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Alice H. Amsden

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NATIONALITY OF FIRM OWNERSHIP IN DEVELOPING COUNTRIES: WHO SHOULD "CROWD OUT" WHOM IN IMPERFECT MARKETS?

Alice H. Amsden

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"*What the entrepreneurial group of Islamic small businessmen most lacks is not capital … or drive ... or a sufficient market …. It lacks the capacity to form efficient economic institutions; it is a group of entrepreneurs without enterprises.*"

-- Clifford Geertz, *Peddlers and Princes*

Overview

In theory, the nationality of an enterprise shouldn't matter to economic development. Whether a firm is a foreign-owned subsidiary of a multinational (FOE), or a private nationally owned enterprise in the developing world (POE), development will be the same so long as markets are perfect. In industries in which an infinite number of firms can compete, there need be no "crowding out" of the momentarily weaker by the stronger. There is plenty of room for all to create new jobs no matter what the nationality of their corporate board or majority shareholders. It follows that government policy should open the doors to one and all.

But this story changes in markets that are monopolistic. Here, arguably, the nationality of ownership does matter. FOE and POE make distinct contributions to economic development, but under monopoly, only one species survives---not necessarily because it is better but because it is more experienced. The POE could be as great, if only it had enough time to learn. In fact, many POEs are already entrepreneurial. From ground up, they built most of the "new" industries of the developing world. FOEs, on the other hand, from subsidiary to headquarters, benefit from a finely-tuned, *bureaucratic* management machine. Whether a developing economy is dominated by FOEs or POEs in its mid-tech or mature high-tech sectors thus really matters.

Starting with the 1950s, when the US spurred a managerial revolution that spread to Europe and Japan, multinationals marketed not just capital and technology but also the latest management skills. Through the movement of people, managerial professionalism diffused from FOE to POE. All Taiwanese top managers in the electronics industry, for example, had once worked for RCA (Radio Corporation of America) RCA had located a subsidiary in Asia in search of cheap labor. This was a very important transfer of know-how from North to South.

But the multinational, operating through its subsidiary, is inherently a bureaucratic animal. Strategic decisions must filter from headquarters, then to regional offices, and then to subsidiaries,

making three levels of bureaucracy right there. Professional management is one side of the multinational's coin, but bureaucracy and rule-bound decision making is the other.

The POE, by contrast, is likely to contribute Schumpeterian entrepreneurship to development, not bureaucracy. The POE is relatively young, it combines professional management and dynamic family ownership, and it spearheads diversification in countries setting up or restructuring a wide range of promising industries. It, not the FOE, is the agent that opens industries that are "new" to the developing world. POEs may be adventurous and corrupt (their reputation, with little proof), a little loose with other people's money, but in those developing countries that managed to accumulate modern manufacturing experience, national enterprises are now the incubators of top talent (Morris Chang, the former Vice President of Texas Instruments who presently manages Taiwan Semiconductor Manufacturing Company, spoke of leaving TI because he had reached the "yellow-glass ceiling"). There are no color bars for national citizens in nationally owned firms.

Entrepreneurship in POEs and bureaucracy in FOEs arise from differences in risk-taking – the FOE is risk averse and the POE is risk loving, given their differences in knowledge, income and age. The multinational has the knowledge to choose among promising investments around the world, not just in a single country. To decide what actual investments to undertake, it uses bureaucratic processes involving divisions of decision-makers. But however careful, this process may screen out the most profitable and developmental investments due to high estimated risk.

The POE, by contrast, becomes a competitor by reducing the through-put-time of doing business. Its swiftness stems partly from operating within a business group that is managed by a single owner that can transfer money and skills to and from organically created affiliates. Groups benefit from the inter-sectoral learning made possible by the absence of operating in a single market (Dosi 1988). The POE today is typically in its first, second, or third generation of family ownership. It is free from bureaucracy at the top while enjoying professional management at the bottom and middle.

POEs also tend to have more knowledge of the local business environment than FOEs. Charles Kindleberger argued as early as 1970 that proximity creates advantages for the national investor, but he wrote too early to add that the same people who know their own environment also know the leading economies abroad. Knowing both worlds through birth and education, POEs exploit a developing country's high-risk opportunities, because they have no other choice. These lay dormant for so long under the influence of FOEs. POEs pick winners by looking at the earlier behavior or FOEs.

This is the gist of the argument that "crowding out" of POEs by FOEs in monopolistic industries (mid-tech and mature high-tech) is not development friendly.

FOEs transfer technology, so the argument runs, but clearly they do not do so to their national competitors. Foreign companies transfer knowledge to the developing world but only when they themselves are *located abroad*. Without any ownership strings attached, overseas vendors supply technology to latecomers in the form of capital goods, parts and components. Sometimes a package with "supplier's credits" to pay for the capital is included, reducing the need for foreign finance. Foreign capital goods manufacturers, from Sony to Sun Microsoft, are the major sources of technology in industries ranging from steel and petrochemicals to shipbuilding and electronics. No direct foreign investment in these sectors is required for POEs to learn.

Depending on the definition of a "foreign direct investment," the contribution of FOEs to economic development has tended to be exaggerated, especially if an alternative source of capital is available. In order to appear "open," countries overstate their foreign investment stock (a firm with only a 10% foreign equity stake may be classified as foreign in one country but not another). In China, around 70 percent of "foreign" investment is from overseas Chinese, including Chinese from Hong Kong, and the definition of a "foreign" investment includes the kitchen sink, such as foreign loans, not only foreign equity (Banerjee, 2005).[1] In 2003, under US pressure, 82 countries made a total of 244 regulatory changes regarding foreign direct investment, of which 220 were in its favor (UNCTAD

2004). The more FDI a developing country has, the warmer a country's political welcome in Washington, so the role of the POE has tended to be understated and misunderstood.

As early as 1982, POEs already showed faint signs of out-performing FOEs. Hyundai Motors, then a baby owned almost exclusively by Hyundai, a Korean business group, out-performed Daewoo Motors, a joint venture between General Motors and Daewoo, another national Korean group (that ultimately went bankrupt from over-expansion). The nationally owned firm out-competed the joint venture along every line. If we measure "commitment" to national development in terms of sunk capital, Hyundai's commitment was larger; as a firm without a leading-edge technology, it had nowhere else to invest than at home. The national company's opportunity costs were higher than the foreign company's. Hyundai's employment was also greater, a key concern of the Korean government at the time. Hyundai's capacity, production and exports were greater. Although at full capacity, labor and capital productivity were roughly the same in the two companies, given a big gap in capacity utilization, actual labor and capital productivity were far higher in Hyundai.

Mitsubishi Motors sold Hyundai Motors its engine design, which was then perfected to save fuel. Seoul's taxi drivers bought HM's cars, not GM's, out of national pride and fuel efficiency.

The distinction between entrepreneurial and bureaucratic, that makes the POE potentially more valuable than the FOE, takes many forms. A giant multinational, with tacit knowledge, keeps its top managers and engineers at corporate headquarters to oversee non-routine, non-standardized functions, as Raymond Vernon observed in his product cycle theory (Vernon 1966). This elite, of necessity, is in short supply. Therefore, when a multinational opens a subsidiary overseas, it substitutes top management's insights with bureaucratic rules. It cookie-cuts every foreign operating facility. Within a range, there is no need for innovative managers, so even the transfer of managerial know-how is constrained.

The multinational retains at home its most prized value-added function, R & D. This function never fully migrates even to the biggest markets or labor troves, China or India, despite foreign R & D facilities in these countries (such as General Electric's lab in Bangalore). FOEs' R & D in the developing world barely reaches the level of "applied research," let alone "basic research" (Amsden, Tschang et al. 2001). The most promising R & D projects are guarded closely by huge corporate labs, huge because they undertake multi-disciplinary tasks, from physics and linguistics to metallurgy and chemistry. GE's Bangalore lab employed maybe 1000 people and was designed to support all GE's production operations in India, not to launch new products, whereas GE's corporate research laboratory in upstate New York employed at least 5,000 people. Without R & D on the premises, developing countries may not get to produce the hottest-selling models. Daewoo Motors, the GM-Daewoo joint venture, under-performed in Korea because it tried to sell an out-dated Opel model from GM-Europe.

A good working hypothesis is that at present, FOEs undertake only beginner-level R & D in most parts of the developing world. As skills rise, headquarters may invite local engineers to participate in a top-level corporate project, but only in a small part of it.

FOEs that are equity investors in the developing world are thus decapitated creatures. They are disfigured because they are missing the top layer of management, including leaders in science and engineering, which are always located at corporate headquarters. If all industry were foreign-owned, a developing country would never develop the top skills and highest-paying jobs (CEO, CFO, Regional Manager, Lead Scientist) that rocket the modern corporation. The developing country would never become advanced enough to earn the entrepreneurial rents that tacit technology and associated brand names earn. The developing world would only experience a brain drain of its best talent, who would migrate to places with high-end jobs. These are some of the opportunity costs of having FOEs crowd-out POEs in monopolistic industries.

POEs in developing countries know high-risks when they see them, but they don't know investment opportunities elsewhere, and they anticipate ultra-high profits at home; in select under-developed countries, where markets are still young if not virgin and entrepreneurs and government planners know what they are doing, the expected rate of return is enormous. Hence, POEs are entrepreneurial. They are the first to create the national enterprises necessary for economic development in conjunction with government support. They assume the lead in overcoming the initial handicaps of lateness. POEs see opportunities first by thoroughly knowing the world around them.

The jury is still out in the FOE-POE rivalry, particularly when joint ventures are taken into account and differences in age and stage of development are controlled for. Imagine if India and China follow in Korea's footsteps and build up their nationally owned automobile industries (which both are trying to do). Then the difficulty of answering the question about future competition between FOEs and POEs becomes clear: who will triumph---Brazil's and Mexico's foreign-dominated automobile industries, with their concern for static efficiency, or Korea's, India's and China's nationally dominated ones, with their concern for expanding markets? Or will Toyota Motors sweep every board? The answers are not obvious. But if one believes in entrepreneurialism and human capital, versus first mover advantage and bureaucratic efficiency, then the bet is on Korea, India and China, all students of Japan.

The National Edge

The modern corporation is a microcosm of the modern economy, with all its complex economic, political and social cross-currents. It is difficult to establish, and only a subset of developing countries have successfully nurtured professionally managed national firms across a wide

array of industries. Why has Asia been better than Latin America in building the latest generation of behemoths? Have POEs or FOEs mattered in Asia's rise?

Foreign investors were typically not the first to create new industries overseas even before World War II. With the exception of raw material extraction, FOEs were not leaders: "Throughout the colonial world, while foreign investment undoubtedly speeded up the development of countries (both poor countries and regions of White recent settlement), it is more accurate to think of it as accompanying and reinforcing their growth than as preliminary to it...the foreign investor usually did not join in until comparatively late in the day, lagging behind rather than running in front" (Cairncross 1953, emph. added). The experience of nineteenth century America "strongly supports" this assessment (Kravis 1970), as does the history of Japan: "When the Japanese had already demonstrated their general progressive drive and their specific industrial aptitudes, FDI in manufacturing made an appearance" (Reubens 1955). In India, "foreigners were responsible for starting the jute industry, a major nineteenth century exporter. The initiative for railroad construction also came from foreigners. But Indians took the lead in creating the cotton textile, power generation, shipping, construction, sugar, iron and steel, engineering, and agricultural implements industries" (Agarwala 1986). Later, they pioneered in chemicals, electronics, automobiles and aircraft manufacturing. In all these cases, the POE was first to raise the capital and take the risk in a "new" industry---new to India. In the Argentine meat packing industry, two local firms were among the original investors, until bought out by foreign meat packers. In China, foreign firms were generally tiny in size, and large enterprises got their start from state-related bureaucrats (Allen and Donnithorne, 1954; Dernberger, 1975; and Feuerwerker, 1958).

Many heavy industries after World War II were developed by state-owned enterprises (SOEs), not FOEs, if only because FOEs were routed out of these industries by government regulations, and POEs didn't have the investment capital. Under colonialism, FOEs got (and mostly retain) secure spots in natural-resource rich industries. In Latin America and Asia, SOEs were instrumental in starting or

advancing the petrochemical and steel industries. On average, these two industries accounted for about 80% of all state *manufacturing* activity in developing countries. The Crown in Thailand established business groups centered on the manufacture of cement and automobiles. The Indian software industry prides its origins on being private. In fact, the industry started, and started specifically in Bangalore, with the help of a government military R & D installation and a prestigious Indian Electronics Institute, an elite graduate engineering school. The global privatization drive that began under President Reagan sold many SOEs to FOEs. But some of the best SOEs went to national capital, thereby strengthening them (Embraer in the Brazilian aircraft, Sunkyong in the Korean petrochemical industry).

POEs normally remain family owned for at least three generations: a visionary at the top and her close associates rule the roost. Then come professionally trained, salaried managers and engineers. This combination, of professional managers and dynamic owners, is almost as growth-inducing as that of the early Japanese *zaibatsu* (business groups) whose excess demand for capable managers led to outsiders being given a share in ownership; thus, ownership and professional management in Japan were fused early on. In most developing countries there was no fusion, but professional managers went almost to the top of the organizational hierarchy, especially in production engineering. Thus, big business in the advanced developing countries combined raw entrepreneurship in the persona of the ambitious owner and professional expertise in the persona of trained managers. This combination was capable of quick decision-making and project implementation, one that could conceivably challenge the bureaucracy of foreign subsidiaries, regional offices, and headquarters. Taiwan's private electronics firms couldn't attract professional managers and engineers unless such professionals were convinced that they were joining a firm that was rationally run. No one wanted to work for a maniac. A new cadre of professional managers disciplined an old cadre of dynamic tycoons.

In Latin America, however, foreign investors got an early start – a conceivable reason behind its lackluster performance compared with Asia's after World War II. As indicated in Table 15.1, Latin

America attracted foreign investment far earlier than Asia. Much of the elite in Latin America still considered itself foreign, so foreign investment did not initially meet widespread nationalist opposition, and it found a relatively rich population not under another empire's control. FOEs became part of the woodwork. The subsidiary of an Italian multinational, Pirelli, was established in Argentina as early as 1917 (Barbero 1990). Afterwards FDI in Latin America rose fairly steadily.[2] Skills and wages in Argentina, Brazil, Chile and Mexico were high by the standards of Asia, which provided a market for foreign goods. Protective tariffs insured that these goods would be assembled, if not manufactured, locally. When most of the developing world was still under the control of a colonial power, Latin America was nominally free, having thrown off the Spanish yoke in the early nineteenth century. It was easier for FOEs from the US to do business in Latin America than in the colonies of rival powers, so with Washington's support, FOEs became the dominant form of business in Latin American industries.

Table 15.1: Timing of foreign investment in Latin America and Asia, 1977-89 (share of foreign affiliates in local output)

United States Foreign Affiliates			
	Latin America		
	1977	1982	1989
Non-elec mach	22.6 %	13.5 %	31.4 %
Elec mach	31.4 %	22.6 %	15.6 %
Transport eq	64.5 %	52.2 %	38.9 %
All manufacturing	20.0 %	18.2 %	15.3 %
	Developing Asia		
	1977	1982	1989
Non-elec mach	3.0 %	---	---
Elec mach	---	6.2 %	9.8 %
Transport eq	---	---	8.5 %
All manufacturing	3.6 %	2.2 %	4.5 %

Japanese Foreign Affiliates*			
	Developing Asia		
	1977	1982	1989
Non-elec mach	---	4.5 %	6.0 %
Elec mach	---	8.4 %	12.9 %
Transport eq	---	18.7 %	29.1 %
All manufacturing	---	5.8 %	7.8 %

Source: Adapted from Amsden (2001)

Notes: European OECD investments were negligible and, therefore, were ignored. Data for Japanese foreign affiliates includes affiliates for all those companies in which Japanese ownership is 10% or more. Data for US foreign affiliates include only those companies in which US ownership is at least 50%. Figures from US, Japan and OECD were not aggregated due to missing US observations.

* Japanese investments in Latin America were negligible and were ignored.

As World War II approached, foreign investors strengthened their Asian presence. Japan's mobilization for war and invasion of Manchuria in the 1930s provided a lightning rod for regional industrialization. Japan hastily strengthened war-related industries in Korea and Taiwan, thereby planting the seeds for their highly successful postwar industrial promotion systems. Colonial governments in Indonesia and Malaysia responded to Japan's threats with defensive investments, including protectionism against Japanese exports.[3] A bloodless coup d'état in Thailand in 1932 ushered in a period of nationalist development initially in collaboration with Japan. While "economic policy stayed liberal in most (southeast Asian) colonies throughout the late nineteenth and early twentieth centuries," economic policy was already protectionist when growth resumed in the late 1930s following the Great Depression (Lindblad 1998).

The manufacturing experience that a dozen developing countries got from foreign and national enterprise was key to postwar development. No developing country entered the orbit of modern world industry after World War II, with its own POEs, that didn't have prewar manufacturing experience (Amsden 2001). No developing country cultivated a strong cadre of nationally owned firms from scratch.

Manufacturing experience came from one of two basic sources: émigrés and colonial firms (owned by metropolitan-based companies). Foreign immigrants from Europe brought technology to the developing world, especially Latin America, at least since the 16th century. First as individuals, then as subsidiaries of foreign companies like Pirelli, their share of the local economy increased. The same is true of Chinese émigrés in Asia. Colonial firms, the second source, didn't transfer technology all that differently, but their investments were more strategic, coordinated and planned. The critical difference between émigré and colony was that colonialism eventually ended.

De-colonization, or the movement after 1945 towards independence for the world's politically oppressed countries, had a colossal effect on firm ownership. But change was felt only in some parts of the developing world. Because Latin America had gotten its political independence in the early nineteenth century, de-colonization didn't create any epochal changes. There was no disruption in the ownership of productive assets. FOEs were everlasting, as in the automobile industry. *Given this continuity, any aspiring nationally owned Latin American POE had to confront these dinosaurs in its own backyard*.

Decolonization had a much more cataclysmic effect on colonies that won their political independence after World War II. De-colonization not only meant political independence. It also meant economic independence: getting rid of unwanted FOEs. China expropriated foreign capital. Korea and Taiwan re-took land, companies and a modern banking system from Japan. India's independence scared away many British-owned enterprises. Other FOEs were out-competed by Indian POEs. When Indonesia finally got rid of the Dutch in the early 1950s, it inherited some 400 firms and substituted new ownership.

These discontinuities in Asia made it much easier to nurture national enterprises. De-colonization created a tabula rasa. POEs became the new entrepreneurs, and growth soared.

The Philippines got its political independence about the same time as its neighbors, but the high income share of American foreign multinationals never changed, despite a fairly well-educated population. African countries were the last to win independence, but their goldmines and plantations remained in foreign hands. The creation of a local African business elite has only begun, as larger numbers of students from the developing world study overseas. In the Middle East, only after 1961 were the Seven Sister oil companies forced to pay higher taxes and royalties, or become nationalized. The catalyst was OPEC, the professionally managed Organization of Petroleum Exporting Countries. OPEC revolutionized ownership in the oil industry. If Africa could reduplicate its expertise (as with AMEC, or African Metallurgy Exporting Countries), it might be able to catch up economically with the richest countries in the Middle East.

Thus, after World War II, the entrepreneurial POE was a major institution in developing the world's most successful countries, mainly in Asia. FOEs, on their other hand, settled in for the long run in the slower growing regions, Latin America and Africa, with the Middle East's oil industry somewhere in between. Of course, the FOE expects to shed its bureaucracy in the Information Age, although bureaucracy is likely to increase in foreign subsidies. As for the POE, can it move beyond entrepreneurship and become good at managing by the numbers? Does ownership matter when it comes to being good in production management and distribution logistics?

Entrepreneurship and Efficiency

Ever since receiving steroids from the state, POEs were disparaged as being inefficient. Inefficiency, however, has often proved to be wishful thinking on the part of POEs' detractors. Virtually every snap-shot of a leading POE, in China or Chile, shows it in a frenzy of minimizing costs, notwithstanding its receipt of government subsidies. Raising productivity and enjoying protection

were compatible. POEs (and local FOEs) can raise their domestic price to tariff levels, but still, they can always make more profits if they slash their spending. POEs invested heavily in skills related to production engineering and project execution---stretching existing capacity if they were in slow-growing Latin America, adding new capacity at lightening speed if they were in Asia. As entrepreneurs, POEs were cost minimizers, because it was the rational thing to be.

Initially, technology was always foreign. Rarely was a domestic industry started without technology from abroad. But technology infrequently came from FOEs. Technology was transferred mainly by foreign capital goods suppliers located overseas. These vendors were usually happy to transfer information to any customer, and supply them with a road map of where their industry was going. In the case of the developing world's textile equipment in the 1970s, most came from British and Swiss machinery suppliers, who installed textile machinery systems and trained workers to maintain and repair them. If a piece of equipment failed, vendors came to service it at great expense, giving an incentive for local production engineers to be pro-active in learning.

Machinery suppliers usually guarantee a buyer a "rated capacity" below true potential capacity. Therefore, a machinery buyer benefits financially if it can push capacity above the rated level. In the continuous process industries like steel, cement and pulp and paper, investments to exceed rated capacity were routine.

In "mature" high-tech industries such as calculators, computers and cell phones, where global prices were already falling fast and profit margins were thin, POEs had to enter an industry quickly and get a product swiftly out the door. Taiwan's leading electronics firms did R & D in order to optimize large-scale integration of thousands of components and parts. The better integration, the shorter through-put times (Amsden and Chu, 2003). POEs were entrepreneurial as well as efficient, the more so if they had both an American and Japanese management background.

Thin Air in the Stratosphere

At one time, it would have been inconceivable to think that a mega-multinational could do any of its R & D overseas. According to Vernon's product cycle (Vernon 1966), non-standard projects have to be kept at home in order to be under top management's nose. But, in fact, some R & D has gone overseas, most recently to developing countries with low labor costs. People now regard GE's R & D center in Bangalore, India, with the same awe that they once regarded the Eiffel Tower. But on first observation, the R & D done overseas by multinationals is small in amount and modest in complexity. A study by the OECD of the internationalization of its country-member's R & D suggests this. On average (across countries), OECD countries do only about 12% of their R & D in another country. The percentage was roughly 10% for the US and 2% for Japan at the end of the 1990s, although higher for some European countries (OECD, 1998 and Patel and Vega, 1999). In Korea and Taiwan, the percentage of total, country-wide R & D accounted for by FOEs was less than 2%, well below their share of output.

Foreign R & D also turns out to be relatively unsophisticated, especially in developing countries. According to two criteria to classify R & D as basic, applied or another form of research---*the size of R & D operations*, and *the type of math done by researchers, original or algorithmic*---virtually all the R & D undertaken by foreign firms in Singapore and India (Bangalore) is at most applied research (Amsden and Tschang 2003). An in-depth comparison of R & D in five multinationals and five nationally owned firms in the Korean telecommunications industry concluded that the national firms did more diversified R & D, ranging from some basic to advanced development; the authors warned Korea not to rely on foreign firms for R & D at the frontier.

But R & D is only one among many functions that foreign investors do primarily at home, or possibly in regional offices. Local content tends to be much higher for nationally owned firms than for

foreign subsidiaries, the most obvious being foreign assembly operations for export, where most inputs are imported. High importation is partially affected by trade barriers: for most of the period 1950-2000, the US insisted that most of the inputs in products being exported to the US from developing countries be 'Made in America.' The incentives for local content were also different for nationals and multinationals. It often made sense for foreign firms to import components with large scale-economies from a single internal source, outside the country of assembly. It also made sense for nationally owned firms to build their supply chains locally. Daewoo and GM fought constantly over the origin of parts; GM wanted to import them from GM subsidiaries, while Daewoo wanted to make them at home. Hyundai created a local network of parts and components suppliers under the direction of a "Parts Development Department" that employed 300 engineers. This department was modeled on a Toyota idea. With support from government R & D, nationally owned firms in Taiwan's electronics industry began to import substitute key parts of their computers and cell phones---first CD ROMs and then TFT-LCDs.

Foreign investors do not, and probably cannot, be expected to do their state-of-the-art research outside their corporate labs. If nationally owned companies want to be first with cutting-edge products, earn entrepreneurial rents and accumulate engineering know-how, then like everyone else they must invest in their own R & D. Like the alchemists---FOEs or POEs---they must slog away, hoping for big results.

Conclusion

Like the Devil, the superiority of the POE over the FOE lies in the details. POEs are not successful in every developing country or every industry. But FOEs and POEs are inherently distinct because of their differing attitudes towards risk. In principle, a joint venture is a substitute for a POE.

With a joint venture, the best of the entrepreneurial POE and the best of the bureaucratic FOE can be united in a partnership. In this case, there is no need for local government to treat one type of firm as intrinsically better than another. Joint ventures are often preferred over FOEs by developing countries, from China to India, if no more disaggregated method is possible.

But a joint venture is not necessarily a good substitute for a POE. Entrepreneurs in today's developing countries don't need the expense of a joint-venture partner to buy knowledge about how two worlds work. They already understand how they work because they go to kindergarten at home and university in the US. Many remain in both places as part of a long-term recursive "brain drain;" entering their home country and then leaving it temporarily for Europe or the US. With greater broadmindedness than the FOE, and with more government support for risk taking, the POE has become a new force in global business.

As POEs have risen, even the nature of foreign investment has changed, giving POEs a larger slice of the pie. At present, a foreign investment in the form of a new, overseas plant is less likely to happen than a foreign investment in the form of outsourcing, where POEs do all the work. RCA made TVs in Taiwan in its own plant. Today, IBM "makes" computers in someone else's plant in Taiwan.

Given poor infrastructure, the poorest developing countries have gotten almost no investment from multinationals except in raw materials. Their resource-intensive industries are typically controlled by foreign firms, many with market power and political clout. The FOE can use diplomacy and a deep pocket to influence public policy making, from a law to a coup. POEs, for their part, have connections to top politicians through childhood ties. Thus, FOEs and POEs divide the terrain for influence-peddling. The difference between them is not in corrupting the rules of law. Instead, the difference lies in investment policies. If profits rise, foreign-owned mining companies tend to reinvest them in the same industry elsewhere, in a different country, with few local jobs or skill formation. POEs, by comparison, are almost always part of a diversified business group (Sumitomo, an old

Japanese business group, started in finance. A greater share of their profits is thus likely to be invested in diversifying locally, entering a "new" industry at home and possibly a new export market overseas, with many more jobs and skills established.

A country is only credited with those "foreign investments" that are made by its own POEs, not by its FOEs, who claim their own nationality to identify a new project. A country's outward "foreign investments" depend on the establishment of home-spun POEs, and many potential advantages of globalization only begin with the rise of a cadre of national businesses.

Two questions arise: what is the appropriate government policy towards POEs? This question is difficult to answer because FOEs and POEs usually start off with vastly different endowments, and it is valid to ask whether inequalities in initial endowments should be leveled by governments. Whatever the answer, the time is ripe for rethinking government industrial policy towards POEs because their positive progress has been unexpected and their skill-related benefits have been felt economy-wide.

Second, if POEs in developing countries get the royal treatment from a growth-conscious state, what does the rest of the world get? "Plenty," would probably be a fair statement. If POEs from the developing world succeed, like POEs succeeded earlier from Japan, the welfare of the world economy will rise with more competition. A true globalism will appear with multinationals from countries other than just the US, Europe, and Japan. Diversity will prevail, and global income distribution may become less inequitable. As FOEs lose their monopoly power to newcomers, the entrepreneurs who start out behind, they may also face new business opportunities that overtake the joint venture.

Notes

[1] "Without underestimating the capital inflows into China, one has to take note of the fact that the amounts are not strictly comparable with those of India because of the disparities in coverage of data. The coverage of FDI flows in India until 1999-2000 was confined only to equity capital. Apart from equity capital, reinvested earnings and inter-corporate debt transactions, China includes short-term and long-term loans, trade credits, bonds, grants, financial leasing, investment by foreign venture capital funds, earnings of indirectly held enterprises, non-cash equity acquisition, control premium and non-competition fees within FDI. It also includes project imports such as FDI flows, while these are recorded as imports in India." (Banerjee D. (2005), *Globalization, Industrial Restructuring, and Labor Standards*, Sage.)

[2] The Ford Motor Co. began assembling cars in Argentina in 1917 (Diaz Alejandro C. (1970), *Essays on the Economic History of the Argentine Republic*, Yale University Press, New Haven and London.) The *production* of cars by Hyundai in postwar Korea was preceded by the *assembly* of cars by Ford. But it is questionable whether assembly operations should qualify as a second mover operation. Assemblers transfer *management* skills to locals who then become trailblazers, but by simply assembling, they don't dig their heels into an industry very deep. Usually their parts and components are imported. Their operation, in the form of assembling imported inputs, is more related to foreign trade than foreign investment.

[3] In the early 1930s, "the Netherlands East Indies government had passed the Crisis Import Ordnance designed to impose quotas on a whole range of Japanese goods, and, in the Philippines, Japan was forced by the United States to come to a gentleman's agreement limiting its cotton exports to that colony. Parallel measures were undertaken in all the insular colonies restricting foreign investment, export of strategic materials, immigration, and land-ownership, all of which were clearly aimed at the Japanese economic advance." (Peattie M. (1996), 'Nanshin: The "Southward Advance," 1931-1941, as a Prelude to the Japanese Occupation of Southeast Asia' in P. Duus, R. Myers and M. Peattie (eds.) *The Japanese Wartime Empire, 1931-1945*. Princeton University Press.)

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