Do export processing zones attract FDI and its benefits

The experience from China

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1 Introduction

The question posed by the title of this paper can be answered in fact quite simply. In the experience of China, export-processing zones (or, to use Chinese terminology, Special Economic Zones or SEZs) did succeed, during the decade of the 1980s, to bring into China a significant volume of foreign direct investment (FDI). With this investment did come certain benefits. However, both greater volumes of investment and greater benefits followed when the special privileges accorded to foreign investors in SEZs were nullified by the Chinese government in 1991 via the opening all of China to foreign investment on essentially the same terms as were granted in the SEZs. This has led some observers to conclude that the SEZs were a failure in the sense that perhaps the benefits that almost unquestionably have been brought to China by foreign investment could have been accelerated had the 1991 liberalization occurred earlier and the period curtailed during which this investment was largely restricted to SEZs (and to SEZ-like zones; as we shall see, even during the 1980s, FDI was not limited to the formally-declared SEZs but extended to other areas to which SEZ-like privileges were extended to firms). Thus, the question posed by the title can be restated as follows: were the SEZs, and SEZ-like zones, a “building block” upon which the successful build-up of FDI during the 1990s and 2000s rested? Or, in the end,

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What are identified in most countries as “export processing zones” were referred to in China as “Special Economic Zones”. These zones were, in fact, meant to increase exports via selective deregulation of regulations and reduction of tariffs on imported intermediate goods that impeded establishment of export-related activity and thus correspond to what is elsewhere termed export-processing zones. However, the term “Special Economic Zone is used throughout this paper in conformance with the considerable literature that has been developed that is specific to China.
were the restrictions imposed on China outside the SEZs during the hey-day of the SEZs simply an obstacle that slowed China’s economic progress?

These questions of course are in a category that can never be answered definitively; after all, we will never know the “counterfactual”, i.e., if things had been done differently in China during the 1980s – specifically, if China had pursued more liberal and open policies than it did – would the economic situation there be better than it is now? The answer is, we shall never know for sure. But, nonetheless, we can explore these questions with the hope that some insight can be gained, even if this insight might not in the end give a final answer to the questions that we pose.

2 Some background: the SEZs and the opening of China to foreign investment during the 1980s

It is useful to begin by examining the circumstances under which China, which prior to 1979 had been in effect fully closed to foreign direct investment, began to open itself to this investment in the 1980s. The process began with reforms first enacted during the late 1970s. One of these reforms was the passage in 1978 of the Law on Chinese-Foreign Joint Ventures. This law, in principle, allowed foreign investment anywhere in China, subject to government approval and tight conditions and regulation. The main objectives of the law were to bring to China technologies that, at the time, were lacking in the largely state-owned industrial sector and, also, to improve the quality of services in China. A parallel objective was to increase China’s exports; in 1978, China’s exports of manufactured goods were a scant portion of national product and, moreover, lack of foreign exchange was seen as a binding constraint on further development.

The intent of the 1978 law does not seem to have been to open China to a flood of foreign investment but rather to encourage selective investment in sectors where Chinese firms were clearly deficient. Indeed, a main worry in 1978 was that foreign investment should not create too much competition for domestic firms, which of course at that time were almost all state-owned. Thus, China did implicitly restrict foreign investment on a sectoral basis; such investment was generally not sought in sectors where Chinese firms were already present even if, in many instance, these domestic, largely state-owned firms were not up to world standards in terms of product technology or efficiency. Alas, many if not most of the regulations and restrictions associated with this law were non-transparent, especially with respect to specifically what were the sectors in foreign investment was sought or, alternatively, officially discouraged (Rosen, 1999). This was true even after the publication of implementing regulations for the law in 1983 and publication of “clarifications” of these regulations in 1986 (as we shall see, the “clarifications” were actually a de facto liberalization of policy). It would not in fact be until 1995 that a comprehensive list of regulations and guidelines, including transparent sector-specific restrictions, for foreign investors would be published.

However, it was quickly recognized that the 1978 law in itself not only would not open China to a flood of foreign investment but in fact was inadequate to enable much FDI at all, especially export-related FDI which in
fact was sought (Jia, 1994). Thus, in 1979 a law enabling the Special Economic Zones in which foreign investors could operate export-oriented ventures free from much of the regulation then present in China was passed. The first such zones were established in 1980. The main advantages granted to exporters in these zones were access to imported raw materials and intermediate goods at world prices (World Bank, 1993) and availability of export credit that was then lacking in the domestic financial institutions.

Thus, as a practical matter, in the early 1980s, to qualify for certain export-oriented privileges that were indeed desired by foreign investors seeking to invest in the manufacturing sector in China, this investment had to be placed in the SEZs. There were four such zones created in 1980. Three of these were in Guangdong Province, in the cities of Shantou, Shenzhen, and Zhuhai, and one was in Fujian Province in the city of Xiamen. In 1988, a fifth zone was established, on Hainan Island. In addition, in 1984, fourteen coastal cities were designated as “Economic and Technical Development Zones” (ETDZs). As such, these cities de facto became SEZs, as most of the privileges available to exporters operating in the SEZs became available to exporters operating in these designated cities as well.

Importantly in what was to follow, all of these zones were in the coastal areas of China that for a variety of reasons were a priori the most attractive, when compared to other areas of the country, to foreign investors. For example, these areas had, relative to much of the rest of China at the time, a well-developed infrastructure, including access to deep-water port facilities and airports. The coastal areas tended to have well-developed human capital as well, e.g., virtually all persons in the cities of these areas were literate and numerate, and the region possessed a disproportionate number of China’s university graduates (Jia, 1994, op. cit.). China thus avoided a problem associated with EPZs in many developing countries, where these zones have often been located in the least-developed regions of the countries.

The number of zones created also doubtlessly worked to China’s advantage by hastening the liberalization process in China from the mid-1980s onward. This is because officials in the ETDZ cities soon found themselves in competition with each other, and with the SEZs, to attract foreign investors and, in this competition, no such official would seek to enforce restrictions that were not being enforced in other areas. The result was that regulation as actually applied in these areas tended to be more liberal than de jure regulation. Moreover, the success of these zones in attracting FDI led to a number of other areas being accorded SEZ-like status, where this status was often granted by provincial governments not necessarily taking these actions with the permission of the central government (Lardy, 1994, 2002). By 1989 there could be identified something like 111 “zones”, most of them in fact without official status, which operated under the pretty much the same rules as were applied in the SEZs (Rosen, 1999, op. cit.) Most of these continued to be located in the coastal provinces.

Even so, foreign investment in the SEZs and SEZ-equivalent areas built up quite slowly at first. The rate of FDI however picked up significantly following 1986, when requirements appearing in the 1978 law on foreign investment that operations in China with foreign investment be formed as joint ventures with local enterprises and that the heads of such operations be Chinese nationals
were eased pursuant to the “clarification” of the 1983 regulations. Indeed, the results following 1986 were actually quite spectacular from the perspective of that time. FDI inflow in 1986 was close to $US1.9 billion whereas three years earlier it had been barely a third of this amount. FDI inflow then rose to more than $2.3 billion in 1987. Although these flows are but trickles when compared to the amounts that would be realized in the middle 1990s, by the standards of the middle 1980s, they were impressive.

Between 1979 and 1991, about 43% of all FDI in China was placed in Guangdong and Fujian provinces, where the SEZs were located. An additional 27% went to the coastal provinces containing ETDZs or, later, the unofficial SEZ-like zones noted above; thus, about 70% of FDI in China during this period went to the provinces in which the SEZs or SEZ-like zones were located. How much of this investment was located in these zones, as opposed to areas in these provinces not designated as special zones, is not reflected in the official data, but it is almost certain that the vast majority of the FDI was actually in the zones. FDI in the SEZs and SEZ-like zones, moreover, almost surely included almost all manufacturing operations under foreign investment. By contrast, much of the FDI outside the SEZs in provinces other than the coastal provinces was in services sectors, often ones catering to tourists and other overseas visitors (e.g., hotels).

With this investment did come certain benefits, e.g., new sources of employment in regions where unemployment or, more correctly, shadow unemployment, was doubtlessly quite high, and new sources of foreign exchange at a time when scarcity of foreign exchange was, as noted, a binding constraint on Chinese growth. However, the benefits were rather limited. For example, there were relatively few “linkages” established during the early years between foreign-invested operations in SEZs and SEZ-like zones and Chinese firms, e.g., few export-processing operations used Chinese firms to supply inputs for products to be exported. One result was that there was little technology transferred between these operations and local firms; a common channel by which technology transfer takes place is from a producer of final goods to supplier firms, but during the 1980s it was difficult for foreign-invested firms operating in limited zones in China to open this channel very wide. Rather, something of a “dual” economy was evolving, such that firms in SEZs and SEZ-like areas operated largely separately and independently of other firms in the Chinese economy. But, of course, this was

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2 Following 1986, operations in China, including in SEZs, could be majority or 100% foreign-owned if either (1) 50% or more of the output was for export or (2) the operation was to produce technologically advance products, ones where incumbent Chinese firms lacked the relevant technology.

3 All figures for FDI flows are on a balance of payments basis, i.e., reflect actual realization of investment. Chinese authorities often cite figures for amounts of investment that are “contracted” (in effect approved by the government) and these figures have historically often been much higher than realized investment.

4 The terms “foreign-invested operation” and “foreign-invested firm” are used throughout this paper because local affiliates of foreign investors are still termed thusly in China, even if they are majority or wholly owned by the foreign investor; the terms reflect the fact that, at the outset, operations with foreign investment had to be in the form of joint ventures with locally controlled firms, a requirement that, as noted in the text, was eased in 1986.
contrary one of the reasons why China had decided to open itself to foreign investment in the first place, to create technology transfer to laggard Chinese firms.

The lack of technology transfer was in part due to the nature of foreign investment in the SEZs and SEZ-equivalent areas: Initially this investment was largely concentrated in relatively labor-intensive, technology non-intensive activities such as the cutting and sewing of clothing and other assembly operations. The main attraction of these areas, from the point of view of the foreign investor, was the ready availability of cheap but disciplined labor, rather than local non-labor inputs (Chen and Wong, 1997). Thus, for example, in the case of operations in China in which Hong Kong light manufacturers had invested, the flow of product was of inputs of intermediate goods from Hong Kong to the Chinese affiliates, where final assembly took place. The Hong Kong firms and their affiliates rarely used inputs from Chinese sources. Where such inputs were used, these were of products where Chinese firms already had mastered the relevant technologies. For example, garment assembly operations in China did use cloth from Chinese suppliers as well as cloth made in Hong Kong. But in this sector there was little opportunity for transfer of new technology to Chinese firms. (Or at least this is the view of many analysts; we re-examine this view in the following section.)

Most of the early investment in SEZs and SEZ-like areas came from so-called “overseas Chinese”, most especially those of Hong Kong, then not part of China. Indeed, doubtlessly one of the most successful of the SEZs was the one established in Shenzhen, a city immediately north of Hong Kong’s “New Territory” region on the Chinese mainland. This and other SEZs in Guangdong province were, by 1990 if not earlier, acting virtually as extensions of Hong Kong’s light manufacturing industries (Chen and Wong, 1997, op. cit.). There is evidence that by the late 1980s, however, that Hong Kong investors were beginning to “fan out” and invest in Chinese provinces other than Guangdong, having already established a light-manufacturing base in Guangdong (Zhang and Chen, 1997). Moreover, investment in Fujian Province, Shanghai, and other coastal areas began by the late 1980s to arrive from other “overseas Chinese” located in areas other than Hong Kong, including Taiwan and the southeast Asian nations.

In late 1990, Chinese President Deng Xiao-peng visited several SEZs during his now-nearly legendary “trip to the South” following the Tiananmen Square incident, where he observed the employment and export activity that these zones had generated. He wondered aloud whether it continued to make sense for privileges extended to export-generating firms to be restricted to these zones. Why not, he rhetorically asked (or at least he supposedly asked; as noted, the particulars of this trip now are the stuff of near-legend and remarks that Deng supposedly made might never have been uttered at the time), end the restrictions such that foreign investors could locate manufacturing operations more or less where they might choose? Accordingly, in 1991, the restrictions limiting export-related privileges to firms

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5 This in fact seems to be the experience of many countries that have established EPZs; see Rhee, Katterbuch and White (1990).
located in SEZs were largely lifted, and other measures were taken to liberalize China’s policy towards foreign direct investment.

Importantly, by this time, in fact the special advantages accruing to firms in SEZs already were diminishing, largely as the result of reductions in tariffs China applied to imported goods. Moreover, as already noted, by that time, the advantages granted to operations in SEZs were being applied on a rather widespread basis in the unofficial zones throughout the coastal regions of China. Additionally, the terms actually applied to foreign investors in these zones were almost surely *de facto* more liberal than allowed by the official policies of the central government (although this is a hard proposition to test because, as already noted, the official policies were not fully transparent). The liberalization of 1991 thus probably should be seen almost as much a bringing into line of formal policy with policy as actually implemented as a change in policy.

3 The 1991 reforms and their aftermath

As is well known, after the liberalization of 1991, the flow of FDI into China increased very dramatically. Charts 1 and 2 indicate the flow and cumulative stock of foreign direct investment in China from 1980 until 2002. As noted earlier, there had been a significant surge in foreign direct investment following 1986, but then flows of FDI leveled off at something like $3 billion per year beginning in 1988 and grew quite slowly until 1991. This slow growth is often attributed to the Tiananmen incident in 1989 and the crackdown that followed this incident but it is not really clear from the FDI flow data that there was a trend break following 1989. But beginning in 1991, when the liberalizing measures took effect, foreign direct investment flows once again began to grow and indeed so at almost astounding rates. One consequence was that China became the largest recipient of FDI flows among developing nations and, furthermore, by 1995 had become the second largest recipient of this investment among all nations (the United States was in first place). The growth continued until about 1997, whereupon FDI flows into China fell somewhat during the next three years. But, by that time, the flows on an absolute scale were very high – in fact, substantially higher than to any other developing nation – such that China continued to be the largest developing country recipient of FDI even after the annual flow declined. And, of course, the stock of FDI (a better measure of economic activity generated by foreign-invested firms than flow of FDI) continued to grow substantially.

Perhaps anticipating China’s entry into the World Trade Organization (WTO), FDI flow into China began once again to grow beginning in 2000 and this growth seems to have persisted through 2002, after this entry was completed. Impressively, and unlike the period of growth during the 1990s, this recent growth in FDI in China has been taking place at a time when total worldwide flows have been declining (Unctad 2002). Indeed, in 2002 and 2003, China has been the nation receiving the largest amounts of foreign direct investment, surpassing even the United States which held this position from the late 1980s until 2001.

With the passing of time, the sectoral mix of foreign direct investment began to shift such that, although such investment continued in lower-technology,
labor-intensive sectors, an increasing proportion of the new investment was in higher technology activities (Lemoine, 2000). This resulted in both foreign-invested firms leading China into new export activity (e.g., in electronics and other goods embodying advanced technology) and these firms participating to a greater extent in the local economy. A consequence of the latter was that output from newly established foreign-invested operations shifted sometime in the middle 1990s from being primarily oriented towards export markets and more towards local markets. Even so, exports from foreign-invested enterprises continued to grow and, indeed, almost all growth of Chinese exports during the 1990s can be attributed to these enterprises (Wei, 1996; Lemoine, 2000, op. cit.). Part of the reason for this doubtlessly is that China’s regulatory framework, especially as regards working of the financial system, worked so as to intermediate most domestic savings into the inefficient state-owned sector (Lardy, 1998). The result was that would-be local entrepreneurs were at a disadvantage relative to foreign-invested firms (Huang, 2003). Thus, such entrepreneurs often teamed up with foreign investors, so that new ventures would be subject to the more favorable regulatory framework (Huang, 2003, op. cit.).

One major consequence of the post-1991 developments in China is that total factor productivity in the Chinese coastal provinces, where FDI is concentrated, grew faster in this period than prior to the earlier period, and the difference in the two growth rates is statistically significant (Graham and Wada, 2001). By contrast, there was no such acceleration in total factor productivity in the remaining provinces of China in the post-1991 period. This suggests that the jump in the growth of the total factor productivity in the coastal provinces is the consequence of technology transfer into the region by foreign-invested enterprises. Consistent with this, FDI is significant as a determinant of growth in the coastal provinces of China and, also, in a Mankiw-Romer-Weil version of the Solow growth model, the coastal provinces seem to be converging to a different, and faster, growth path than the remaining provinces of China in the post-1991 period. There is also evidence that FDI in the coastal provinces of China has boosted productivity in that region even in labor-intensive operations, suggesting perhaps more significant technology transfer than normally thought to occur in such operations (Lemoine, 2000, op. cit.). Thus, it would seem that one of the original goals of opening China to foreign investment, notably the upgrading of China’s technological capabilities, has been fulfilled to some major degree since 1991, or at least so in the coastal provinces.

Additionally, the goal of boosting exports has been furthered, perhaps to an extent that China’s reformers would never have dreamed of achieving, during the post-1991 period. Chart 3 provides some evidence that foreign-invested firms have indeed created most if not all the growth in Chinese exports virtually since the first foreign investment in China took place. This point has been made by several authors (e.g., Wei, 1996, op. cit.) It has been noted, however, by one author (Huang, 2003, op. cit.) that some of this

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6 But it should be noted that Graham and Wada 2001 did not directly test for this; rather, they suggest that because the main thing that changed as between the coastal provinces and the rest of China was the large influx of FDI into the former area, this likely was the cause of the different performances in TFP growth.
growth might in fact have been achieved by domestically owned firms, particularly ones in China’s emergent private sector, had these firms not in various ways been handicapped relative to foreign-invested firms. This last point is controversial and whether in fact it is true is one of those matters that, at the end of the day, remains unknowable.

What does seem clear from Chart 3 is that there was no clear trend break in exports by foreign-invested enterprises following 1991. Rather, these exports grew at what would appear to be a steady rate from 1986 onward, with no acceleration in this rate evident following 1991. This brings us back to reconsideration of the earlier period.

4 The period of the SEZs re-examined

As noted in the introduction of this paper, a common view regarding the SEZs and the SEZ-like zones in China is that, if anything, the restrictions on FDI that existed in China at the time of the SEZs actually impeded Chinese development. It was only after many of the restrictions were lifted, or so goes this view, that large scale FDI entered into China, helping to launch an era of high growth. ⁷

But an alternative point of view can be formulated: that the economic development that was registered during the 1990s in China came about as the result of, as it were, the maturation of a forest that was planted during the 1980s. Without the passage of a certain amount of gestation time, it can be argued, the trees of this newly planted forest could not have been expected to bear much fruit. In this view, the SEZs and the SEZ-like zones did not impede FDI and its benefits, but rather provided (not to overdo the metaphors!) a “greenhouse” environment in which the young plants could be nurtured.

Moreover, in this latter view, the decade of the 1980s was a time when exactly how far the transitions that were first initiated in the late 1970s might proceed was highly uncertain. Many Chinese leaders during the 1980s, for example, remained unconvinced that the “reforms” of the late 1970s and early 1980s were in fact desirable. These “anti-reformist” leaders in particular worried that, if given extensive rights to operate in China, foreign firms might effectively annihilate the incumbent domestic, largely state-owned enterprises that then accounted for the vast majority of non-agricultural employment in China. At the same time, however, there was also consensus among the Chinese leadership, anti-reformist factions included, that China needed to increase its exports. Hence, initially, one motivation behind creation of the SEZs was to achieve the desired increase in exports but to keep output from foreign-invested enterprises (and other enterprises that might operate in these zones) from competing in the domestic market. This separation was not entirely successfully implemented, of course: By the end of the 1980s, as noted in the previous section, foreign-invested firms

⁷ I have not identified specific analysts holding this point of view. But, let’s just note that this view is quite prevalent at certain international organizations, e.g., the World Bank. See, for example, Madani 1998, who somewhat softly states (page 1) “Not all export processing zones have served as engines of industrialization and growth...”.
operating in the manufacturing sector were in fact beginning to sell into the domestic Chinese market. By that time, however, official resistance to foreign participation in the domestic economy, following several years of positive experience with the SEZs, was beginning to attenuate.

Nonetheless, in the early and middle 1980s, there was much resistance within the Chinese leadership to the liberalization of Chinese economic policies and no guarantee that this liberalization would continue, let alone be expanded. Indeed, even in the late 1980s, it was not a wholly unreasonable for reformers to fear that those liberalizing measures undertaken by China might be rolled back by conservative “hardliners”.

Given this, foreign investors were understandably skittish during the 1980s about locating major operations in China, for fear that a reversal of liberalization might take place or even that foreign-invested operations might be nationalized in the event that China reverted to a harder-line version of Communism. SEZs were of course places where the rules for foreign investors were relatively favorable. Indeed, because suspicion of foreign investors characterized a significant portion of the Chinese leadership, it was only because these zones were quite limited in number and scope that anti-reformist leaders in China could be persuaded to allow these zones to exist. Accordingly, the SEZs at that time arguably provided the only possible setting in which foreign investors could be comfortable with operating in China; after all, as recently as the late 1970s, China had been largely closed to foreign investment and in fact the country was seen by the outside world as a rather hostile place in which to attempt to do business. Thus, that the zones be conducted as limited experiments represented not only a compromise between reform-minded leaders of China and leaders opposed to the reforms but, arguably, even had reform-minded leaders pushed and achieved a wider opening of China at that time, foreign investors might have perceived China as being subject to too high a degree of risk to be willing to make significant investments there.

Given all of this, it is important again to note that the amounts of FDI drawn to the SEZs and the SEZ-like zones after 1985 were, by the standards of the time, quite impressive. While more dramatic growth of FDI flows took place during the 1991–97 time frame (and additional growth has occurred after 2000), one might ask whether the later growth would have occurred at all without the earlier experience and the confidence that was gained both on the part of China’s leadership and on the part of foreign investors during the earlier time.

Moreover, the benefits brought by the existence of the SEZs, while these benefits were clearly much less than what was to come during the 1990s, were not insubstantial during the 1980s. The most significant benefits were registered in Guangdong Province. In fact, by 1990 Guangdong Province could, by a substantial margin, boast the highest per capita GDP in China. This was in large measure due to the success of foreign investment in the three SEZs and numerous smaller zones, both formal and informal, located in this province (Zhang and Kang, 1997, op. cit.). Furthermore, at least some of the benefits that are most often attributed to the liberalization of the early 1990s were in fact beginning to appear in Guangdong Province prior to these liberalizing measures taking effect. These included the emergence of foreign-invested firms in higher technology sectors than the textiles and apparel
sector. For example, exports of electrical and electronic products from Guangdong were already close to $1.7 billion in 1991, and these exports came from foreign-invested enterprises that were established before the reforms of that year. In fact, this investment took place after the 1986 “clarification” of the 1983 foreign investment regulations; as recently as 1987, Guangdong registered no exports at all of electrical or electronic goods. Thus, this sector underwent very rapid development in this province during 1987–1991. Furthermore, at least some linkages between foreign-invested firms and locally owned firms in this sector were in fact beginning to be established prior to 1991.

It is also clear that certain incumbency advantages that were created by foreign investment during the 1980s in Guangdong and other provinces where SEZs and SEZ-like zones had been established persisted after the 1991 liberalization. Thus, foreign direct investment continued to flow into these zones (or to locations nearby the zones) even after foreign investors were allowed to place their investments outside these zones. Indeed, to this day, the vast majority of FDI in China continues to be located in the coastal provinces where the SEZs and ETDZs were initially established. In fact, a higher percentage of total FDI flows to China during the 1990s flowed into these provinces (about 83%) than during the 1980s (about 70%). Although the official data do not reveal whether these flows went into the areas formerly designated as SEZs or ETDZs, casual observation suggests that a great deal of new foreign-invested activity is located in or at least very near these areas. Shenzhen and Xiamen, for example, continue to attract new FDI (the author can attest to this because he has visited both places within the past two years!).

One reason for these revealed incumbency advantages doubtlessly is that, once a certain type of activity begins to cluster in a specific location, external scale economies are created that cause similar activities to be placed in the same general location. These scale economies in turn are the result of the creation of pools of specific resources, e.g., workers with specialized skills, local firms offering specialized services, etc.8 The point here is that these incumbency advantages seem to have been established during the period when foreign investment in China was largely restricted to the SEZs and that the 1991 liberalization did little to diminish these advantages. Indeed, as noted earlier, a principle factor favoring the SEZs, notably low or zero tariffs on imported inputs, had already been eroded before 1991; this erosion does not seem to have adversely affected the ability of the SEZ and SEZ-like zones

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8 The author can give an example of the latter from personal experience: on summer break while an undergraduate, I obtained temporary employment in a high technology firm located near San Francisco, California, where I grew up. This firm had need for small quantities of metal parts that had to be machined to very high tolerances; without the parts, the end-products produced by the firm would not function, but the number of parts was too small to warrant in-house capacity to produce them (these end-products were high unit value electronics goods). The specific designs of the parts were changed often, such that large work-in-process inventories were not practical. Thus, the firm had to be located very near supplier firms that could produce these parts in small production runs on short notice. The Silicon Valley area south of San Francisco was the only place in the entire United States where there existed a cluster of such supplier firms, and the existence of these supplier firms was a major reason why quite a large number of other firms producing high technology goods were located in this area.
Chart 1. FDI flows to China 1980–2002
to attract FDI, suggesting again that incumbency advantages persisted even after the initial advantages possessed by these areas ceased to be operative. Even given all of this, however, the case to be made in favor of the SEZs and SEZ-like zones being successful is a limited one. The essence of this case is two-fold. First, it must be argued that these zones created “greenhouses” in which incumbency advantages were created that were necessary for foreign investment to grow at the rates that occurred during the 1990s. But, while the facts seem to support this case (because, even after the advantages granted to the SEZs ended, FDI continued to come to these same areas), these same facts could support an alternative hypothesis: That the areas in which the SEZs were established were ones where location advantages favoring FDI already existed. Such advantages, as previously noted, include relatively well developed infrastructure plus availability of “human capital”.

Second, it must be argued that creation of these zones was a necessary step to draw FDI into these regions, i.e., that absent the SEZs, the FDI would not have come even after the liberalization of the early 1990s. The alternative hypothesis noted just above implies, however, that the regions in which the SEZs were located at least had latent location-specific advantages that would attract FDI, once a favorable policy environment was established. Indeed, there are those who believe that, had China liberalized its policies towards FDI at an earlier date without passing through the intermediate SEZ stage, the benefits of FDI in China would have arrived sooner than they did. The case that the zones were in fact necessary rests on the untested proposition that, in the absence of special zones, full-blown liberalization would not have been long tolerated by a Chinese leadership that included numerous skeptics of liberalization, such that an opening of China to foreign investment would not have been seen as credible, or at least would have been seen as very risky business, by foreign investors.

Which of the two hypotheses, (1) that SEZs were a necessary intermediate step between China being closed to FDI and China being open, or (2) that the era of the SEZs represented an unnecessary and ultimately unproductive side trip on China’s path to development, is correct? I would submit that rigorous testing of these two hypotheses is, alas, not possible. We simply do not know what would have happened had the reformist faction in China been bolder and, say, put into place the liberalization of 1991 six years earlier. Would this have led to a surge of FDI and economic growth, or would this have played into the hands of conservative “hardliners” in the leadership who then would have moved successfully to squelch the reform effort? In the end, we just don’t know.

Whichever the two hypotheses one accepts regarding China’s experience, it is quite clear that by 1990 or so the SEZs and other zones had outlived their usefulness. Thus, one analyst from China (Long, 2001) argues persuasively that restrictions and conditions put on foreign investors at that time were not serving long run developmental interests of China but, rather, were counterproductive. Another analyst (Luo, 2003), looking at the issue from quite a different perspective, arrives at a similar conclusion: he notes that performance of subsidiaries of foreign investors in China has tended, ceteris paribus, to be weaker where regulatory interference has been higher. By both effectively ending the differential treatment accorded to foreign investors operating in the SEZs and SEZ-like zones in 1991 so as to extend equivalent
Chart 2. FDI stocks in China 1980–2002
treatment to foreign-invested firms operating anywhere in China and further reducing the regulatory burden under which these firms operated, Deng Xiaoping thus did create a new environment in China that enabled a faster pace of development. The case for the SEZs ultimately rests on the notion that, even if the need for these changes had become clear by 1991, ten or even five years earlier the benefits of deregulation of FDI were not apparent to the Chinese leadership. The utility of the SEZs, viewed with perspective, was to demonstrate that these benefits indeed did exist.

5 Implications of the Chinese experience for other developing nations

If we accept the first hypothesis outlined in the previous section that the SEZs were a necessary first step in China’s emergence as the largest developing nation host to FDI, Chinese experience would be supportive of the following rather sweeping generalization offered by the World Bank: “The literature on EPZs shows that EPZs are a second-best solution compared with generalized country-wide reforms, but that, where country-wide reforms are difficult to implement, they can be a useful weapon in the development arsenal” (World Bank, 2001). However, we might want to add two qualifications based on Chinese experience. The first is that the EPZs be established in a locale that already possessed attributes attractive to foreign investors, such that these investors might be expected to come to that locale were government policy to be conducive to foreign direct investment (which, as we have noted, was not the case in China when the SEZs were first implemented). The second is that the usefulness of the EPZs is most likely to be to create a demonstration effect for country-wide reforms. Both of these conditions in fact were met in China: the SEZs were located in the coastal regions, mostly in or near thriving cities, that were a priori the most attractive areas to foreign investors, and the early success of the SEZs did provide impetus for policy changes, both at national and provincial level, that reinforced the attractiveness of these areas to foreign investors. On the second condition, the fact that there were many SEZs and SEZ-like zones established in China during the 1980s such that these competed with one another, doubtlessly enhanced the demonstration effects: in particular, measures adopted in one province or municipality that proved effective in attracting FDI were quickly copied by other provinces and municipalities.

Even so, drawing implications for other developing nations from the Chinese experience is a risky business. China has, after all, many characteristics not shared with other developing nations that now make this country a very attractive location for foreign investors. It occupies a very large land mass and has the largest population of the world’s nations and, thus, presents foreign investors with a large, diverse, and growing market. Rates of literacy in China are high in comparison to most other developing nations, and the percentage of Chinese who have or are receiving university-level education is also very high. Although recent growth has placed stress on the nation’s physical infrastructure, this infrastructure is unusually well-developed among developing nations, and bottlenecks in the infrastructure are being addressed via an aggressive program of new investment. Corruption has been an issue in China but, in places where corruption seemed to be
Chart 3. Exports by Foreign Invested Enterprises (FIEs) and Total Chinese Exports, 1985–2002
out of control, the government has implemented serious crackdowns (e.g., in Xiamen in recent years, corruption became an endemic problem; but senior figures there who were found to have been corrupt have been brought to justice and received severe criminal sentences, including even the death penalty). Crime rates in China at the personal level are low, and foreign investors do not worry about sending expatriates to that country for fear that personal safety cannot be guaranteed.

In short, the factors that might explain China’s huge success in attracting foreign direct investment are many. One of these is the early success of the SEZs, but this success alone does not explain the continuing surge of FDI that has flowed to China during the 1990s and the first years of the 21st Century. Thus, those nations that wish to learn from the Chinese experience should view this experience holistically, and not to draw unwarrantedly optimistic conclusions from the SEZs themselves. Export processing zones such as the SEZs might indeed achieve catalytic effects in nations other than China, but this will happen only if other necessary elements are put into place.

References

Do export processing zones attract FDI and its benefits


