Foreign Direct Investment in Japan

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NEW HORIZONS IN INTERNATIONAL BUSINESS

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COMMENTARY

Bruce Kogut[1]

The papers by Professors Ryuhei Wakasugi and David Weinstein are important explorations in the terrain of establishing plausible relationships. The problem confronting the analysis of why direct investment is low in Japan is the determination of the proper counterfactual. We would like, in effect, to run an experiment to determine what would be the level of direct investment if it *were not* for the presence of a particular factor.

One way to arrive at the right counterfactual is to try to estimate an explicit general equilibrium model unrestrained by institutional factors and use this model as a benchmark to examine real traded flows. The work of Gary Saxonhouse is in this vein. His conclusions that the trade surplus of Japan with the United States arises out of the particular allocation of factors and resources of the new nations are derived by asking *what if* questions, e.g. if Alaskan oil should belong to Japan.

Another way to approach the problem of analysis in the absence of a counterfactual is to present reasonable arguments about what institutional factors might explain low imports, or low direct investment. To make this analysis feasible, we have to find an institutional detail that varies across industries, or some unit of analysis. A feature such as the Japanese language would not be a very insightful candidate for explaining why trade or investment is low, for there is no variance in this institutional facet across industries. Of course, language might play a role in influencing the overall level of import or investment penetration, but it would simply be difficult to know by looking at the statistical evidence drawn from Japan alone. An example of an institutional factor that varies across sectors is given by the work of Robert Lawrence. His institutional argument points to the role played by *keiretsus* in Japan. Since these enterprise associations are found to vary across sectors, it is possible to look at whether *keiretsus* occur in the industries where foreign penetration is the lowest. He finds that there is some evidence for low penetration in these industries[2]

Which approach one prefers, namely an investigation based on an explicit model or pragmatic reasoning, does not seem to matter too much in the case of understanding direct investment flows. There are, after all, no explicit models that predict how much of an economy should be owned by foreign companies. A counterfactual cannot be constructed by this route. The articles by Dunning and Graham in this volume (Chapters 2 and 3) suggest ways in which one might think about ownership. Yet, ultimately, it is too difficult a problem to know how much of Japan should be owned by foreign companies

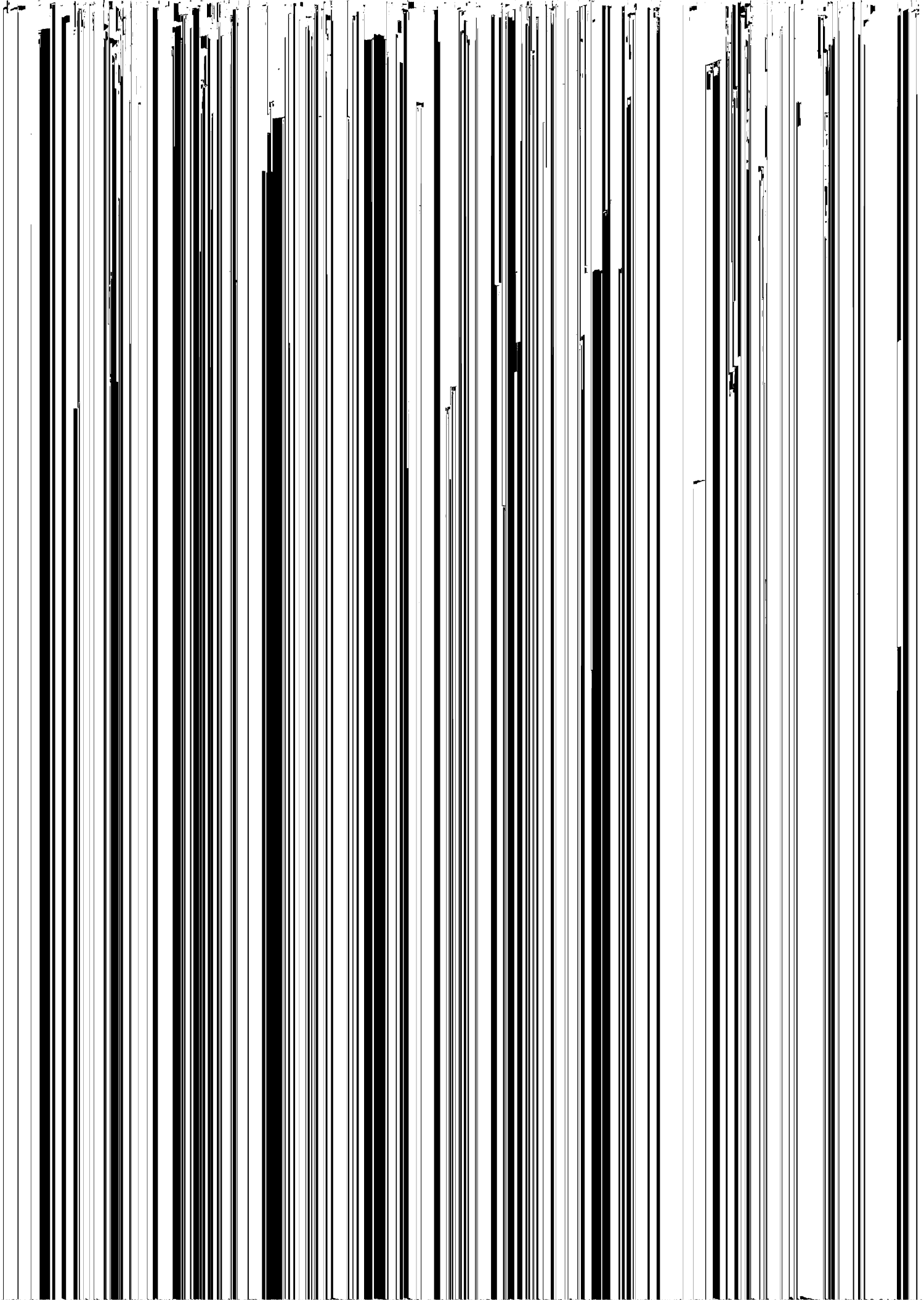
and what the effect of foreign ownership would be on the share of the Japanese market to be held by foreign companies.

It is important to recall the history of this debate, which began around the question of why *foreign market shares* of Japanese markets are so low. The logic of the debate moved from whether shares were low due to trade barriers to whether they were low due to investment barriers. There is evidence that trade and direct investment are complements. Investment is simply shorthand for sales of goods and services produced in Japan; exports to Japan are sales that are produced in foreign countries. We should not lose sight of the more basic issue that no matter where these goods are produced, foreign market shares appear low in Japan.

The papers by Wakasugi and Weinstein fall into the realm of the application of plausible and intelligent common sense. In his insightful paper, Wakasugi focuses directly on the determinants of foreign market share. He argues that since direct investment and trade are complements, the quality of the ownership advantage of the foreign company should influence market share. The empirical analysis is directed at testing the relationship between market share and technological intensity, among other variables. His results point to this relationship. These results may not seem stunning, but they are quite important in showing that technology transfer is correlated with sales penetration. This finding is by no means obvious.

The notion that technological capability drives investment into Japan is consistent with what we know about the determinants of Japanese investment into the United States. Technological rivalry through expenditures in R&D and expansion into overseas markets is a significant predictor of outward investment; there is little evidence that Japanese firms invest in the United States for the sourcing of American technology (Kogut and Chang, 1992). In his analysis of direct investment in Japan, Yoshitomi (1991) also points to the strength of the technological advantages of Japanese companies. Wakasugi finds similarly that the location of R&D by foreign firms does not seem to explain inward investment into Japan. Foreign firms come to Japan already endowed with technological advantages.

There is another way to get a sense of the role played by economic fundamentals in investment flows. Since we know that many industry characteristics (e.g. technological intensity, advertising and marketing expenditures, capital/labour ratios) are correlated across countries, we should expect that the sectoral pattern of direct investment should also be correlated. Table C1 presents the raw count of US direct investment in Japan and Japanese investment into the United States.[3] An important observation is that the disparity in entries (which are highly correlated with investment value) grew after 1976. Before this, Japanese investments in the United States were also quite low. The correlation between the sectoral patterns for



shares are correlated with competitive forces, but we still lack an explanation for why shares overall are so low. This observation is a fair and honest conclusion to an insightful study.

The thoughtful paper by Weinstein, like the contribution of Graham, is imbued with history and Japanese conditions. He places emphasis on superior capabilities of Japanese firms, as witnessed as early as 400 years ago. In economics, there is a current fascination with a notion of path dependence – what was done yesterday has an impact on today. No doubt, someone in the Dutch trading company was trying to figure out why FDI in Japan was so low.

The history is interesting but, one suspects, also misleading. Mark Mason's (1992) history of the exit of General Motors and Ford in the 1930s from Japan does not indicate superior capabilities of Japanese competitors. Toshihiro Nishiguchi's (1994) account of the development of the Japanese supply base is similarly critical of the reliability of military production, including the failure rate of the Zero aircraft due to the poor quality of the components. There was still a formidable role for Mr Toyoda and Mr Ohno in working out some of the manufacturing details. But the larger point is well taken. The possibility that Japan knows how to do it better is the main contending explanation. It's not barriers; it's just superior capabilities of Japanese firms.

The key statistical result in Weinstein's paper is the finding that liberalization of markets has a far greater impact on inward investment flows than does the presence of a *keiretsu*. These results are not especially surprising, given the well documented importance of government restrictions in the past and their weakening but still telling role in a number of industries currently. The finding that the *keiretsu* has a mild but significant role is also surprising, because the result is established by a researcher unsympathetic to its importance and because its measurement is so clearly prone to error.

The more interesting issue does not seem to be weighing the size and significance of coefficients, but placing in perspective what the overall story seems to indicate. The example of the insurance industry is, in the perspective of the overall results, revealing in suggesting the importance of understanding the political economy of regulation and entry. Weinstein describes a system by which insurance companies take equity positions in clients and offer 'kickbacks' in the form of high dividend payments to policyholders. He describes elsewhere a system in which financial groups permit banks to offer debt at high interest rates to member companies in an environment of credit rationing. This system leads to both lower margins and high capitalization of member firms relative to outsiders.

What these stories point to is a regulatory body that is pursuing a set of political and economic policies. Whether these policies are coherent in some vision of a national industrial policy, or sector-specific, is unclear. That they

can be formed independent of the influence of large financial groups or of large manufacturing firms is doubtful. It is probably a fair observation that the belief in the efficiency of the Japanese financial system has had rather rough going of late. The implication that large financial groups, or motivated bureaucrats, might influence the speed or slowness of liberalization is a far more disturbing theory than that of stubborn resistance of *keiretsu* members to open the circle to purchases from foreign firms. Of course, in some sectors, the political pressure may be exerted by coalitions of retail store owners or small farmers. But whatever the political economy story one tells, the finding that liberalization does influence investment shares can be restated: that Japanese ministries establish regulations to reduce entry.

The more benign explanation for low foreign sales might be the complex distribution system and the nature of the labour market, as suggested by Weinstein. The distribution system is not especially tied to *keiretsu* groups, and hence *keiretsu* membership again appears to be a poor explanation for the low degree of foreign penetration. Since the characteristics of distribution vary dramatically between consumer and intermediate product sales and among sectors, and since tradeables and investment patterns vary by sector, an observation on an average does not reveal too much about markets in which foreign shares are normally expected to be high.

If we look, for example, at the computer industry, we get a fairly good indication of the costliness of entry due to distribution. Table C2 presents data collected by Williamson and Yamawaki (1991), and indicates that staffing in distribution channels is especially onerous in Japan. Of course, these staff levels are imposed on foreign and domestic firms alike. However, since initial sales are bound to be low for a foreign entrant and the distribution costs cannot be spread at first across many product lines, these costs certainly dissuade foreign entry. A major reason why acquisitions are the most common vehicle for direct investment is the difficulty of establishing distribution channels. A product can be shipped; distributors cannot be.

The labour issue raised by Weinstein is an important one, for it points to the possibility that the Japanese market is segmented. In one segment, workers accept low initial wages in return for training and long-term employment. In the foreign segment, workers are paid about 6 per cent more but face a greater probability of a short tenure. The conclusion that these estimates suggest a labour-cost disadvantage for the foreign firm is less important than the fact that labour is segmented. In the study by Westney and Sakahibara (1985) that compared the Japanese and US computer industries, the authors noted similarly that foreign firms were disadvantaged in attracting the best engineering graduates. Table C3, taken from their paper, reports the rankings of firms in the electronics industry for 1982 and 1983. Even IBM, that had already been a long-term entrant in the Japanese market and was of unques-

Table C2 Comparative size and stock turn of US and Japanese independent wholesalers

Industry	Japanese sales per establishment as % of US	Japanese stock turn as % of US
Confectionery	66.5	37.6
Alcoholic beverages	94.8	46.4
Fabric	48.1	92.6
Men's & boys' apparel	84.4	116.1
Women's & children's apparel	48.5	93.3
Lumber & wood products	191.2	84.7
Furniture	95.4	101.0
Paper & allied products	47.9	58.1
Chemicals	49.8	41.2
Pharmaceuticals	134.0	65.4
Pottery	110.4	100.4
Fabricated metal products	100.0	63.3
Machinery	71.4	35.8
Household appliances	80.4	40.5
Other electric machinery	55.3	48.6
Automobiles & parts	56.8	57.4
Other transportation equip.	101.0	40.3
Instruments	72.7	74.9
Toys & sporting goods	71.3	77.9
Average	72.6	58.6

Source: Williamson and Yamawaki (1991).

tionable technological merit, rated substantially below its competitors. But more telling is how sparse the foreign-firm presence is among the top 40 firms.

What the Weinstein stories add up to is a picture of an economy that remains unusually insular. Domestic political economy, which remains surprisingly difficult to analyse by even seasoned Japanologists, appears to be the terrain worthy of investigation to understand why levels of foreign sales are so low. The more organic factors of the nature of the distribution system or of labour markets, which reflect a traditional economy, point to the persistence of institutional characteristics that may be difficult to sustain in the event that Japan becomes a more international country.

Table C3 Top 30 companies among technical students in their senior year at Japanese universities (September, 1983)

Company	1982 ranking received	1983 ranking votes	Total no. of votes received	No. of first place votes
NEC	1	1	437	127
Hitachi	2	2	412	96
Sony	4	3	340	96
Fujitsu	6	4	338	66
Matsushita Electric	5	5	335	104
Toshiba	3	6	330	59
IBM Japan	9	7	216	64
Shimizu Const.	8	8	215	52
Taisei Const.	11	9	202	61
Toyota Motor	17	10	198	60
Kajima Const.	7	11	188	59
Sharp	13	12	176	34
Canon	15	13	152	29
Ohbayashi-gumi	14	14	142	24
NTT	20	15	141	56
Takenaka	17	16	140	40
Nissan Motors	19	17	138	30
Mitsubishi Heavy Ind.	10	18	136	48
Honda Motors	21	19	135	41
Kyocera	22	20	132	26
Mitsubishi Elec.	12	21	128	34
Sanyo	25	22	103	28
Toray	32	23	102	27
Asahi Chemical	27	24	99	26
Suwa Seikosha	90	25	90	27
Fuji Photo	31	26	89	27
Epson	45	27	79	19
Nippon Denso	26	28	78	20
Kumagai-gumi	30	29	75	15
Nippon Steel	16	30	74	13
Fuji Xerox	42	32	70	14
Y. Hewlett-Packard	34	36	64	12
DEC Japan	140	54	38	6
Sumitomo 3M	156	123	17	2
Yamatake Honeywell	165	129	16	3
Nippon Univac	114	168	11	1
Dupont Far East	104	180	10	0

Source: Westney and Sakahibara (1985).

As a research strategy, much will be gained from a selective study of particular industries. As stressed earlier, direct investment is unusually concentrated in a few industries. More than this, there are a few hundred firms that tend to dominate these sectors internationally. A 'brute and dumb' approach to this question of why foreign sales are so low might be to look simply at a handful of sectors that tend to be dominated by international companies.

As an example of this brute analysis, examine Table C4 which summarizes data on market sales in electronics taken from Yano Research Institute. There is a slight trend towards increasing dominant share in the number of product lines. (Firm market shares are not shown in the table.) In some cases, such as IBM's 42 per cent of the market for large computers in 1979, the share is quite large. By 1984, Fuji Xerox has joined IBM. By 1992, IBM has entered the top five in personal computers, as had Apple. In electronic components, IBM was a top-five seller of disk drives, and Texas Instruments achieved an important level of penetration in bipolar devices. Not shown here is the absence of American and European firms in the consumer electronic industries.

*Table C4 Market position of Western electronics firms in Japan in selected product areas**

Product group	1979	1984	1992
Household electric appliances	0/15	0/15	0/18
Audio and electronic equipment	0/10	0/10	0/16
Office machines (including computers)	1/10	2/10	3/11
Electronic components (including semiconductors)	0/8	1/7	2/15

Note: * No. of products for which foreign-affiliated subsidiaries in Japan are ranked among top five firms in terms of market share/ total no. of products.

Another industry in which direct investment is important is chemicals and pharmaceuticals. About 40 per cent of the assets in the chemical industry in the United States is owned by foreign companies, with German firms playing a dominant role (Kogut and Gittelman, 1994). In Table C5, market share is presented for a number of chemical sectors. Companies that are known to be foreign (or to have a foreign partner) or that do not appear in the *Japan Company Handbook* are listed in bold. There is little evidence for increased market share by foreign companies, and a rather striking absence of Euro-

pean firms altogether. In the perfume business where distribution and marketing are critical, the low share of European companies is suggestive of the difficulty in penetrating the market.

Another interesting sector is the earth-moving sector. Here, the joint venture by Mitsubishi–Caterpillar is prominent, and their share is frequently close to that of the leader, Komatsu (see Table C6). On the other hand, foreign firms are absent from the auto and auto part industry, which is generally rather international for other countries. A large portion of the explanation for the low level of foreign penetration is simply the failure of non-Japanese firms to break into the auto industry.

As a final non-random blink at market share in Japan, consider the consumer goods markets for drinks and detergents. Table C7 shows the major penetration made by Coca Cola into a number of product areas. Clearly, Coca Cola has succeeded in penetrating through the distribution channels. Other consumer non-durables (not shown in our tables) tell a more mixed story. For example, foreign firms have a low share of the cosmetics market. Distribution channels are important in this industry. Yet, it is striking that the brand labels of foreign companies do not seem to overcome this disadvantage. The low share of foreign companies in the household detergent market (not shown in our tables) stands in sharp contrast to the European and, to a lesser extent, American pattern. In the baby diaper market, Procter and Gamble stands at second, with 27.3 per cent of the market. The Procter and Gamble entry into Japan, which included acquisitions of its partners and sixteen years of losses before profitability, is largely a story of major errors in advertising despite early leadership positions. Eventually, knowledge of the market was acquired, and its market share has stabilized.

These market share figures do not clearly indicate anything systematic about barriers to Japan. They provide the important insight that the experience of foreign firms varies widely by industry and by firm. From what we know about Japanese firms in consumer electronics and autos, the lack of foreign penetration in these markets does not seem to be shocking. Is the level of the foreign share of chemicals too low? Is the share about right in consumer non-durables? Is there an absence of strong financial groups in the diaper and soft drinks industry, or is the explanation for the high foreign penetration an outcome of a more open distribution system?

It strikes me that the search for a smoking gun is not going to be a fruitful exercise. It is unlikely that a single thesis about the level of foreign penetration will prevail. Instead, I suspect that an analysis of the combination of the interplay between bureaucrats and their interests, the strategies and capabilities of firms, and industry conditions will be required to understand the low level of foreign sales in Japan. Lacking a good counterfactual, analysis must be directed towards a richer contextual understanding of Japanese markets.

Table C5 Market position of Western chemical firms in Japan in selected product areas (foreign firms in bold)

		1979		1984		1992	
	Rank	Company	Share (%)	Company	Share (%)	Company	Share (%)
Polyethylene high-pressure processes	1	Sumitomo Chemical	16.0	Sumitomo Chemical	16.6	Mitsubishi Petrochemical	15.2
	2	Mitsubishi Petrochemical	15.9	Mitsubishi Petrochemical	16.0	Sumitomo Chemical	13.5
	3	Mitsui Polychemical	11.8	**Nippon Unicar**	**11.4**	**Nippon Unicar**	**12.0**
	4	**Nippon Unicar**	**10.7**	Mitsui Polychemical	10.1	Ube Ind.	11.0
	5	**Asahi Dow**	**10.5**	Toyo Soda	9.8	Tosoh	10.5
Polystyrene (GP,HI)	1	**Asahi Dow**	**25.1**	Asahi Chemical	32.1	Asahi Chemical	30.5
	2	**Mitsubishi Monsanto**	**24.6**	Mitsui Toatsu Chemical	15.2	**Mitsubishi Monsanto**	**16.0**
	3	Toyo Polystyrene	12.9	**Mitsubishi Monsanto**	**13.2**	Denki Kagaku Kogyo	14.0
	4	Denki Kagaku Kogyo	11.8	Denki Kagaku Kogyo	11.5	Mitsui Toatsu Chemical	12.0
	5	Nippon Polystyrene	10.1	Idemitsu Petrochemical	9.9	Idemitsu Petrochemical	10.5

Anti-arteriosclerotic agents	1	Sankyo	28.0	Eisai	18.6	Green Cross	5.4
	2	Kowa	26.8	Sankyo	2.8	Eisai	5.0
	3	Banyu	8.5	Yoshitomi	2.6	Ono	4.9
	4	Morishita	8.0	Chugai	2.6	Taisho	4.6
	5	Yoshitomi	4.2	Nihon Pharmaceutical	2.4	Chugai	1.3
Antibiotic preparations	1	Takeda Chemical	5.5	Yoshitomi	5.5	Toyama Chemical	10.0
	2	Fujisawa Pharmaceutical	5.1	**Pfizer Taito**	**4.6**	**Pfizer**	**8.6**
	3	**Lederie Japan**	**4.7**	Kyowa Hakko Kogyo	4.3	Sankyo	3.8
	4	**Pfizer Taito**	**4.5**	Fujisawa Pharmaceutical	3.2	Tanabe Seiyaku	3.2
	5	Kyowa Hakko Kogyo	4.0	Toyama Chemical	3.1	Kyowa Hakko Kogyo	3.0
Perfumes	1	Shiseido	39.0	Shiseido	40.0	Shiseido	41.0
	2	Kanebo Cosmetics	15.5	Kanebo Cosmetics	16.0	Kanebo Cosmetics	18.0
	3	**Chanel**	**5.0**	**Chanel**	**4.9**	**Chanel**	**4.9**
	4	**Coty Division**	**3.9**	**Coty Division**	**3.4**	**Coty Division**	**4.1**
	5	Pola Cosmetics	3.0	Pola Cosmetics	2.9	Pola Cosmetics	3.3

Table C6 Market position of earth-moving equipment (foreign firms in bold)

	Rank	Company	Production estimate for 1992 (million yen)	Share (%)
Bulldozers	1	Komatsu	47600	50.3
	2	**Shin Caterpillar Mitsubishi**	**35700**	**37.8**
	3	Kubota	1900	2.0
	4	Furukawa	1800	1.9
	5	Yanmar Diesel Engine	1600	1.7
		Others	5930	6.2
	1992	Total	94500	100.0
Shovel Trucks (4WD)	1	Komatsu Mechanic	37500	25.6
	2	**Shin Caterpillar Mitsubishi**	**29500**	**20.1**
	3	Toyo Umpanki	12700	8.7
	4	Furukawa	9500	6.5
	5	Kawasaki Heavy Ind.	8900	6.1
	6	Kobe Steel	8500	5.8
		Others	40000	27.3
	1992	Total	146600	100.0
Excavators	1	Komatsu	224900	25.6
	2	Hitachi Construction Machinery	175700	20.0
	3	**Shin Caterpillar Mitsubishi**	**88700**	**10.1**
	4	Kobe Steel	87800	10.0
	5	Sumitomo Construction Machinery	52700	6.0
	6	Ishikawajima Construction Machinery	31600	3.6
	7	Kalo Works	21900	2.5
	8	Kubota	20200	2.3
		Others	17500	19.9
	1992	Total	878500	100.0
Rough terrain cranes	1	Kobe Steel	54000	39.5
	2	Tadano	40700	29.8
	3	Kalo Works	32800	24.0
		Others	9100	6.7
	1992	Total	136600	100.0

Table C7 Market position of consumer non-durable products (foreign firms in bold)

	Rank	Company	Sales (million yen)	Share (%)
Cola	**1**	**Coca Cola Japan**	**212200**	**87.8**
	2	Pepsico Inc., Japan Branch	22000	9.1
	3	Ueshima Coffee	5700	2.4
		Others	1700	0.7
	1992	Total	241600	100.0
Clear carbonated beverages	**1**	**Coca Cola Japan**	**53500**	**41.5**
	2	Asahi Breweries	35300	27.4
	3	Kirin Beverage	18200	14.1
		Others	22000	17.1
	1992	Total	129000	100.0
Fruit juice soft drinks	**1**	**Coca Cola Japan**	**28700**	**14.5**
	2	Suntory	19300	9.6
	3	Kirin Beverage	11800	6.0
	4	Asahi Breweries	7400	3.7
		Others	130200	66.0
	1992	Total	197400	100.0
Canned coffee	**1**	**Coca Cola Japan**	**224600**	**39.6**
	2	Ucc Ueshima	74500	12.1
	3	Dydo Drinco	58500	9.4
	4	Pokka Corp.	56900	9.2
		Others	183600	29.7
	1992	Total	618100	100.0
Oolong tea	1	Sunlory	52400	29.5
	2	**Coca Cola Japan**	**26100**	**14.7**
	3	Asahi Brewery	21900	12.3
	4	Ito En	12300	6.9
	5	Kirin Beverage	10900	6.1
		Others	54300	30.5
	1992	Total	177900	100.0

Table C7 continued

	Rank	Company	Sales (million yen)	Share (%)
Nutritious drinks	1	Otsuka Pharmaceutical	84500	44.2
	2	**Coca Cola Japan**	**46100**	**24.1**
	3	Sunlory	13800	7.2
	4	Yakult	10200	5.4
		Others	36500	19.1
	1992	Total	191100	100.0
Sports drinks	1	Otsuka Pharmaceutical	74300	51.0
	2	**Coca Cola Japan**	**48500**	**33.3**
	3	Sunlory	7000	4.8
		Others	15800	10.9
	1992	Total	145600	100.0
Liquid cream	1	Shiseido	28400	40.7
	2	Kanebo	13600	19.5
	3	Pola Cosmetics	5100	7.3
	4	**Max Factor**	**1700**	**2.4**
	5	Nippon Menard Cosmetic	1600	2.3
	6	Kobayashi Kose	1500	2.2
		Others	17800	25.5
	1992	Total	69700	100.0
Skin lotion	1	Shiseido	71300	37.4
	2	Kanebo	35200	18.5
	3	Pola Cosmetics	15800	8.3
	4	Kobayashi Kose	7100	3.7
	5	**Max Factor**	**7000**	**3.7**
	6	Meishoku	6100	3.2
	7	Nippon Menard Cosmetic	4000	2.1
		Others	44100	23.1
	1992	Total	190600	100.0

The conclusions of this analysis will point, I am quite convinced, to the following features. In a number of industries, such as consumer electronics and autos, the low penetration by foreign companies can be largely explained by the rigour of competition in the Japanese market, coupled with the steep

investment requirements in distribution. For many industries, the political economy of motivated bureaucrats, rent-seeking clients, and poorly organized consumers is the telling context in which to explain low investment and import rates. I look forward to the revisionist history of the (in)efficiencies of the Japanese financial and insurance industries, and the missed opportunity to benefit from more rigorous international competition in the creation, pricing, and trading of securities and policies. It is through sectoral, rather than macroeconomic studies that the question of low penetration will advance to a set of intriguing questions, namely, the benefits and costs of international insulation for the Japanese household.

NOTES

1. I would like to acknowledge the excellent research assistance of Jaeyong Song in compiling the data used in this article.
2. Summaries of the Saxonhouse and Lawrence positions can be found in Saxonhouse (1993) and Lawrence (1993).
3. The entry data into Japan are taken from Toyo Keizai, Gaishi Keikigyosoran (Foreign-affiliated Firms in Japan, various years); the US data are described in Kogut and Chang (1992).

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