Volume Title: Foreign Direct Investment

Volume Author/Editor: Kenneth A. Froot, editor

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-26621-4

Volume URL: http://www.nber.org/books/froo93-1

Conference Date: May 15, 1992

Publication Date: January 1993

Chapter Title: Mobile Exporters: New Foreign Investors in East Asia

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Chapter URL: http://www.nber.org/chapters/c6537

Chapter pages in book: (p. 173 - 196)

6 Mobile Exporters: New Foreign Investors in East Asia

Louis T. Wells, Jr.

Over the past five or so years, Indonesia has experienced a boom in the amount of foreign direct investment coming into the country.[1] Between 1986 and 1990, 50 percent more foreign investment projects were approved than were approved for the twenty-year period between 1967 and 1987. From 1987 to 1990, the number of approvals tripled. But it is not only the growth in foreign investment that is striking. Equally remarkable is the fact that the majority of recent foreign investors for manufacturing do not come from the countries that are usually thought of as sources of international investment—not from Japan, which is often touted as dominating regional investment, nor from the United States or Europe. Rather, they come from other developing East Asian countries. Although substantial flows of foreign investment from other developing countries are not totally new to Indonesia, the latest wave differs from the past in the markets toward which output is aimed. Rather than designing factories to supply the Indonesian market, more than half of these foreign firms plan to export most of their output from the host country. The phenomenon, documented and examined in this essay primarily for Indonesia, is occurring elsewhere in developing Asia as well. There is some slight evidence to suggest that such investment will also have important implications for other developing countries.

This paper has several goals: first, simply to identify and report on the size of the new wave of foreign investment; second, to examine why the flows are going to the particular countries that are receiving them; third, to explain in terms of widely accepted foreign investment theory why foreign direct investment is involved at all; and fourth, to examine some of the characteristics of the investment that might make it attractive or unattractive to the host country.

1. Unless otherwise indicated, all data for Indonesia in this paper are for *approvals* by the BKPM, Indonesia's foreign investment authority. They exclude petroleum and the financial sector, which are not subject to the jurisdiction of BKPM.

The new investments appear to reflect shifts in comparative advantage, as Indonesia has become a more attractive site for certain kinds of manufacturing activities. Yet, it is unlikely that local firms would have quickly taken up the new opportunities. Particular foreign companies held firm-specific advantages—especially in the form of reputation with buyers in the United States and Europe—that enabled them to respond to the new opportunities in ways that were not available to local firms or to foreign investors with only capital.

6.1 Developing Asia as a Source of Foreign Investment

For at least three decades, firms from the richer developing countries of Asia have been building manufacturing affiliates abroad. Already in 1963 and 1964, fifteen Hong Kong textile firms were establishing plants in Singapore. In the 1960s, Hong Kong firms built similar plants in Macao, Thailand, and the Philippines and eventually as far away as in Mauritius (Wells 1983, 74). However, those investors, were, in the main, different from the *mobile exporters* that have recently emerged in East Asia.

In Indonesia, foreign direct investment (FDI) from other Asian countries was already important by 1970. Although Japan accounted for a little more than half of the equity in foreign-owned manufacturing investment arriving in the period 1967 to 1977, other Asian countries accounted for a respectable 18 percent, more than either European or U.S. investors (Halverson 1991 [original source: Hill 1988]). The proportion from other developing countries declined substantially—to 6 percent—during the 1977–85 period, as Japanese investment dominated. But recent years have seen a sharp rebound as new types of investors from other Asian developing countries have increased their share of foreign investment flows into Indonesia.

The dramatic increase in the importance of flows from other developing countries is evident in recent data. In the period from January 1990 through July 1991, firms from East Asian developing countries accounted for 56 percent of the projects approved by BKPM, the Indonesian foreign investment authority (by value, a little more than half). When manufacturing alone is considered, the East Asian developing countries accounted for 65 percent of all such investment. Close to three-quarters of these East Asian firms were from Taiwan and Korea (see tables 6.1 and 6.2). Although Japanese firms are widely thought to dominate foreign investment in Southeast Asia, the developing East Asian countries in fact invested more than three and a half times what Japanese enterprises put into Indonesia.

The dominance of investment from Taiwan and Korea in the total of developing-country investors is also a recent phenomenon. For the 1967 to 1981 period, Korean and Taiwanese investment was overwhelmed by investment from Hong Kong. During that period, Hong Kong accounted for 12.6 percent of approved investment, Taiwan and Korea only 3.2 and 1.3 percent,

Table 6.1 **All Foreign Investment in Indonesia: Numbers of Projects and Total Investment, January 1, 1990–July 31, 1991**

Home Country	Number of Projects	Value of Total Investment (U.S.$ thousands)
East Asian developing countries	365	$5,754,961
Hong Kong	55	909,186
Taiwan	127	809,297
Korea	118	2,488,939
Singapore	59	1,507,159
Malaysia	6	25,300
Japan	122	1,597,123
United States	18	325,281
Other industrialized	74	1,802,570
Other	23	380,963
NA*	51	1,876,398
Total	653	11,412,015

Source: Calculated from BKPM data on approvals.
*Mixed nationalities, etc.

Table 6.2 **Foreign Manufacturing Investment in Indonesia: Number of Projects and Total Investment, January 1, 1990–July 31, 1991 (ISIC 3000s)**

Home Country	Number of Projects	Value of Total Investment* (U.S.$ thousands)
East Asian developing countries	315	$4,277,582
Hong Kong	39	693,971
Taiwan	120	780,872
Korea	107	2,176,970
Singapore	43	601,269
Malaysia	6	17,400
Japan	77	1,132,198
United States	12	132,054
Other industrialized	34	830,927
Other	13	227,369
NA†	34	881,601
	485	7,481,731

Source: Calculated from BKPM data on approvals.
*Includes domestic and foreign equity and borrowing.
†Mixed nationalities, etc.

respectively (Halverson 1991, 91 [from Thee 1984]).[2] In the recent period, a new trend has become clear: Taiwan and especially Korea have been taking over as the important sources of foreign investment in Indonesia.

In sum, the Indonesian experience shows a growth in investment from other developing Asian countries in recent years, both in absolute terms and in share of total foreign investment. More of that investment comes from Korea and Taiwan than in the past. Moreover, as the next section will show, the kind of investment that dominates has also changed; the new investors are coming for reasons that differ from those that were most common in the past.

6.1.1 Motivations for Investment

Round One

The earliest Third World manufacturing investors in the Southeast Asian region probably were firms driven abroad by export quotas at home. Thus, the fifteen Hong Kong textile plants in Singapore were producing there for markets in the industrialized countries because access to those markets from Hong Kong facilities had been restricted by quotas. Similarly, Hong Kong textile firms and firms from India eventually went as far as Mauritius to gain favored access to the European market, available to products from that country since it was an ACP nation.[3] Initially, such investments were in textiles, the first major labor-intensive industry to fall under voluntary export restrictions; later investors followed a similar pattern for other products that came under quotas, such as shoes. In some ways, these earlier foreign investors have a great deal in common with the mobile exporters that are now investing in Indonesia and elsewhere in developing Asia. Both groups went abroad to serve third markets—primarily in Europe and North America—that they had been serving from their home-country plants.

Strikingly, these round-one investors never reached Indonesia in any significant numbers. A dozen or so applied for approval in Indonesia in the early 1970s, but their applications were never approved. No functioning export-processing zones were available, and the government hesitated to allow special status for such investors, as it had for one U.S. electronics firm. No general duty drawback or exemption system functioned to allow components to be brought in for inclusion in exported products. Also, most or all of these early applicants were Chinese-owned firms, and ethnic sensitivities were high in Indonesia. Since the country placed little weight on manufactured exports at the time because oil was generating adequate foreign exchange, there was little

2. It is not clear whether the figures used are for total investment in projects that qualify as foreign investments or for the foreign equity in such projects. Unless the different nationalities use sharply different financing for their projects, the distinction is of little importance in the comparison just made.

3. ACP (Africa-Caribbean-Pacific) countries received preferred access to the European Community under the Lomé Convention.

pressure for compromise (Wells and Warren 1979, 83). This attitude was to change in the 1980s, as oil prices fell.

Although quota-driven investment has continued to expand, new production sites (e.g., Indonesia) have also fallen under quota restrictions, limiting the growth of such investment.

Round Two

These pioneer foreign investors were followed by a much larger stream of investors whose target markets were the host countries themselves. Tariffs and quotas in the poorer countries limited exports to those markets from Hong Kong, Taiwan, Korea, India, and so on. To escape those restrictions, Third World firms established plants in those markets, plants designed overwhelmingly to serve local customers. In many cases, parent firms had exported to the market before they invested. In this, they were like many of the multinationals from the industrialized countries, which had gone abroad to defend markets first captured by exporting. In other cases, market opportunities had been identified by Chinese in Indonesia and other parts of Southeast Asia and reported to relatives in Singapore, Hong Kong, or Taiwan; investments followed.

A similar round of investment occurred in Latin America, although the numbers seem to have been smaller. There, firms from Argentina, Brazil, and other industrializing Latin American countries established subsidiaries elsewhere in the region. A Brazilian firm, to cite just one example, manufactured bicycles in Bolivia and Colombia (Wells 1983). A few firms from both Asia and Latin America (especially Brazil) invested as far away as Africa.

This second wave of investment by Third World multinationals has by now been rather firmly established, documented, and described (Wells 1983; Lall 1983; Khan 1986; White, Campos, and Ondarte 1977). To a great extent, the investment was associated with small-scale, often second-hand plants; cost-minimizing technologies; and price rather than brand-name competition. There were, of course, exceptions. Inca Cola, for example, expanded abroad from Peru based on marketing skills. Until recently, in spite of the exceptions, it was the small-scale, cost-oriented investor serving local markets who accounted for most of the flow of foreign direct investment from developing countries to other developing countries.

Firms of the type just described are particularly attracted to markets that offer protection from imports. Such investors are still building plants in Southeast Asia, particularly in sectors where protection is offered. Some fifty of the recent developing Asian investors in Indonesian manufacturing indicated that they would export no more than 20 percent of their output (the number only increases to sixty if 50 percent exported is the cutoff point).[4] But trade policies

4. In fact, these figures probably overstate considerably the amount of manufacture destined ultimately for the local market. A number of the nonexporting manufacturers in fact produce for other firms that will export. For example, nonexporters include firms that make fish and shrimp food and fabrics that will be sold to other firms that export the final product.

have been reformed in a number of countries; as a result, formerly high rates of protection have given way, and such investment has received little encouragement.

Round Three: The Mobile Exporters

The majority of very recent investors are of a different type from those that dominated round two. They come to Indonesia, as did the early quota hoppers, to serve export markets that they have been serving from their home plants, rather than to serve the Indonesian market. Thus, close to half of recent foreign investment from other East Asian developing countries has been for export factories (a project is counted as being for export if 80 percent or more of its production is to be exported). And overall, more than two-thirds of all manufacturing output for all recent investors from developing countries has been destined for export. For investors from Korea, Hong Kong, and Singapore, a still larger part of the projects is aimed at the export market (see tables 6.3 and 6.4).

Unlike the first round of Third World investors, a large number of the new investors have come to Indonesia to produce products that are not subject to so-called orderly marketing arrangements or other forms of export quotas at home. Although textiles remain important and quotas play a role in investment decisions, sports shoes account for a large number of clothing projects. Managers in those plants do not claim to have invested for reasons of quotas. Beyond clothes, firms have invested to export a wide range of products: eyeglasses, speaker cabinets, furniture parts, nails, lead pipe, printed circuit boards, to name only a few.

Table 6.3 **Foreign Manufacturing Investment In Indonesia: Export-Oriented as Percentage of Total Approvals, January 1, 1990–July 31, 1991 (ISIC 3000s)**

	Number of Projects		Percentage
Home Country	Export-Oriented*	Total	
East Asian developing countries	146	315	46%
Hong Kong	25	39	64
Taiwan	21	120	18
Korea	69	107	64
Singapore	30	43	70
Malaysia	1	6	17
Japan	49	77	64
Other developed countries (including U.S.)	14	46	30
	209	438	48

Source: Calculated from BKPM data on approvals.

*Eighty percent or more of production to be exported.

Table 6.4 **Foreign Manufacturing Investment In Indonesia: Exports as a Fraction of Production, January 1, 1990–July 31, 1991 (ISIC 3000s)**

Home Country	Export/Production (average for all projects)
East Asian developing countries	.71
Japan	.71
Other developed countries (including U.S.)	.53

Source: Calculated from BKPM data on approvals.

The bulk of the exports of these plants is to be sold in North America and Europe. But other markets are also targeted. A number of plants manufacture low-cost electronics and other products for Middle Eastern and African markets, for example.[5]

The mobile exporters indicate that they have sought new manufacturing sites primarily to maintain low costs, rather than to escape quota restrictions. The need to go abroad for lower costs has arisen for several reasons:

First, firms from Korea and Taiwan have been hit with currency revaluations, raising the value of their home currencies against the currencies of their major export markets. At the same time, the Indonesian rupiah has devalued against the dollar and, of course, more sharply against the yen and European currencies. The relative decline in the value of the rupiah has not been offset by inflation differentials.

Second, firms in Korea that have been manufacturing simple products claim that they have difficulty hiring workers at home, even at the prevailing rates. When industrialization makes other options available, workers are simply not attracted to the repetitive, low-prestige assembly plants that make shoes and other simple products. (These claims echo earlier claims of Taiwan pineapple exporters that they could not hire workers even at premiums above prevailing wages in Taiwan; the firms responded like today's manufacturers and developed plantations in Southeast Asia.)

Third, as manufacturers in Korea and Taiwan were hit by increasing costs and labor shortages, those countries also lost special treatment for their exports under the Generalized System of Preferences (GSP) in major industrialized markets. Shipments of a wide range of goods from Korea and Taiwan, exempt in the past, became subject to tariffs in the United States. In contrast, the industrialized countries still offered most Southeast Asian countries GSP treatment in the early 1990s.

The cost drives were accompanied by liberalization of government rules in Korea and Taiwan on outgoing capital movements. What had required cumbersome approvals or illegal transactions in the past became much easier.

5. Information gathered in informal interviews.

As a result of all these changes, the Southeast Asian countries have become increasingly attractive manufacturing sites for firms from Korea and Taiwan that face severe price competition.

While firms from Korea and Taiwan have encountered rising costs from unfavorable movements in exchange rates, shortages of labor, and increased tariffs, Hong Kong manufacturers have similarly been confronted with wage increases but also with prospects of a mainland takeover in 1997. Consequently, Hong Kong manufacturers, unrestricted by capital controls, have likewise sought overseas manufacturing sites, for both cost and security reasons.

The current wave of investors, not surprisingly, has its antecedents. Costs mattered to some of the earlier investors. Many of the export-oriented, first-round investors from East Asia that had reached the Philippines and Mauritius were influenced in their site selection by the need for lower costs; quotas were not the only driving force. In a survey as early as 1979, managers of foreign plants in Mauritius and the Philippines indicated that low-cost labor was an important motivation for foreign investment (Busjeet 1980). Yet quotas seem to have been the dominant drive behind foreign investment for the exporters. For the majority of foreign investors from developing countries, it was local markets that counted; for these investors, labor and other production costs mattered much less than escape from the tariffs and quotas that limited opportunities to serve the local market from home sites.

6.1.2 Where to Invest

So far, the bulk of investment by mobile exporters from East Asian firms seems to have been directed toward Thailand and Indonesia, although reliable figures are not available for the entire region. These countries may have been chosen by investors largely by default. They meet the necessary condition of having low-cost labor, but so do other countries in the region, such as China, the Philippines, and Vietnam. Each of the alternatives, however, poses problems for would-be investors. The Philippines is viewed as being politically unstable. Vietnam is not yet an easy place for foreign firms to do business. China has attracted some such investment, but few investors want to bet their entire portfolio on China. Singapore and Malaysia are possible sites, but labor there is too expensive for investors that do not require the higher skills available in those countries. With Thailand and Indonesia as the attractive sites for low-wage manufacture, the early round-three investors seem to have preferred Thailand. As Bangkok grew more "crowded" with investors, Indonesia increased in popularity.[6]

Other preferences have also affected locational decisions. Taiwanese firms seem to have a preference for Thailand, while Korean investors appear particularly likely to go to Indonesia (see table 6.5). One can only hypothesize the reasons. The Chinese community in Thailand accounts for a larger part of the

6. Informal interviews with investors.

population and seems better integrated into the local community than do the Chinese groups in Indonesia; consequently, Chinese managers from Taiwan may feel more comfortable in Thailand. The exception seems to be Singapore investors. Though Chinese, many are in Indonesia. But close to 45 percent of the recent ones have located on Batam Island, a special enclave off the coast of Singapore, developed to attract Singapore firms. Of the rest, a large number are trading or consulting firms, real estate investors (hotels, largely), and manufacturers for the local market. For these firms, location in Indonesia is essential if the local market is to be served. Unlike the Chinese, the Koreans do not have large communities in either place. The lower costs of Indonesian labor may have proved more attractive to them, given no other reasons to prefer one country over the other.

Foreign investments by firms from East Asian developing countries have not been limited to Southeast Asia. Round-one investors went as far as Mauritius, as noted earlier. Korean and Hong Kong exporters were established in Sri Lanka, primarily for low-end textiles. Round-two investors, oriented toward domestic markets, were spread thinly across Africa by the mid-1980s.

Mobile investors may be driven farther afield for reasons beyond labor costs. Although the costs of labor and its availability in Costa Rica and Colombia may be somewhat more attractive than in Korea and Taiwan, the differences cannot be overwhelming, especially in comparison to the opportunities in Southeast Asia. Yet East African firms have invested in both countries. Investments by East Asian firms in Latin America are probably aimed more at reducing risks from trade barriers than at minimizing costs. These investments probably reflect managers' growing concerns with the prospects of Western Hemisphere trade preferences, from which Asian production sites would be

Table 6.5 **Foreign Investment by Country of Origin (percentage by value)**

	Host Country			
Home Country	Indonesia	Thailand		
	1/1990–7/1991	1989	1990	1991
East Asia	50.6%	28.1%	44.6%	25.6%
Hong Kong	8.0	6.0	26.3	6.7
Taiwan	7.1	15.1	10.2	13.2
Korea	21.9	2.6	3.0	1.2
Singapore	13.3	4.0	4.5	2.0
Malaysia	0.2	0.3	0.7	2.5
Japan	14.1	38.1	27.0	35.1
United States	2.9	3.9	6.4	14.1
Other	32.4	29.9	22.0	25.2
Total	100.0	100.0	100.0	100.0

Source: Provided by Peter A. Petri, from approvals data by the BKPM in Indonesia and the BOI in Thailand.

excluded. Like the Japanese, mobile exporters will probably show increasing interest in Mexico, as talks on a North American free trade area show progress.

Some African sites offer favorable access to European Community markets. Currently, most African countries face severe disadvantages, beyond distance, in attracting mobile exporters. Macroeconomic policies, particularly overvalued exchange rates and controls on profit remittances, are major hindrances to such investment. Yet the scattered East Asian investors producing for local African markets suggest that mobile exporters might also be attracted if policies are reformed.

Whatever the motivations for the scattered investments outside the region, so far the flows remain largely within-region. Firms from East Asian developing countries have invested first and foremost in countries within Southeast Asia in their search for low-cost and available labor.

6.2 Mobile Exporters and the Theory of Foreign Direct Investment

Two concepts are rather widely held among researchers concerned with foreign direct investment: (1) to survive abroad, a firm needs some kind of advantage over local competitors, and (2) a firm must have some reason to internalize that advantage through ownership rather than contracting with another firm.

In the case of the mobile exporters that are the focus of this study, the advantage brought by the firm is quite clearly market access. The firms have a track record of meeting the standards and schedules of foreign buyers. Most important, probably, is the management skill of the firm and the reputation built up with buyers for producing the required quality according to the promised delivery schedule. To some extent, the reputation might derive from technological skills. Whatever the source of the reputation on the part of suppliers, buyers are hesitant to shift large purchases to suppliers unknown to them.

The advantages accruing to investors from their buyer contacts are reinforced by the fact that some buyers have already established offices in the supplying countries—particularly in Korea and Taiwan. Korean and Taiwanese firms have built close relationships with those offices, and they can use those links even when they locate plants in Southeast Asia.

In theory, at least, the East Asian suppliers have an alternative to foreign direct investment when they seek lower-cost sites. A Korean or Taiwanese firm could simply contract with Southeast Asian plants to supply products that the firm then would sell to buyers it knows. But one can easily see why such arrangements would be unattractive to many exporting firms. Most important, the costs of a failure on the part of the contractee would be born by the parent enterprise, in the form of lost reputation with buyers. The negative impact may extend beyond the sales directly involved and could harm future sales even by the parent firm. A carefully built reputation can be at risk.

Theory might suggest contracts that would penalize foreign contractees severely for such failures. Yet it would be difficult to draw up such contracts and enforce them so that the Korean or Taiwanese firm would be adequately compensated for its total losses should the contractee fail to meet quality standards or schedules. Better, it would seem, to keep the transaction in-house, given the high risks to the parent firm if the contractee fails to deliver as required. Internalization seems the safer approach.

In sum, both conditions that usually characterize foreign direct investment hold: advantages in the hands of foreign firms and reasons for internalizing the transactions.

Foreign investors' advantages do not always last. Theories of foreign direct investment consider the concept of the "obsolescing bargain" (Vernon 1971, chap. 2). According to this concept, the strengths that the foreign investor has at the outset are often eroded with time. Where technology is the competitive advantage, local firms may eventually master the know-how, for example, leaving the foreign firm with no advantage unless it innovates and moves on to something new. With governments favoring local firms and with the inevitably higher costs that foreign management imposes, foreign investors are eventually driven out as their advantages erode.

There is some evidence that the advantages of mobile exporters can erode rather quickly. It seems that, at least in the case of athletic shoes in Indonesia, foreign buyers soon follow the subsidiaries and set up buying offices in the countries where new plants are located. The presence of enough foreign-owned suppliers has brought in the buyers. Thus, Nike, Adidas, and Reebok have all established offices in Indonesia. As a result, the "distance" between foreign buyer and prospective Indonesian suppliers declines. Before the arrival of the foreign firms, buyers rarely visited Indonesia; thus, it was difficult for local firms to establish the contacts that might lead to exports. Once buying offices have been established in the country, local firms approach the foreign buyers and offer to match the product quality and schedules of the Korean and Taiwan investors, at lower prices. The costs to the buyers of examining the prospective suppliers' factories and sample output, and experimenting on a small scale with a few orders, are not high once the buyers have established local offices. Domestic firms may thus erode the advantages with which foreign firms entered. This seems already to have happened in Mauritius, where Hong Kong textile firms established facilities some years ago and local firms have emerged as major competitors.

The product cycle models of international trade and investment also offer some understanding of the mobile exporters (Vernon 1966). Although the theory has become increasingly less useful in explaining trade and investment among the industrialized countries as their markets have converged and as multinational firms have established facilities in a number of countries, the theory still has some validity in explaining investment flows among countries with quite different income levels. Foreign investment moves, according to the theory, down the ladder of development as products mature. Thus, movement of investments from the richer developing countries of East Asia into the poorer countries of the region is consistent with the theory.

6.3 Benefits to the Host Country

In a simple world, with competition, market prices of resources that reflect shadow prices, no overwhelming scale economies, and no significant externalities, foreign investment that is profitable to the firm would be beneficial to the host country. But that simple world does not describe reality in Southeast Asia. Past studies have shown that import substitution policies, for example, lead to significant numbers of foreign investment projects that can be economically harmful to the host country (Encarnation and Wells 1986).

Indonesia has been dismantling the import barriers that were largely responsible for the discrepancy between private and economic returns. Yet it is widely believed that the market prices of labor do not reflect shadow prices. Unemployment remains high; wage levels seem to be higher than opportunity costs.

With large oil exports (accounting for some two-thirds of all export earnings when oil prices were high), Indonesia's exchange rate long remained too high to encourage labor-intensive manufactured exports. Oil and gas production, of course, generated little employment directly. Oil revenues (at times, about two-thirds of government revenue) accrued largely to the government. The focus of the government in investing these revenues was largely on "megaprojects" (capital-intensive plants such as steel, petrochemicals, and fertilizers), none of which generated many employment opportunities beyond the construction stage. Although Indonesia managed to avoid the excesses of Nigeria and Venezuela, its rapidly growing young population was finding few opportunities for work.

With current exchange rates, fewer distortions remain in the Indonesian economy. Yet experience in the past has made officials wary of reliance on oil or a few other raw materials for the bulk of foreign exchange earnings. Thus, investments that enable the country to diversify its exports are particularly valued. Due to the benefits of diversification, the shadow price of foreign exchange earned from nontraditional exports may be considered to be higher than the market price of such foreign exchange.

Moreover, it is increasingly popular in developing countries to look to foreign investment to provide capital, since other sources (e.g., foreign bank loans) have become scarce. In Indonesia, earnings from oil accrued to the government and were invested in industry. With lower oil revenues, the government has sought other sources of capital. Foreign investment offers an alternative.

6.3.1 Capital and Exports

In the case of Indonesia, the total amount of capital brought to the country by the new wave of investors is not huge, at least compared to total capital investment in the country. Yet the contribution of these firms to the recent rapid growth of nontraditional exports has been very important. But the net exports are, at least at the outset, less than any gross figures from such investors would suggest. After paying for imported components, dividends and interest, and expatriate management, the net foreign exchange earnings may not be large. With little local purchase of inputs, net foreign exchange earnings consist primarily of wages paid to Indonesian workers and taxes paid to the Indonesian government. Taxes may be quite small, even though Indonesia does not grant tax holidays. Export-processing investments offer possibilities for evading taxes by setting transfer prices such that profits are recorded largely elsewhere (Indonesia's corporate income tax rate is relatively low, at 35 percent; yet there may still be reasons for reporting profits in other jurisdictions. Hong Kong's rate is still lower, for example.)

One can estimate some orders of magnitude, at least for the labor payments. If all the export firms from East Asian developing countries that were approved in 1990 and the first half of 1991 actually commence production and have the work force indicated in their applications, some 87,000 Indonesians will be employed (the number would be much larger if firms were included that were exporting less than 80 percent of their output). At a wage rate of, say, $800 per year per worker, the wage bill would be roughly $70 million.

Although the direct contribution may be smaller than it first appears, such investment may be particularly welcome at a time when Japanese investment in the region is slowing.

6.3.2 Spillover as Catalyst

The capital associated with the investment and the direct exports may not be the most significant gains from the mobile exporters. From the point of view of the host country, local firms' access to the marketing channels from the industrialized countries may be the most important advantage offered. There is mounting evidence to suggest the important role that foreign firms in general play as catalysts for the development of local exporters (Rhee and Belot 1989). As described earlier, the mobile exporters often bring with them their buyers from the countries in which their products are sold. There is already a considerable amount of anecdotal evidence that Indonesian firms are taking advantage of access to these buyers to export directly and to sell components to foreign investors for inclusion in exports. Thus, the export diversification offered directly by the mobile exporters themselves may dramatically understate the actual contribution of these firms.

6.3.3 Labor Intensity

Although the total amount of capital brought by mobile exporters may be small, the number of jobs might be disproportionally large. In fact, a study of investors from other developing countries that invested in Indonesia between 1967 and 1975 shows that plants of investors from developing countries were considerably more labor intensive than those of their competitors from other countries. The capital-labor ratios for the advanced-country firms were about twice those of the developing-country investors. Japanese investors were even more capital intensive than other advanced-country firms (Wells and Warren 1979, 74). By the recent period (1990–91), those figures had changed significantly, even reversing themselves in some cases. Although the relatively few manufacturing firms from other industrialized countries were indeed much more capital intensive than the East Asian investors, the manufacturing investors from other developing countries were, by the recent period, twice as capital intensive as investors from Japan—the opposite of the old pattern (see table 6.6). But when only the exporting firms are compared, the differences between the developing-country firms and the Japanese investors disappear almost entirely.

How can one explain the differences and the changes? The early round of Japanese investors seems to have concentrated in capital-intensive protected industries (e.g., automobiles), while early developing-country investors invested in simpler, less capital-intensive activities, often using technologies especially suited to small scale. This adapted technology was labor intensive (Wells 1983). By the 1990s, Indonesia was on the road to a more liberal trade policy. As protection declined, the opportunities for investment in capital-intensive industries, behind import restrictions, were disappearing; the attractive ones had been made. The earlier yen revaluations seem to have led to more interest on the part of the Japanese in exporting from Indonesia. But Japanese investors appear to have made the shift toward more labor-intensive activities whether they were producing for the local market or for the export market. A small number of investors from other developed countries have not yet adjusted to the new policies. Like the second-round investors, they were building plants to secure what remained of a protected market. Similarly, European and U.S. investors were still responding to the old protected market with capital-intensive plants. Moreover, even when they were exporting, the plants of these investors tended to be capital intensive.

In the earlier period, there were other differences between developing-country investors and firms from the industrialized countries; the differences seem to have narrowed. For example, firms from developing countries em-

Table 6.6 **Foreign Manufacturing Investment In Indonesia: Capital Intensity, January 1, 1990–July 31, 1991 (ISIC 3000s)**

	Investment per Indonesian Worker (U.S.$)	
Home Country	All	Export Oriented*
East Asian developing countries	$ 33,088	$19,406
Japan	16,121	16,121
Other developed countries	122,385	91,408

Source: Calculated from BKPM data on approvals.

*Eighty percent or more of production to be exported.

Table 6.7 **Foreign Manufacturing Investment In Indonesia: Use of Expatriates, January 1, 1990–July 31, 1991 (ISIC 3000s)**

	Indonesian Workers per Expatriate	
Home Country	All	Export Oriented
East Asian developing countries	31	35
All	30	35

Source: Calculated from BKPM data for approvals.

ployed more expatriates in the earlier period. Presumably, Taiwanese and Korean engineers and managers, for instance, were sufficiently inexpensive that there was little need to replace them with Indonesians. But by the early 1990s, the number of Indonesian employees per expatriate differed hardly at all between firms from the two kinds of countries; this was true whether all manufacturing firms were examined or only those oriented toward exports (see table 6.7). The increasing expenses of foreign managers and engineers, even from Korea and Taiwan, may partially explain this convergence.

Similarly, investments by firms from other developing countries in the early period were significantly smaller than those from the industrialized nations. But by the early 1990s, the differences were hardly noticeable. The average investment in a firm owned by an East Asian developing country was $15.8 million, the average for all investors $17.5 million.

Of course, high labor-capital ratios provide a measure of benefits that is of limited value in assessing the worth of foreign investment. Since the foreign capital involved may not be a scarce resource that would be available for other uses should the particular projects in question not materialize, more relevant is the labor utilized per unit of Indonesian capital employed or per unit of other scarce resources utilized. In terms of Indonesian capital, the labor-capital ratios are particularly high, since ownership of the export projects is predominantly foreign (more than 70 percent). Unfortunately, adequate data are not available to calculate employment per unit of total Indonesian resources.[7]

If, however, as seems to be the case, Indonesia and many other developing countries have a limited tolerance for foreign capital, then the number of jobs provided per unit of foreign capital may itself have some relevance.

The mobile exporters approved by Indonesia in the eighteen-month period under study would provide close to 90,000 direct jobs, not a number to be sneezed at. The actual number of jobs associated with exports by the foreign

7. Prior to the reforms in the mid-1980s, foreign investors would have been required to provide projections that allowed rough calculations of such figures. The lengthy questionnaire designed to allow analysts to do sophisticated economic cost-benefit calculations was dropped in an effort to make Indonesia a more attractive place for investment and in recognition of the fact that, in actuality, no one made the calculations that would have used the data requested.

manufacturers is considerably more: a number of the firms plan to export less than 80 percent of their output but still significant amounts; many firms that do not show their output being exported supply inputs to the mobile exporters; and then there are the jobs created indirectly.

In sum, the contributions to employment are likely to be significant. Given the low shadow price of labor, compared to market prices, the value to the host country of investment by mobile exporters may be greater than the value to the investors themselves would suggest.

6.3.4 Costs

Indonesia, and to some extent all the countries of Southeast Asia, face problems with ethnic diversity, especially the Chinese. Since a considerable number of the mobile exporters are Chinese from Taiwan and Hong Kong, the flows feed into these ethnic sensitivities. Yet the growing importance of Korean investment suggests that increasing diversity of sources may defuse some of the potential costs that seem in the past to have been associated with Third World investors in Southeast Asia.

In addition, the growth in manufactured exports associated with these investors, as attractive as it is for other reasons, increases the dependence of the host country on a few foreign markets. In Indonesia, this dependence has manifested itself in bilateral negotiations, particularly with the United States. Wary of the costs to its new success in exporting manufactured goods, for example, Indonesia caved in quickly to U.S. insistence on new intellectual property laws when it was confronted with threats to those exports. With the threat to its GSP status, and other penalties authorized under U.S. trade law (particularly under the so-called Super 301 provision), as well as European protectionist policies, Indonesia's growing exports of manufactured goods increasingly are hostage to the desires of market countries.

Although the gains associated with the new investments probably outweigh the costs, those costs should not be forgotten.

6.4 Investment Policies to Attract Mobile Exporters

From the oil boom of the early 1970s until very recently, Indonesia made little effort to attract foreign investors. Oil provided foreign exchange and capital, and it provided opportunities to borrow from international banks. As a result, in spite of interest in foreign direct investment between 1965 and 1973, other concerns took hold: for example, promotion of non-Chinese investment and the desire of some politicians and bureaucrats to be able to exercise control over the economy. Interest in encouraging foreign investment began to grow again after the collapse of oil prices in the 1980s. But that interest did not manifest itself in the usual ways—through tax holidays, investment promotion abroad, and so on.

Unlike its neighbors, Indonesia has since 1985 offered no tax holidays to foreign (or other) investors. Prior to 1985, the country did offer a complex set of tax holidays, the length of which depended on the location of the facility in Indonesia, its size (larger ones received more holidays), its market orientation, and so on. The entire system of tax holidays was abolished with the tax reform of the mid-1980s, which also lowered the corporate income tax rate.

The large inflows of foreign investment in recent years clearly indicate that tax incentives are not necessary for a developing country to attract foreign investment. Immediately following the elimination of tax holidays, investment approvals did drop off. But hindsight has revealed that the sudden decline resulted from investors applying in the previous year to gain the tax holidays *and* the lower rates, predating of approvals by the BKPM, and the impact of a major recession in the country. Foreign investment boomed as the economy picked up and as other changes were made that were more important to foreign investors.[8] The new, lower tax rate had offset the elimination of tax holidays.[9]

At the same time, Indonesia began to deal with its reputation for having a tedious bureaucracy. In the 1980s, some improvements were made; BKPM, which had to approve all incoming investment, simplified its application forms and promised quicker decisions. In the past, decisions had often taken one or two years. Reform reduced the decision time to a few months at most. In the reform, an effort was made to improve the predictability of the process. The government shifted from a "positive list," a rather unclear list of sectors in which foreign investment would be allowed, to a "negative list," a short and rather clear list of sectors in which foreign investment would not be allowed. Thus, a would-be investor could tell with a greater degree of certainty whether a proposal would be accepted or not. For small firms in particular, the increased certainty was attractive.

Another reform was especially important for the mobile exporters—in fact, probably an essential condition for the growth in such investment. In the past, Indonesia had struggled unsuccessfully with efforts to create export-processing zones. In general, nothing materialized; if it did, it was rife with corruption. Having decided that successful export-processing zones could not be created quickly, the government created an organization in the Ministry of Finance that was charged with providing duty exemptions and duty drawbacks for exporters. No longer would an exporter have to locate in an export-processing zone to qualify for duty-free imports.[10] If certain conditions were met, then the exporter could locate anywhere in the country without having to pay duty on imports required for exports. The procedures were designed

8. For research on the role of tax incentives in attracting foreign investment, see Guisinger et al. (1985). For an interpretation of the results of that study, see Wells (1986).

9. A careful study was done to compare the internal rate of return for foreign investment projects under the old, higher tax rate with tax holidays and various proposed new, lower rates without tax holidays. The rate chosen was one that meant little impact on the discounted rate of return on foreign investment, with the elimination of tax holidays.

10. In fact, special arrangements had existed earlier for certain exporters, primarily semiconductor firms.

to protect the national interest, assuring that duty-free imports did not leak into the country, but also to reduce the opportunities for corruption and to overcome the fears on the part of managers that usually accompanied drawback schemes: that the ministry of finance would be, at best, slow in rebating duties paid. The program proved extremely popular with export-oriented firms.

In addition, Indonesia created an investment area on Batam Island, just off Singapore, where export firms were exempt from Indonesian ownership requirements and other regulations. The site was designed to attract firms that found Singapore's labor costs too high but had need for resources located in Singapore, such as an attractive environment for managers to live in and financial facilities. But only a small number of the investors approved by Indonesia in 1990–91 were to build their plants on Batam Island. Mobile exporters were coming to Indonesia anyway.

Most important to the inflow were the resources that Indonesia had. Its large pool of inexpensive labor was, of course, the major attraction. Further, that pool was not limited to the capital city, as seemed to be the case in Thailand. Other urban areas, particularly Surabaya, offered industrial infrastructure and a large pool of labor should Jakarta's infrastructure become overburdened. Equally important, Indonesia imposed no currency controls. Firms could transfer profits abroad freely, and they could purchase foreign exchange for imports without constraint.

Even with the increased interest in foreign investment and the more attractive policies, Indonesia gave little more than lip service to foreign investment promotion. Investment promotion has been limited almost entirely to ineffective investment missions and seminars (Wells and Wint 1990). Although Indonesia once had a few offices abroad for the promotion of foreign investment, those have been closed. In 1991, there were plans to open an office in Brussels, but no plans existed to open offices in East Asian developing countries, where opportunities for promotion appeared most promising.

Indonesia was attracting large inflows of foreign investment without promotion. Expenditures on effective promotion could well be justified, given that employment and diversification of exports were more valuable to the economy than market prices would indicate. Yet Indonesia's resources and its policies seem to have been sufficiently attractive to mobile exporters, who sought stable, low-cost countries as export bases. In 1992, it appeared that the inflow of such investment was at a level close to the maximum that would be politically acceptable.

Some countries outside Southeast Asia have recognized the new wave of investors. For them, promotion will probably be essential if mobile exporters are to be attracted. Costa Rica, with one of the most effective promotion organizations in the developing world, has begun to recruit investors from Korea. Colombia, just starting its investment promotion efforts, has similarly recognized the prospects of bringing East Asian exporters to Latin America.

Costa Rica's success in attracting investors through promotion efforts has depended on personal selling, largely in the United States. Those efforts may be more difficult when the investors are to be attracted from East Asia: fewer promotion managers are likely to speak local languages; detailed business information is less easily come by; even official data provide little accurate information on which industries are already investing abroad. Approaches to promotion that work well in the United States will have to be adapted to work in East Asia. Yet, if such countries place large value on employment and diversification of exports, expenditures on effective promotion are justified.

References

Busjeet, Vinod. 1980. Foreign investors from less-developed countries. Unpublished doctoral dissertation. Harvard Business School.

Encarnation, Dennis, and Louis T. Wells, Jr. 1986. Evaluating foreign investment. In *Investing in development: New roles for private capital,* ed. Theodore M. Moran, 61–86. Washington, D.C.: Overseas Development Council.

Guisinger, S., and associates. 1985. *Investment incentives and performance requirements.* New York: Praeger.

Halverson, Karen. 1991. Foreign direct investment in Indonesia: A comparison of industrialized and developing country investors. *Law and Policy in International Business* 22 (1): 75–106.

Hill, Hal. 1988. *Foreign investment and industrialization in Indonesia.* Singapore: Oxford University Press.

Khan, Kushi, ed. 1986. *Multinationals of the South.* London: Francis Pinter.

Lall, Sanjaya. 1983. *The new multinationals.* Chichester, U.K.: John Wiley and Sons.

Rhee, Yung Whee, and Therese Belot. 1989. *Export catalysts in low-income countries: Preliminary findings from a review of export success stories in eleven countries,* World Bank Industry and Energy Department Industry Series Paper no. 5, PPR. Washington, D.C.: World Bank, November.

Thee, Kian Wie. 1984. Japanese direct investment in Indonesian manufacturing. *Bulletin of Indonesian Economic Studies* 20 (August): 190–207.

Vernon, Raymond. 1966. International investment and international trade in the product cycle. *Quarterly Journal of Economics* 80 (May): 58–60.

———. 1971. *Sovereignty at bay.* New York: Basic Books.

Wells, Louis T., Jr. 1983. *Third World multinationals: The rise of foreign investment from developing countries.* Cambridge, Mass.: MIT Press.

———. 1986. Investment incentives: An unnecessary debate. *CTC Reporter,* no. 22 (Autumn): 58–60.

Wells, Louis T., Jr., and V'Ella Warren. 1979. Developing country investors in Indonesia. *Bulletin of Indonesian Economic Studies* 15, no. 1 (March): 69–84.

Wells, Louis T., Jr., and Alvin Wint. 1990. *Marketing a country.* FIAS Occasional Paper no. 1. Washington, D.C.: Foreign Investment Advisory Service.

White, Eduardo, Jaime Campos, and Guillermo Ondarte. 1977. *Las empresas conjuntos Latinoamericanas.* Buenos Aires: Instituto para la Integracion de America Latina.

Comment Peter A. Petri

Louis T. Wells's paper provides a timely and fascinating analysis of the recent wave of East Asian developing countries' foreign investment in each other. The Indonesian numbers cited are especially dramatic, but as table 6C.1 shows, the phenomenon has regionwide significance. Of foreign direct investments in East Asian developing countries, 39 percent have recently originated in the East Asian newly industrialized countries (NICs) and developing countries—nearly as much as came from Japan and the United States combined. Intriguing questions arise: Are these flows likely to be sustained? What theoretical mechanisms drive them? What accounts for their sharp surge in the late 1980s? What is their significance from empirical and theoretical perspectives?

Although the statistics are impressive, some words of caution are in order. The data analyzed in the paper and in table 6.1 deal with short time periods. In addition, Wells's discussion is largely based on data that tend to highlight rapid change. The value of *foreign projects approved* can show large year-to-year swings that may not show up with the same frequency or amplitude in actual *foreign investment flows.*

There are three reasons for this. First, since project approvals are akin to an option, they do not always result in investment flows. In volatile economic circumstances, such as the exchange rate movements of the mid-1980s, many firms become interested in identifying foreign production opportunities but then drop their foreign projects or wait to implement them until conditions are clearly favorable. Second, since the actual investments associated with a proj-

Table 6C.1 **Shares of Inward Foreign Direct Investment, Flow Data (percentage)**

		Investing Country			
Host Country	Year	East Asian Developing	Japan	United States	Other
NICs					
Hong Kong	1989	14.9%	29.9%	31.4%	23.8%
Korea	1988	3.9	52.8	28.1	15.2
Singapore	1989	5.4	30.7	33.2	30.6
Taiwan	1988	18.0	37.6	13.6	30.8
Average		10.6	37.8	26.6	25.1
Developing					
China	1988	69.8	16.1	7.4	6.7
Indonesia	1990	31.4	25.6	1.8	41.2
Malaysia	1990	54.6	23.9	3.2	18.3
Philippines	1989	10.0	14.5	55.7	19.8
Thailand	1988	29.5	51.7	11.3	7.5
Average		39.1	26.4	15.9	18.7

Source: United Nations, *World investment directory 1992.*

ect take place over several years (if at all), approvals affect flows with a distributed lag. Third, since approval statistics measure the total investments associated with a project, they are larger than the foreign inflows used to finance the project. For all these reasons, investment flows suggest more modest and more gradual changes than approvals.

Is the Indonesian experience discussed by Wells typical of regional trends? As table 6C.1 shows, Indonesia is not atypical; in fact, China and Malaysia have higher East Asian investment shares due to the key roles Hong Kong and Singapore, respectively, play in their economies. Table 6C.2 provides a time-series perspective by comparing recent data on project approvals from Thailand with Wells's Indonesian data. Intra–East Asian investment is clearly important in Thailand as well, but there it seems to have peaked in 1990, suggesting a temporary surge.

On the whole, Wells is ambivalent about the theoretical and empirical novelty of the East Asian investment phenomenon. On the one hand, he argues vigorously that today's "mobile exporters" are different from earlier waves of investors; on the other hand, he grounds their motivations in existing theory, which also suggests various historical precedents.

This is clearly not the first wave of foreign investment *in* East Asian developing countries. Previous investment waves have been motivated by trade barriers in host countries and by quota restrictions in their developed-country partners. The fact that today's investments are cost driven (that is, caused by the appreciation of the NICs' currencies in the 1980s) is not enough to make them novel; multinationals from developed countries have long used low-wage economies in East Asia and elsewhere as production platforms.

Table 6C.2 **FDI Inflows By Country of Origin, Approval Data (percentage of value)**

	Host Country			
	Indonesia	Thailand		
Investing Country	1/1990–7/91	1989	1990	1991
East Asia	50.6%	28.1%	44.6%	25.6%
Hong Kong	8.0	6.0	26.3	6.7
Taiwan	7.1	15.1	10.2	13.2
Korea	21.9	2.6	3.0	1.2
Singapore	13.3	4.0	4.5	2.0
Malaysia	0.2	0.3	0.7	2.5
Japan	14.1	38.1	27.0	35.1
United States	2.9	3.9	6.4	14.1
Other	32.4	29.9	22.0	25.2
Total	100.0	100.0	100.0	100.0

Sources: Indonesia: Wells (chap. 6 in this volume). Thailand: BOI.

It is also not surprising that the NIC investors have chosen exporting industries. These investing firms come from intensely trade-oriented environments and typically enjoy strong competitive positions in export-oriented industries. Further, tradable-goods industries are especially sensitive to changes in relative production costs, such as those occasioned by the exchange rate movements of the 1980s.

Nor is this the first wave of investments *by* East Asian developing countries. Hong Kong, Korea, Singapore, and Taiwan have been significant foreign investors for some time. To be sure, their past investments had specialized objectives, such as establishing marketing channels in developed countries or exploiting advantages derived from special family and business ties.

Could the novelty be that general factors (such as production cost) are becoming useful in explaining the outward investments of developing countries, much as they have long helped to explain the investments of developed countries? On this point, though, the experience of the tigers is not very convincing—these economies are essentially industrial economies, as much as Japan was twenty years ago.

If intra–East Asian investment flows are not intrinsically novel, their high volume may be. Along with sharply rising intra–East Asian trade flows, these investments could foreshadow rising regional economic interdependence (Petri 1993). They could also help to diversify regional linkages by balancing the dominant role of Japan.

Whether the pace of recent investment flows can be sustained is unclear. It can be argued that the investment wave of the 1980s is an artifact of the exchange rate cycle of the 1980s, which first built up and then rapidly diminished the tigers' competitiveness in labor-intensive industries. With more stable currency markets, more moderate investment flows could follow, even if the tigers continued to develop quickly compared to other countries.

Consider what it means for a firm to lose its competitive position *suddenly*—for example, due to the sharp exchange rate changes that occurred in the 1980s—as compared to gradually, in the normal course of development. A firm hit by a sudden shock may well have strong remaining assets in marketing, technology, and management, which can be utilized regardless of its production advantage (assuming that the firm is willing to invest abroad). By contrast, a firm that anticipates a gradual loss in its production advantage may find it more economical to let its marketing and management assets depreciate (alongside its physical assets) rather than to maintain these assets and invest abroad.

According to this argument, a sudden change in costs will lead to large direct investment, while a gradual loss of similar magnitude will not. This story is especially relevant to the 1980s wave of intra–East Asian investments. In the late 1980s, East Asian investors found themselves with significant marketing and other assets that made foreign investment worthwhile, even though these advantages were not based on technological or managerial secrets that could be long kept from host country firms. The fate of these investments is likely to follow that of Japanese garment firms established in Thailand in the 1970s: by the 1980s, most had been acquired by domestic managers. In the future, assuming relatively stable currency markets, NIC firms will provably avoid investments in assets that have a good chance of being useful only abroad and are easily appropriated by foreign firms.

In the meantime, host countries should be delighted by these inflows. Because intra–East Asian investments are in relatively low-technology industries, they are more relevant to the hosts' development than are investments by developed countries. Because the firm-specific advantages of the investing firms are weak, the prospects are better for assimilating or acquiring them. In sum, policymakers should do their best to encourage intra–East Asian investment flows, especially while investments from Japan remain hostage to that country's financial crisis. They should not assume, however, that these flows can be easily maintained at their recent high level.

Reference

Petri, Peter A. 1993. The East Asian trading bloc: An analytical history. In *Regionalism and rivalry: Japan and the United States in Pacific Asia,* ed. Jeffrey A. Frankel and Miles Kahler. Chicago: University of Chicago Press.

Discussion Summary

Most comments and questions focused on three related issues discussed in *Louis Wells*'s paper. First, how sophisticated are the mobile exporters' operations? Second, to what extent are their site choices explained by the mobile exporters' demand for local factors of production and their desire to locate where there are established Chinese communities? Third, what are the welfare effects of the mobile exporters' investments.

Several participants asked questions or made comments about the sophistication of the mobile exporters' operations. *Michelle Gittelman* asked Wells to specify the portion of the mobile exporters' value chain that is located in countries such as Indonesia. He replied that originally the Indonesian sites had assembled parts that were primarily from their home countries but that recently they have started using more local parts. *Dick Caves* stated that the earlier literature indicated a sharp dichotomy between Asian and other investments, in that the others brought intangibles to their foreign investments while Asians tended to have smaller, more labor-intensive operations. In response to Caves's inquiry as to whether this dichotomy persisted, *Wells* said it was still present but to a slightly lesser extent.

Bill Zeile suggested a reason why the recent Japanese investments in Indonesia are more labor intensive than investments by firms from other advanced nations (see text, sec. 6.3.3): these recent investors are Japanese suppliers following other Japanese firms that made earlier capital-intensive investments. *Monty Graham* asked why countries such as Korea use foreign direct investment in Indonesia but contracting relations in countries such as Bangladesh. *Wells* responded that it may be that the manufacturing processes in Bangladesh is lower-end and, thus, that the production process requires less adaptation to change. *Peter Petri* added that the Bangladesh operations originally had been foreign direct investment but that the Bangladesh managers, who had been trained by the Koreans, soon established competing firms. He emphasized that this evolution will probably occur in Indonesia in the near future because the production skills are readily acquired by local managers.

Participants questioned whether the mobile exporters' demand for local factors of production and their desire to locate where there are established Chinese communities fully explain their site choices. *Paul Healy* offered an alternative explanation for why Hong Kong and Taiwan have focused on Thailand while Singapore, another country with a large Chinese presence, has invested in Indonesia. He argued that Singapore, wishing to narrow the economic gap between itself and its neighbors, provides tax breaks to Singaporean companies that locate close to its borders. *Wells* agreed, indicating that many of the Singaporean companies are investing on the Indonesian islands closest to home. *Dara Monashi* asked whether there was an unusually large Chinese presence in the African countries where the East Asians have been locating and, if so, whether it would be reasonable to assume that there would be similar additional investments in other African countries with smaller Chinese populations. *Wells* responded that he has no knowledge about the Chinese populations of various African countries and that the African investments were primarily for import purposes. *Petri* asked whether the site choices were the result of being able to segment the production process and transport intermediate goods at low cost. *Wells* responded that transportation costs had come down recently in some Indonesian locations where international airports have been established.

With regards to welfare issues, *Kenneth Froot* asked whether Wells had data on the employment base or wage levels and, more generally, whether Indonesia views the recent investments positively. *Wells* responded that the Indonesian government viewed the employment effects very positively but he does not have data to formally address this issue. *Krishna Palepu* asked why investments were export oriented in a country such as Indonesia, where the market is so large. He suspects that Indonesia would be better off if it promoted manufacturing for its local economy. *Wells*'s reply was that the recent investments were export oriented; however, earlier investments were import oriented, and the recent investments constitute a small portion of the total stock of foreign investments in Indonesia.