevitably sensitive, because of China’s history of foreign concessions. Zones were easily portrayed by conservatives opposed to economic reforms as a derogation of China’s sovereignty. Precisely for this reason, the establishment of the SEZs served as a powerful commitment device. By demonstrating to foreign businesses that China would maintain an open environment in a specific, easily monitored, location, the SEZs enhanced the credibility of the reform process. At the same time, zones played a powerful symbolic role whenever the reform policies were contested: on two subsequent occasions (1984 and 1992), Deng Xiaoping traveled to the Shenzhen SEZ and endorsed its operation, as a prelude to a further wave of liberalization.

Text Box 17-1: How Chinese SEZs are Similar to Asian EPZs.

China's special economic zones are a type of export processing zone. The first export processing zone in Asia was established at Kaohsiung in Taiwan in 1965. By the 1980s, there were 35 EPZs in Asia, and most countries had them. A strikingly successful example has been the Penang Free Trade Zone in Malaysia which initiated the development of Malaysia's substantial electronics industry. All Asian EPZs offer an essentially similar set of incentives for investors. First, components and raw materials can be imported duty-free and without administrative formalities; and exports leave the zone without export or sales taxes. Thus, the zones are "outside" the country in which they are located, insofar as normal customs procedures are concerned. Second, company incomes tax holidays are typically granted for a period of 3 to ten years. Third, the administrative procedures are streamlined, often through a "one-stop shop" coordination of permits, and usually through exemption of restrictions on foreign ownership and employment of foreign nationals that might apply in the rest of the economy. Fourth, the zone itself often operates as a commercial entity, building infrastructure and supplying utilities—often at a subsidized rate—to the foreign firms.

Asian EPZs offered a way to move toward export promotion without fundamentally overturning the structure of protection in place for domestic manufacturers. EPZs produced benefits in terms of employment created and foreign exchange earned, but at a cost of giving up significant tax revenues, and foregoing potential linkages to the remainder of the domestic economy. Many EPZs started slowly and ended up costing more than initially envisaged; but the policies have typically been seen as ultimately successful in most of the countries which tried them. EPZs initially attract "footloose" investors in such sectors as garments and electronics assembly because of low wages and easy conditions for moving goods in and out. To varying degrees, some zones have been able to move beyond a few initial industries and contribute to broader-based process of industrialization. Chinese SEZs share all these fundamental characteristics with other Asian EPZs.

The initial SEZs were similar to the Export Processing Zones that had spread in Asia since the 1970s: they were regions in which foreign investment was encouraged by lower tax rates, fewer and simplified administrative and customs procedures, and, most crucially, duty-free import of components and supplies (See Text Box 17-1). Thus, the SEZs were part of the early development of the Export Processing regime described in Chapter 16. Yet the SEZs also went beyond the other Asian EPZs (See Text Box 17-2). Because they also served as test-beds for domestic economic reforms, they inevitably had a broader role to play in China's economic evolution. Wholly owned foreign subsidiaries were permitted in the SEZs long before they were allowed elsewhere. Moreover, since each of the four initial SEZs was intended to appeal to an economically significant group of Overseas Chinese who were potential investors (Chapter 1), they served as important channels to outside groups. For all these symbolic and systemic reasons, the SEZs had great importance to China's economic reform. The SEZs also exemplified the pattern of Chinese policy-making during the first era of reform (as described in Chapter 4): dual-

track, incremental reforms that started by creating a new system alongside, or in the interstices of, the existing one.

Text Box 17-2: How Chinese SEZs are Different from Asian EPZs.

Chinese SEZs were bound to be "more special" than other Asian EPZs. Other Asian EPZs were established in economies that were basically market economies, albeit sheltered from world markets and competition by import substitution industrialization (ISI) policies. Chinese SEZs were created in a planned, bureaucratic economic system, so the difference between the "rules of the game" in the SEZs and those in the domestic economy was bound to be large.

--- The SEZs often served as "laboratories" for experiments with economic reforms. For example, Shenzhen SEZ was an early pioneer of both flexible wage systems (no limits to incentive payments) and tender bidding for construction projects. Experiments with development of land markets through leasehold, and equity markets have also been significant.

--- The SEZs were governmental bodies with unusually high levels of autonomy, compared to EPZs. During the early years, SEZs were allowed to retain much of the tax, customs, and foreign exchange revenues generated within the zones.

---The SEZs had multiple functions: They were seen as "windows" on the world, absorbing advanced experience in technology, administration and business. Shenzhen in particular has been developed as a "comprehensive" site, including tourism, housing, and other services for Hong Kong people.

---Chinese domestic enterprises have also had a substantial incentive to invest in the SEZs. By setting up their own subsidiaries—even if they are not joint ventures with foreign businesses—Chinese domestic enterprises enjoy greater administrative flexibility, lower tax rates (15% income tax rather than 30%), and less complicated access to the outside world.

Reflecting their multiple roles and greater importance to the domestic economy, it is not surprising to find that China's SEZ are much bigger than other Asian EPZs, as the following table shows:

Size of China's SEZs and Asian EPZs (km2)

	Initial 1980 Size	Size in 1990
Shenzhen	327.5	327.5
Zhuhai	6.8	121.0
Shantou	1.6	52.6
Xiamen	2.5	131.1
Kaohsiung, Taiwan		0.7
Penang, Malaysia		1.2
Batam Island, Indonesia		36.6
Bataan, Philippines		3.4

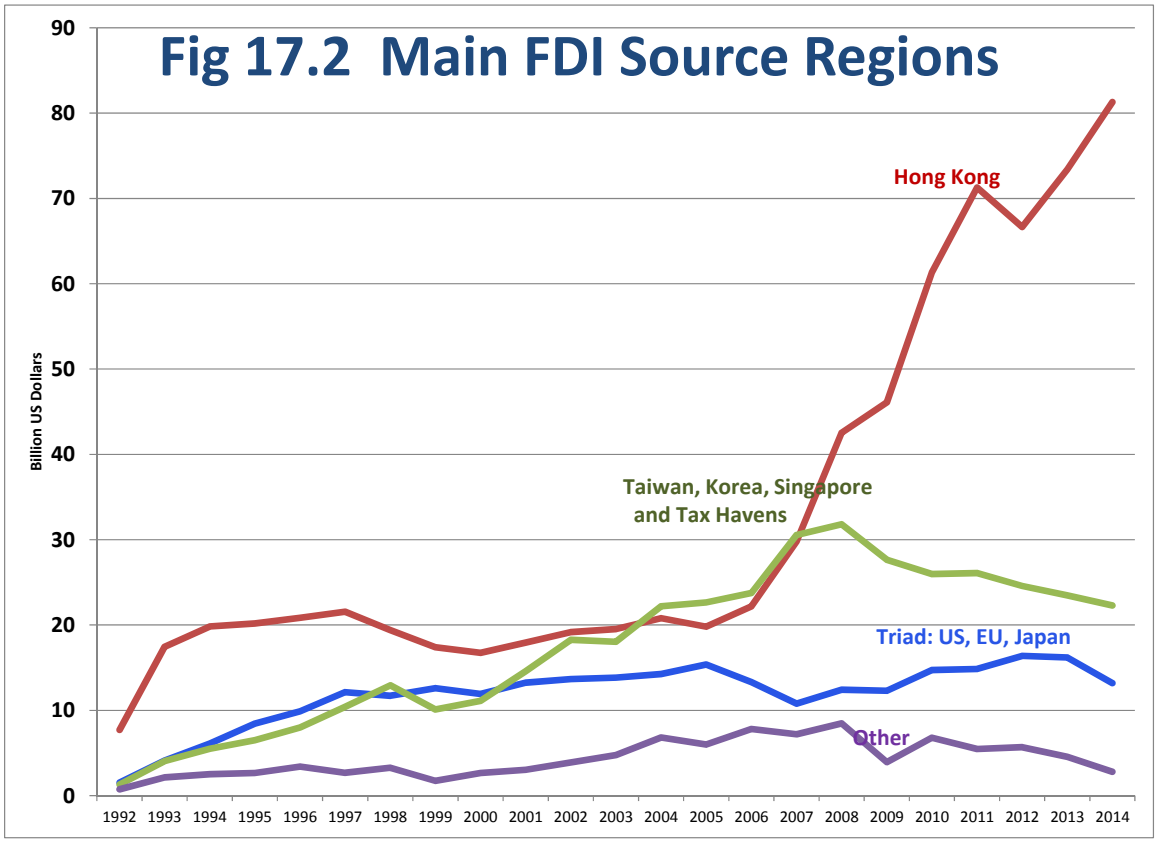
A dramatic proliferation of "zones" began in the 1980s. Hainan Island, in its entirety, was designated a Special Economic Zone, and the existing SEZs at Zhuhai, Shantou and Xiamen were expanded enormously. Broad swaths of territory were declared open to foreign investment, including substantial rural areas. The Pearl River Delta in Guangdong, the Yangtze River Delta around Shanghai, and a swath of coastal Fujian near the Xiamen SEZ, were opened to investment. A total population of 160 million was included among these newly open areas. At the beginning of the 1990s, a new wave of opening of the Chinese economy was announced by…..the creation of another special economic zone. The Pudong (East Shanghai) special zone served as an advertisement, and a commitment device, by creating an SEZ in the heart of China's most developed region for the first time. Slightly larger than Shenzhen, the Pudong Development Zone possessed a population of 1.1 million even before development began. By 2003, there were well over 100 investment zones recognized by the central government, and hundreds more local zones. There were six SEZs (the four original, Hainan, and Pudong), 54 national-level ETDZs, 53 nationally recognized Hi-tech industrial zones, and 15 Bonded Zones (in which commodities can be legally parked "outside" the country's customs borders).

After 2013, a new wave of Free Trade Zones was launched in conjunction with the rejuvenation of economic reform pursued under Xi Jinping and Li Keqiang. By far the most important was the Shanghai Pilot Free Trade Zone. The Shanghai FTZ was designed to test a number of innovations. Foreign businesses were allowed to operate wholly-owned subsidiaries in service sectors generally closed to foreigners elsewhere in China, including hospitals, logistics, and insurance. Financial regulations were considerably less rigid, and firms were encouraged to establish unified financial centers for their China operations that could be legally "off-shore" in most respects. The Shanghai FTZ also pioneered the use of a "negative list" system, in which foreign firms were allowed to operate in any sector except those explicitly restricted by the negative list. Some of the innovations of the Shanghai FTZ were also allowed in FTZs set up in Tianjin and Guangdong (Qianhai Financial District and other associated zones). Early progress in these zones has been slow, and early evaluations have been critical. However, it is too early to assess the ultimate impact of these new FTZs.

17.3 Sources of Investment in China

Hong Kong and Taiwan have been by far the largest foreign investors in China. In this section, we discuss the main source countries, then discuss the economic relationship between China, Hong Kong and Taiwan in the following section. Hong Kong is indisputably the biggest investor in China, accounting for 44.7% of the cumulative total 1985-2003, according to official figures. Interpretation of this figure is

made more difficult by the fact that investment in China recorded as being from various tax havens has increased dramatically since 1998. Not coincidentally, from about this time, the share of investment from Hong Kong and Taiwan has declined. From other sources, we know that Taiwan businesses send substantial investment to the Cayman and Virgin Islands, and other "free ports." Hong Kong businesses face their own political risks and motivations for transiting investment through a third location. In 2004, Korean investment soared $6.25 billion, vaulting past both the US and Japan. Thus, during 2004, Korea was the third largest investor in China after Hong Kong and the British Virgin Islands! While the Korean share of incoming FDI declined subsequently, close economic relations and strong complementarities between Japan and Korea, on the one side, and China, on the other, means that closer Northeast Asian cooperation (and larger FDI flows) always remains a possibility if political tensions subside.



Hong Kong is not just the largest investor in China: Its role is special in almost every respect. In the first place, on July 1, 1997, the former British colony of Hong Kong became a Special Administrative Region (SAR) of China. Thus, China's largest foreign investor is in fact not even foreign. However, there are abundant reasons to treat Hong Kong as "foreign," beyond habitual practice. Hong Kong has a dramatically different economic and administrative system from China; it has a much higher level of economic

development that the rest of the mainland; the SAR government has decision-making authority over virtually all important economic decisions, including trade regulations; and, recognizing this, Hong Kong has long been an independent member of some international organizations, including the World Trade Organization. Given these factors, the classification of Hong Kong as a foreign investor in China is a welcome triumph of common sense.

Hong Kong grew, from the 1950s through the 1970s, from a trade entrepôt to a manufacturing, finance and trade center of formidable efficiency. As Hong Kong continued to grow in the 1980s, it was natural that manufacturing firms would seek additional space outside the crowded center city. But because Hong Kong itself is so small, urban growth inevitably meant relocation of firms a few miles away to China. When a Hong Kong factory moves to the suburbs, it creates "foreign" investment. Hong Kong's proximity to China also means its investors tend to have better information about policy changes inside China than do investors in other countries. Hong Kong businesses move quickly to take advantage of new opportunities in China when policy shifts. Hong Kong is the home of many subsidiaries of corporations based elsewhere. There are about 1,000 foreign company regional headquarters in Hong Kong (256 from the US; 198 from Japan; and 106 from China). In some cases, investment originating elsewhere may be channeled through Hong Kong and show up in the data as Hong Kong investment. Parent companies located in China sometimes channel investment from their subsidiaries back into China, or even create subsidiaries for this purpose: so-called "round-tripping." Chinese firms may be motivated by the desire to gain access to concessionary tax and other advantages enjoyed to foreign-invested firms, and also to the autonomy and anonymity that comes from channeling funds through Hong Kong subsidiaries. But here we must be careful. One of the peculiarities of the Hong Kong economy is that it has long been the headquarters of a number of large firms that are owned by Beijing. Firms such as China Resources and China Merchants (owned by the Chinese Ministry of Commerce and Ministry of Transportation respectively) have been active in Hong Kong for fifty years. These firms are big investors in China, but it would be a mistake to reduce their activities to simple "round-tripping." It is in fact a more complex relationship with a much longer history. Recently these relationships have become even more complicated with the rise of investor companies headquartered in offshore tax havens. Increasingly global companies are sometimes difficult to pin down to a single home economy.

17.4 The China Circle

The close economic association among the economies of the People's Republic of China, Hong Kong, and Taiwan warrants calling them the "China Circle." The basis for

the emergence of the China Circle was the success of Taiwan and Hong Kong in developing labor-intensive manufactured exports during the 1960s and 1970s, particularly to the U.S. market. Both economies produced an enormous range of light, labor-intensive manufactures: beginning with plastic flowers in Hong Kong, extending through a vast range of sporting and travel goods, to the huge garment and footwear sectors. This success had an important demonstration effect on China from the beginning of the reform era, because Chinese policy-makers observed their success and sought to emulate and repeat it through economic reform. The export success of Taiwan and Hong Kong began to have a much more direct effect on the mainland in the mid-1980s, when it began to drive a restructuring of East Asian production networks. Exporters found increasing wages and costs (including land costs), and currency realignments creating "push" to move production to lower-wage locations. At the same time, capabilities were rapidly upgrading in both Taiwan and Hong Kong: educational levels soared, supply of engineering and scientific manpower increased, and commercial and financial experience accumulated rapidly. Attracted to higher skill and higher remuneration occupations, they were "pulled" away from traditional labor-intensive manufactures, which had no choice but to look around for other locations.

The opening of China to foreign investment at this time created a dramatic opportunity to transfer labor-intensive export production to the People's Republic. This development, described in the preceding chapter, was part of a world-wide trend toward increasing intra-industry trade. The trend toward the geographical dispersion of production chains leads to an increasing share of international trade is made up of intermediate and capital goods, and to increasing FDI to build the required networks. This process was particularly powerful in the China Circle, because transaction costs for Taiwan and Hong Kong firms to operate in the PRC were low. Proximity, aided by common language and customs, made doing business on the mainland easy and cheap, once the mainland's economic system opened up. Moreover, low transactions costs made it possible to initially move only the most labor-intensive—typically low-skilled—stages of production onto the mainland, while retaining other activities in Hong Kong or Taiwan. Production chains were quickly created that crossed political boundaries and allowed Hong Kong and Taiwan to specialize in high value services and technology-intensive production; while much of the ordinary manufacturing moved to the PRC.

This restructuring moved remarkably quickly for traditional labor-intensive manufacturing, such as garments and footwear, and was basically completed by the early 1990s. For example, Taiwan firms moved their footwear production to the mainland, and, in the US, imported shoes from China "displaced" imported shoes from Taiwan. A similar restructuring of the electronics industry began around 1990. It has been followed by many successive waves of relocation, of which the most recent—and one of the most dramatic—has been the transplantation of the notebook computer industry during 2002-

2003. In the personal computer (PC) and components industry, production of keyboards and power supply units (the most labor intensive products) were the first to move to the mainland, because the cost advantages were most marked. They were followed by production of monitors and motherboards, and a steadily expanding range of information technology (IT) hardware products.

The previous chapter pointed out that foreign-invested firms accounted for 85% of China's high technology exports. These foreign firms include primarily US firms and Taiwan firms. For example, two of the biggest high-tech exporters from China are Dell Computer and Quanta, a Taiwan assembler of hi-tech equipment. But Quanta is also the largest single external supplier of computers to Dell. Several large Taiwan-based exporters from the mainland are engaged in assembling valuable components into high value final products. Foxconn is the largest and best-known. Computers and laptop computers make up a big share of the total; contract manufacturing of a range of final products accounts for most of the rest. Even Intel operates a testing and packaging facility in Shanghai, and imports the actual chips that are processed there.

As manufacturing production has moved to the China mainland, the southern coastal provinces have been industrializing rapidly, while Taiwan and Hong Kong have to some extent de-industrialized. The Hong Kong industrial labor force peaked just below one million, and had declined to 172,000 by June 2003. In Taiwan, the manufacturing labor force reached a peak in 1987 at 2.8 million, but then leveled off, and was at 2.59 million at the end of 2003. Meanwhile, in the two provinces of Guangdong and Fujian, the industrial labor force has increased from 6 million in 1985 to 11 million at the end of 2001. Between them, Hong Kong and Taiwan have lost about a million manufacturing jobs, while Guangdong and Fujian have gained about five million. In fact, these data probably understate the total number of new manufacturing jobs in Guangdong and Fujian. There have been major flows of immigrants from other parts of China into these provinces, and some immigrants working in the informal sector are not captured in official employment statistics.

Hong Kong and Taiwan have both experienced substantial success in upgrading to higher skilled activities, while simultaneously experiencing steadily rising incomes and relatively low unemployment. Hong Kong's restructuring has been especially thorough, as it has shed many industrial functions altogether and moved into greater specialization in services, particularly finance, transport, and telecommunications. In Taiwan, restructuring within the manufacturing sector itself has been the most impressive feature. Total manufacturing value added has continued to grow, even as manufacturing employment has dropped. Taiwan has moved into technologically more sophisticated products, while shedding low technology products. Thus, the upgrading of skills occurred in opposite and symmetrical ways in Hong Kong and Taiwan. Hong Kong

moved out of manufacturing and into a variety of business services, such as finance, marketing, and accounting. Taiwan has been quite successful in improving technological capacities and moving into production and export of commodities at much higher technological levels, yet it seeks to also become a business operations and financial center. Both experienced dramatic success through the late 1990s; both were buffeted by the economic turbulence of the late '90s and post-2001 global economy; both seem to be recovering today.

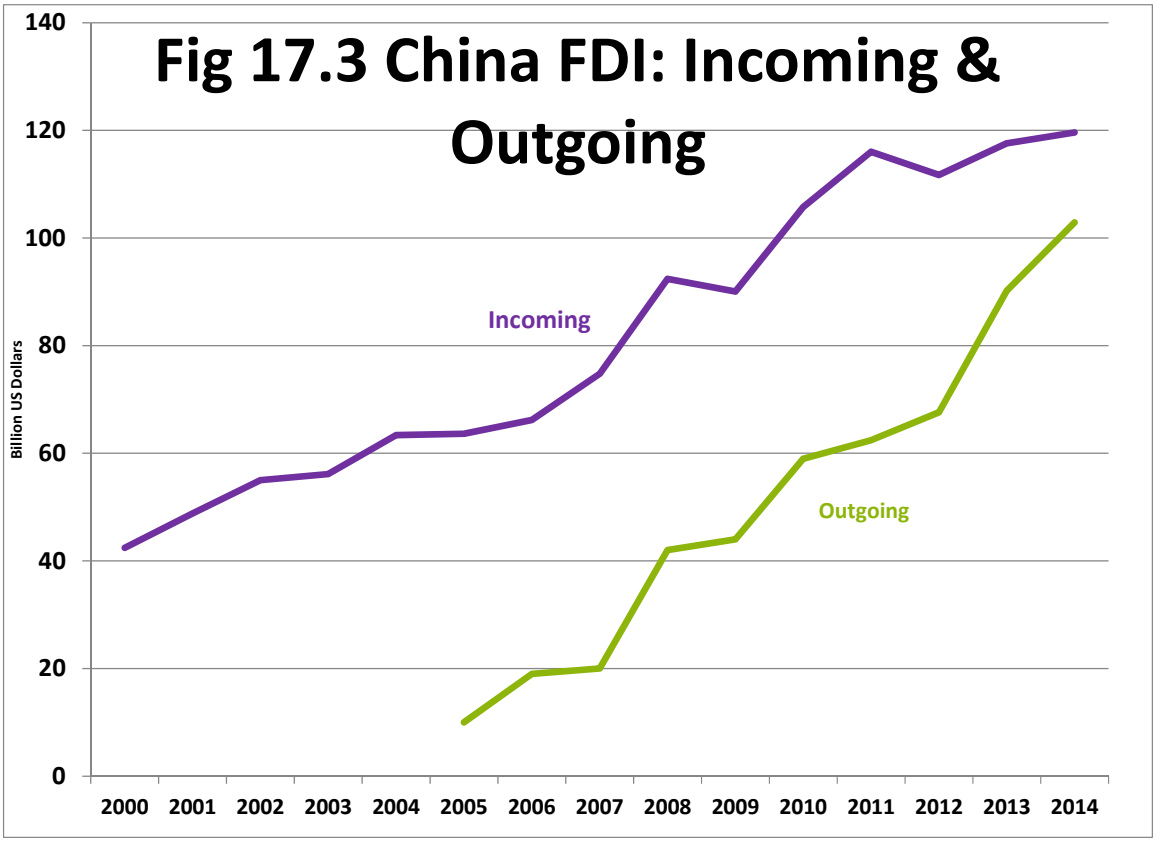
17.5 WTO and the Sectoral Composition of FDI

Manufacturing is a much larger part of FDI inflows into China than it is for FDI inflows in the rest of the world. Manufacturing accounted for 70% of Chinese FDI inflows in both 2003 and 2004, and has only gradually drifted downward. This is unusual: Manufacturing accounted for only 38% of the stock of FDI in developing countries at the end of 2002 (and even less, 32%, in developed countries), while services accounted for 55%. In 2012 in China, FDI was still 44% in manufacturing, and another 22% in real estate. At the end of 2013, manufacturing accounted for 46% of the stock of foreign-held registered capital and real estate for 17%. Together, these two account for 63% of foreign registered capital.

This implies that services are a comparatively small share of investment in China. Mining was less than 1% of FDI, and agriculture less than 2%. Less than 30% of China's incoming FDI was in services. This is a substantial contrast with the rest of the world, where wholesale and retail trade; transport and telecommunications; and finance are all large. To a large extent, this is explainable in terms of the restrictions that China has maintained on foreign entry into the most important service sectors. China's accession to the WTO involved commitments to dramatically lower most of those barriers, and it was widely anticipated that the impact of WTO membership would be most dramatic in opening service sectors (more dramatic than the impact on trade, which had already substantially liberalized by the time of accession). However, this impact is scarcely evident in the investment numbers. While WTO had a major impact on the way that trade was conducted, the apparent impact on foreign investment was apparently much more limited, at least in terms of the sectoral composition of investment.

17.6 Outbound FDI

China was an attractor of FDI for more than a decade before beginning to permit, and then promote, outward FDI. At first, outward FDI (OFDI) involved primarily the permission given to SOEs to acquire resources abroad. Gradually the gates opened further, and the trickle of OFDI became a flood. After the onset of the Global Financial Crisis, Chinese policy-makers began to see that there a range of attractive assets were available globally, not limited to natural resources. As Figure 17.3 shows, China's OFDI is now increasing much more rapidly than incoming FDI, and at current rates, OFDI would surpass inward FDI in 2016 or 2017.



China's initial focus on natural resource investments was accompanied by the dominance of SOEs, and especially large central SOEs as the main investors. However, as outflows have increased, private firms have begun to play a bigger role, and investment has expanded beyond resources into many other manufacturing sectors. Mergers and acquisitions have increased, as Chinese firms (like other global firms) have sought to acquire expertise abroad, as well as gain access to resources and markets.

Chinese official data on OFDI are not very illuminating: they report that more than half of Chinese OFDI is in Hong Kong, and almost a third in "business services." These figures testify to Hong Kong's continuing importance as a channel for outgoing (as well as incoming) investment, but tell us little about the actual distribution of Chinese OFDI. As a result, a number of projects have sprung up to track Chinese OFDI based on press reports and regulatory filings. These find aggregate numbers rather close to Chinese official numbers. The AEI database of cumulative Chinese OFDI from 2005 through 2014 shows that the United States was the top destination at $90.1 billion. Australia was second ($70.7), following by Canada ($41.8), Brazil ($30.5), Britain ($28.5) and Russia ($21.6).

The same database shows 41% of cumulative investment in energy and power, and 19% in metals. This shows the impact of China's early strategy of seeking resources abroad. With the 2014 collapse in global energy and resources prices, many of these investments are set to lose substantial amounts of money. A number of large-scale resource projects in Australia have failed rather spectacularly. In the last year, OFDI into the resource sector has scaled back considerably, and investments in finance and technology grown rapidly. This is a healthy adjustment to changing global circumstances.

17.7 The Balance of Payments and the Capital Account

The balance of payments covers all sources and uses of foreign exchange. Figure 17.4 shows one way to simplify China's balance of payments over the past twenty years. By definition, the four lines shown sum to zero. The green line, generally below the horizontal axis, is the accumulation of official foreign exchange reserves. A negative number corresponds to an *addition* to official reserves. (When the central bank buys foreign currency, it takes that foreign currency off the market—thus the negative sign—and invests the money in low risk securities such as US Treasury bonds. Thus, the increase of official reserves is a special kind of capital outflow.)

Figure 17.4 shows that two large components of the balance of payments have consistently been positive. The balance of trade in goods and services has generally been about +2-3% of GDP, but surged higher between 2005 and 2009, when it averaged 6.8% over five years (as discussed in Chapter 16). Foreign direct investment (FDI) has similarly been positive, drifting down gradually from 5% to 2% of GDP.[1]

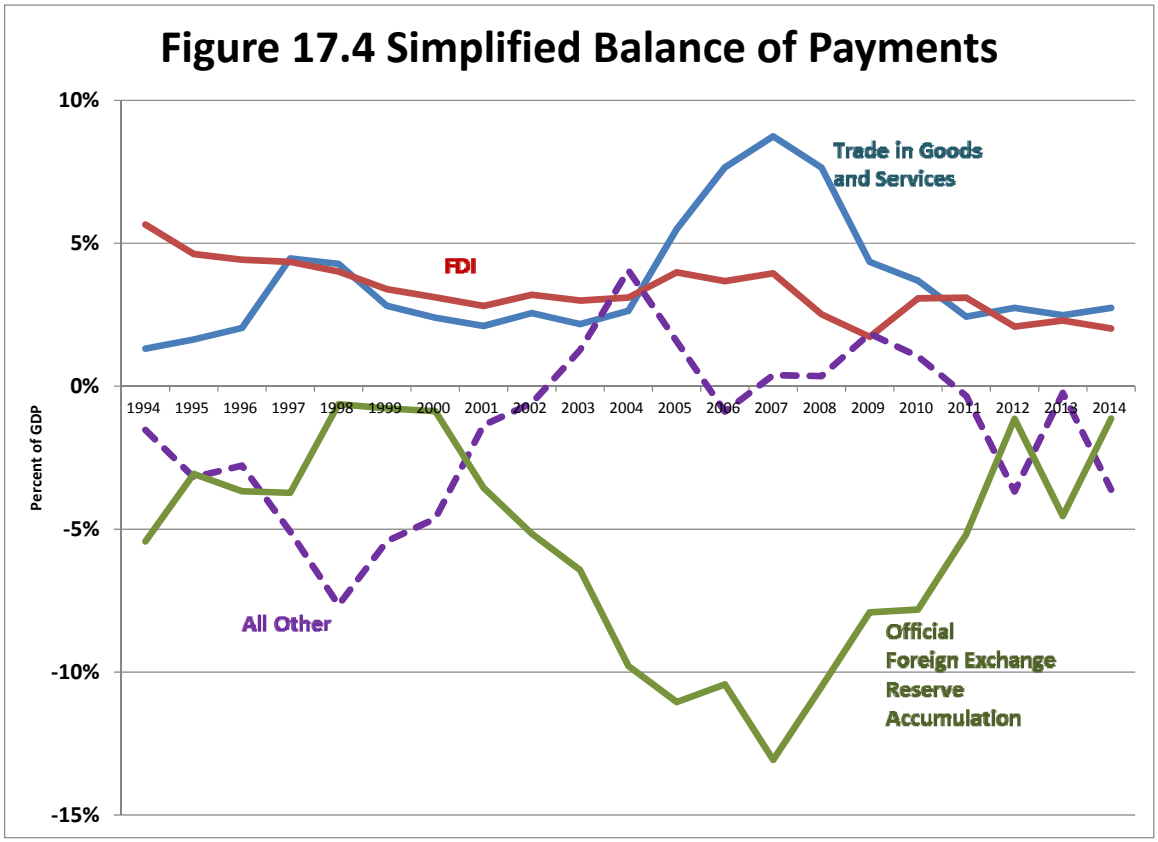
[1] Accounting procedures for FDI are different in the balance of payments accounts and in the Ministry of Commerce figures used elsewhere in this chapter.

Finally, Figure 17.4 shows an aggregate "all others" category (purple line). This includes all items from the capital account (except FDI), plus income and remittances from the current account, plus errors and omissions (See Chart 17A.1 for details). Normally these are shown separately, and they are in fact in different categories of the balance of payments. However, inspection of the Balance of Payments reveals that there is considerable fluctuation in the direction and also the relative size of these different components, and errors and omissions is extremely large. In part, this reflects the fact that data on specific components of the Balance of Payments are simply not very accurate. But in part it reflects the fact that individuals and businesses, in the absence of capital account convertibility, utilize many different channels to move money into and out of China. This omnibus "all others" category can be taken as the net value of all the flows of money in and out of China. While the trade balance and FDI accounts are consistently positive; and official reserve accumulation is consistently negative, this "all other" category swings broadly from negative to positive and back.

In general, three periods emerge from looking at the "all other" capital balance. From 1994 through 2002, capital was generally leaving China. From 2003 through 2010, capital was flowing into China. During this period, attracted by China's booming economy, and further encouraged by expectations of RMB appreciation, money flowed into China on a large scale. Alternately stated, during this period, China had a large trade surplus and a large private capital inflow (including FDI and all others). To balance the accounts, and restrain or prevent currency appreciation, the Chinese central bank bought up massive amounts of foreign exchange. For the 7 years 2004 through 2010, China's FX accumulation averaged 10% of GDP annually. From 2012 through the present (2015 will be even more extreme), a dramatically different picture emerges. The trade surplus return to a more "normal" (historically and in comparative terms) 2 to 3% of GDP. More importantly, "all other" capital flows turned negative. On balance, money was flowing out of China, and this flow became quite large in 2015. As a result, official reserves stopped growing, and even shrank significantly in 2015. Normalized by China's GDP, the first and third periods seem quite similar: in both, capital outflows were significant while official reserve accumulation was modest. Of course, an important difference is that aggregate size of the flows involved. In 1998, the years of the largest proportionate outflow, the total amount was only 79 billion USD. In 2014, by contrast, outflows were smaller in proportion to the Chinese economy, but totaled 375 billion USD, and 2015 was much bigger.

China has maintained restrictions on capital account convertibility. That is, while an exporter or importer can freely convert RMB to foreign exchange with presentation of trade documents, individuals and businesses cannot simply buy or sell large amounts of domestic or foreign currency. In theory, therefore, we should expect other kinds of capital flows reflected in the Balance of Payments to be quite small. However, this

expectation is false. Despite the nominal lack of convertibility on the capital account, liquid capital flows to and from China are in fact quite large.



17.8 Accommodating Outflows

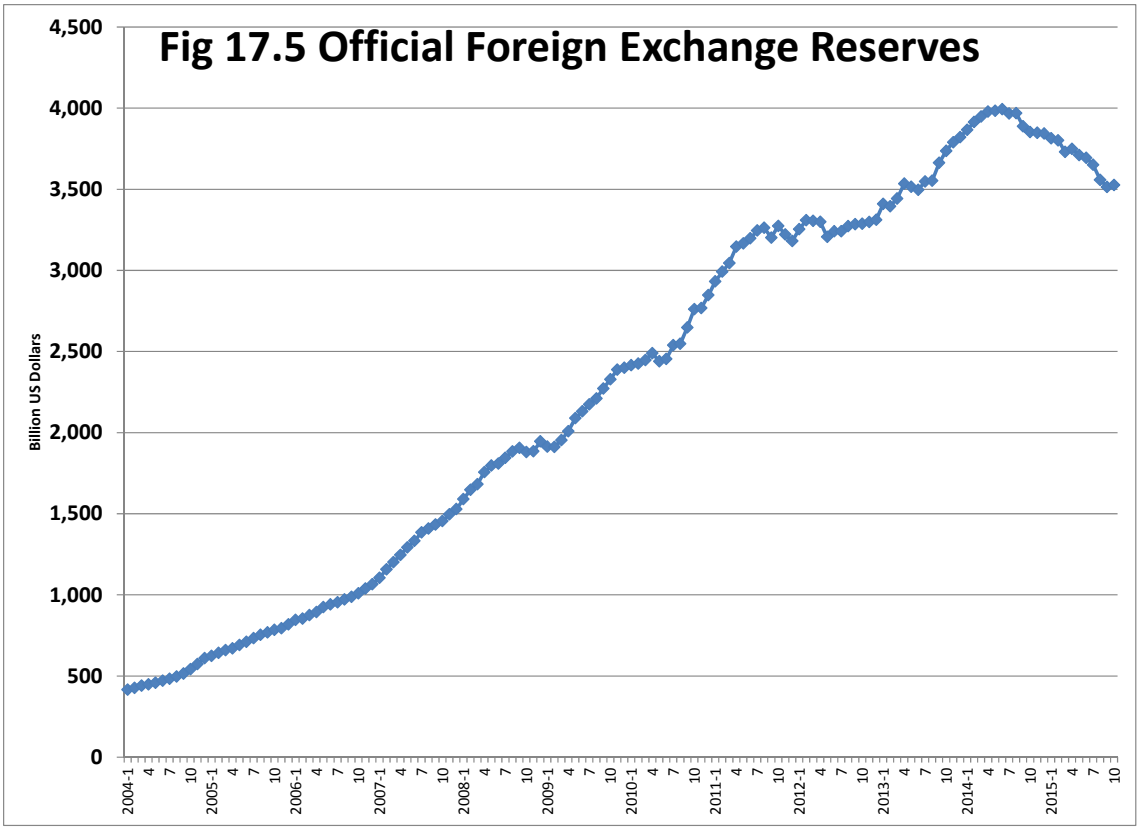
China's current account has been in surplus for the past twenty years, China must have been experiencing capital outflows of the same magnitude (because the Balance of Payments is an accounting identity that sums to zero). In fact, during the first decade of the century, China ran a current account surplus *and* experienced a net inflow of private capital, including FDI and other capital flows. This implies that China must have been accumulating official foreign exchange reserves to offset these twin surpluses. That is indeed the situation. As Figure 17.5 shows, between 2004 and June 2014, China increased its reserves from under $500 billion to $3.99 trillion. Since Jun 2014, however, reserves have dropped by $479 billion, indicating a dramatic change in economic conditions.

It is doubtless better to have $3 trillion in reserve than not to have $3 trillion. However, accumulating such a large sum of official reserves creates three important problems.

1. Accumulating reserves is equivalent to keeping your currency from appreciating (since the central bank is printing more domestic currency to pay for foreign exchange, thus keeping the value of the domestic currency from rising). Preventing appreciation facilitated the increase in the trade surplus to 8% of GDP in 2007, which was associated with misallocation of resources and friction with trading partners.

2. Rapid reserve accumulation makes it difficult to run a coherent domestic monetary policy. Excess printing and emission of domestic currency contributes to inflationary pressures and requires the central bank to sterilize the monetary impact (Chapter 20).

3. This vast sum of money is invested in a limited range of low risk, low return securities, especially US Treasury bonds. Official reserves, in order to be useful reserves, need to be in a safe and highly liquid investment. Unfortunately, there are not many such investments in the world, and US bonds dominate the available supply. This means the return on reserves is low (although bond prices have been robust the last decade).



A large economy needs substantial foreign exchange reserves, but most observers agree that $4 trillion in reserves is more than China needs. Therefore, it is reasonable for Chinese policy-makers to seek other forms of capital outflow which will generate higher

returns, a more diversified investment structure, and other strategic and economic benefits. We have already discussed the fact that China has encouraged outward FDI by both SOEs and private firms since about 2005. The "Go Out" policy has lowered barriers to companies seeking to invest abroad, and support is often available for OFDI from banks and other financial institutions.

In addition, China seeks government-sponsored channels for investment abroad as well. China has now established two large Sovereign Wealth Funds (SWFs), which invest for the long-term interest of the government and nation. Not all the investment of these SWFs is foreign, and we do not have good data on the composition of their assets. However, these are big SWFs and foreign assets are a significant part of their investments. The China Investment Corporation (CIC) had $747 billion in assets in mid-2015, while the SAFE Investment Company had $568. This ranks them third (after Norway and Abu Dhabi) and sixth among global Sovereign Wealth Funds (SWFI website).[2] These SWFs are authorized to hold considerably less liquid—and potentially much higher yielding—securities than the foreign exchange reserve fund.

In a further step, China has recently sponsored the creation of a number of new muti-lateral financial institutions in which China has a preponderant voice. The Asia Infrastructure Investment Bank (AIIB) is a new regional investment bank, similar in character to the World Bank and Asian Development Bank. However, China contributed 30% of the capital (and votes 26.1% of the shares).[3] Since, as in other multilateral financial institutions, a super-majority is required for important decisions, China has a veto, and also secured the appointment of a Chinese national as the first head. The AIIB will eventually help channel a significant amount of Chinese saving to investment projects around the Asian periphery. A somewhat similar institution, the "BRICS Bank" (recently renamed the New Bank) is expected to play a similar role for the BRICS (Brazil, Russia, India, China and South Africa). For China, these institutions are means to facilitate the flow of Chinese domestic saving abroad, hopefully to facilitate the selection of higher quality projects through the application of sophisticated financing and appraisal and evaluation techniques.

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[2] For comparison, the US Social Security Trust Fund has assets of $2,790 billion in mid-2015. It is considered a pension fund, not an SWF.

[3] Other large share-holders include India (7.5%) and Russia (5.9%). Other Asian countries hold 33.8% of shares and European countries hold 21.8%. The US is not a member,

17.9 Conclusion

The preceding pages have made clear that FDI has had a major impact on China, transferring manufacturing capability, jobs, and export markets to China. The close integration of China and other East Asian economies—especially the "China Circle" economies of Taiwan and Hong Kong—has created extremely competitive, flexible and low cost manufacturing networks. Looking to the future, the challenge for China will be to expand the benefits receiving from openness to foreign investment. That expansion should come in terms of the sectors open to foreign participation, and the modes of foreign participation. Now China is making a transition to a large-scale capital exporting country. The scale of China's export of saving is likely to have a profound impact on the global economy. If it is managed well and takes place through stable and transparent mechanisms, it will be of enormous benefit to a global economy where saving and investment rates are today far too low. If savings come out of China through erratic and/or underground channels, the de-stabilizing impact on the world economy will overwhelm the benefits. At the same time, economic difficulties in China might bring this phase of capital export to a premature end.

China today is poised between a nationalist impulse that has gradually and subtly, but unmistakably, limited the access of foreign investors to many areas of the domestic economy, and a reformist impulse that recognizes that the largest breakthroughs in China's move to a market economy have been accompanied by greater openness to foreign businesses as well. The predominance of FDI among China's external capital sources is exceptional; it implies that China's "openness" as measured by exposure to FDI is greater than its openness in other dimensions. Further major choices confront China's policymakers: will "openness" again be a part of China's new reform initiative? Will the Shanghai Free Trade Zone play a role in the current wave of reforms that resembles that played by Shenzhen and the other SEZs in the 1980s or Pudong in the 1990s? Will China choose to join multilateral trade agreements that will require it to open its investment regime? Will China's service sectors become more open to investment as China seeks to upgrade to a more sophisticated and prosperous economy? These questions are all still open at this time.