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Several articles in this journal have examined the nature and extent of both Japanese foreign direct investment in the United States and United States foreign direct investment in Japan. This article asks a more basic question: does the United States have a deficit in its bilateral foreign-direct-investment stocks with Japan? The answer is no. Here, the methodology for the calculation of the deficit is explained and related policy literature reassessed in the light of this unconventional finding.

Introduction

Conventional wisdom has it that Japanese foreign direct investment (FDI) in the United States dramatically exceeds that of United States FDI in Japan. In the United States, there is a feeling that Japan is not sufficiently open and receptive to United States investments and that policy measures need to be taken so that Japan receives its fair share of FDI (Bergsten and Noland, 1993). In particular, C. Fred Bergsten and Marcus Noland (1993, p. 79) argue that "restrictions on FDI in the form of both oligopolies and the keiretsu" have impeded imports of manufactured goods into Japan. Similar arguments have been advanced by Robert Z. Lawrence (1991, 1992) and Dennis Encarnation (1992, 1993), whereas Eric Ramstetter and Willian F. James (1994) have been more careful in their analysis. This literature is discussed in the second part of this article. The next section of this article reexamines data on both annual flows and stocks of bilateral FDI between the United States and Japan and explains the methodology behind the recalculation of the stock data using conventional economic and accounting analysis. The conclusion is that there is no significant United States deficit in terms of FDI stocks with Japan.

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Data on the United States-Japan balance of FDI

In recent years, there has been a deficit in bilateral FDI *flows* between the United States and Japan (table 1). For example, in 1990, Japanese FDI in the United States was 22 times higher than United States FDI in Japan; in 1991, it was 44 times higher, and in 1992, it was five times higher.

But *stock* data are, of course, of greater relevance. The United States Department of Commerce statistics reveal that sizeable Japanese surpluses in its bilateral FDI stock with the United States have occurred only since 1989; at that time, the Japanese FDI stock was four times higher than that of the United States (table 2). Furthermore, the United States FDI stock in Japan is measured at historical book value. Since the yen has appreciated considerably during the past ten years, and much of the United States FDI stock in Japan occurred before then, it is significantly undervalued.

A more up-to-date valuation of the United States FDI stock in Japan shows that the United States and Japan are basically in balance as far as these investments are concerned. Tables 3 and 4 adjust each year's data to reflect exchange-rate changes and the index of share prices in each country to capture better market values rather than being based on historical bookvalue costs. The result is that the ratio of Japanese FDI in the United States to that of United States FDI in Japan falls significantly (from 3.69 to 1.44.) This is shown in table 5, which takes the restated 1992 values of FDI from tables 3 and 4 and reports the annual ratios from 1982-1992. It is only since 1988 that there has been a surplus of the adjusted stock of Japanese FDI in the United States compared to that of United States FDI in Japan. Rounded this would result in a 1:1 ratio. Clearly, this is not evidence of a significant deficit in United States FDI with Japan.

The methodology used in tables 3 and 4 to adjust the official data takes the year 1960 as the starting point. It adjusts FDI for that year and the increases or decreases in subsequent years for changes in exchange rates (from a dollar perspective) and market values to give a more accurate and comparable view of Japanese FDI relative to United States FDI as at the end of 1992.

The problem with the official FDI statistics is that they are based on historical cost estimates of investments derived from company accounting records. Over time, such historical book values become more and more misleading as market values change. Even estimates of current values based on replacement cost (using asset price indices) are limited because they measure

Table 1. Bilateral FDI flows between the United States and Japan,1982-1992

United States F Year FDI in Japan Un	Japanese DJ in the Ratio sited States (2)/(1)
	$\begin{array}{c} 2 \\ 3 \\ 3 \\ 4 \\ 4$

(Millions of dollars)

Source: United States Department of Commerce, Survey of Current Business, various issues.

value changes by making reference to the value of individual assets and liabilities. What is really relevant is the value of the investor's ownership stake in the net assets or equity of the FDI taken as a whole. From this perspective, the market value of the ownership stake would seem to be a much more useful indicator. It is not easy to estimate the current market value of FDI, but an approximation can be made by using national share-price indices that reflect general trends in economic value and provide a broadly based measure of changes in the prices at which investors' ownership shares can be traded in each country. (Share-price indices for Japan and the United States are published, along with exchange-rate data, in the International Monetary Fund's *International Financial Statistics Yearbook*.)

The use of current market values is also consistent with the adjustment made to United States FDI stock in Japan to reflect changes in the exchange rate between the yen and the dollar which—in theory at least—are linked to price differentials between these countries. Before adjusting for market values, the United States FDI data (in dollars) were translated first into yen (at historical cost), then adjusted to market values in Japan and finally translated back into dollars at the current exchange rate. The United States FDI

Table 2. Bilateral FDI stocks between the United States and Japan,1982-1992

Year	United States PDI in Japan	Japanese FDI to the United States	Ratio (2)(1)
		2	1997) 1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19
1982	6 407	9 677	1.51
1983	7.661	11 336	1.48
1984	7 920	16 044	2.03
1985	9 095	19 313	2,12
1986	11 472	26 824	÷ 2.34
1987	15 684	35 151	2.24
1988	18 009	51 126	2.84
1989	19 911	67 268	3,38
1990	22 511	83 091	3.69
1991	- 24 938	92 826	3.73
1992-	26 213	96 743	- 3.69

(Millions of dollars)

Source: United States Department of Commerce, Survey of Current Business, various issues.

data can, thus, be compared with the Japanese FDI data (in dollars) adjusted to market values in the United States. In this way, the limitations of the FDI data of the United States Department of Commerce can be overcome to provide a more realistic picture of the relative Japan/United States FDI positions.

The data recorded by the Japanese authorities are, however, even more misleading than those of the United States. In Japan, there are two sets of data on FDI. One of these is issued by the Bank of Japan and uses flow data from the balance-of-payments accounts; these flows are aggregated to provide an estimate of stocks. These data exclude reinvested earnings—a potentially large source of FDI—and the cumulation of annual flows, to estimate stocks is also a drawback. The other set of data (and the one most widely used in various publications, including UNCTAD's annual *World Investment Report*) is produced by the Ministry of Finance. These data, used by the Ministry of International Trade and Industry and most other Japanese-based trade and investment research groups, are both on outward and inward FDI and are based on approvals and notifications, not actual FDI.

	FDI (increase/	Exchange rate	Market value	Exchange rate	Adjusted FDI
Year	decrease)	(historic)	adjusted	(current)	(to 1992 values)
1960	254 ×	360 ×	136.9/ 9.8	127	10 057.96
1961 +	48 ×	360 ×	136.9/ 11.2	127	1-663.13
1962 +	71 x	360 x	136.9/ 9.9	127	2 783.08
1963 +	99 x	360 ×	136.9/ 10.9	127	3 524.61
1964 +	127 ×	360 ×	136.9/ 9.6	127	5 133.75
1965 +	177 ×	360 ×	136.9/ 9.2	127	7 465.99
1966 +	55 x	360 ×	136.9/ 11.0	127	1 940.31
1967 +	103 ×	360 ×	136.9/ 11.1	127	3 600.94
1968 +	-171 ×	360 ×	136.9/ 11.9	127	5 576.37
1969 +	221 ×	360 ×	136.9/ 15.2	127	5 642.23
1970 +	256 X	360 ×	136.9/ 16.4	127	6 057,57
1971 +	431 x	349 ×	136.9/ 18.0	127	9.008.03
1972 +	410 ×	303 ×	136.9/ 28.3	127	4 731,95
1973 +	348 ×	272 ×	136.9/ 36.4	127	2 803.15
1974 +	648 ×	292 ×	136.9/ 30.8	127	6.622.27
1975 +	20 ×	297 ×	136.9/ 31.3	127	204.57
1976 +	458 ×	297 x	136.9/ 34.9	127	4 201.42
1977 +	- 346 ×	269 ×	136.9/ 37.8	127	2 654.22
1978 +	820 ×	210 ×	136.9/ 41.7	127	4 451,40
1979 -	812 x	219 x	136.9/ 45.2	127	4 240.93
1980 +	468 ×	-226 ×	136.9/ 47.6	127	2 395.23
1981 +	564 x	221 ×	136.9/ 55.3	127	2 429.66
1982 -	400 ×	249 ×	136.9/ 55.1	127	-1 948,53
1983 +	1 254 ×	238 x	136.9/ 64.9	127	4 957.12
1984 +	259 ×	238 ×	136.9/ 81.9	127	811.32
340-31	1 175 ×	239 ×	136.9/100.0	127	3 027.16
1986 +	and the second s	169 ×	136,9/132,9	127	3 258.30
1987 +	and the second s	145 ×	136.9/196.4	127	3 352.08
1988 +	- mutate (0453-3423/04 (1+0)	128 ×	136.9/213.9	127	1 499.76
1989 +	and the second s	138 ×	136.9/257.8	127	1 097.50
1990 +	Alexander and a second s	145 x	136.9/218.8	127	1.857,35
1991 +	LOWE YOD AND AND AND AN OLD COMMEN	135 ×	136.9/184.9	127	1 910.15
1992 +	1 275 ×	127 ×	136,9/136.9	127	1 275.00
Sum			Sector Advancements of the sector and the sector advancement of the se		118 285.98

Table 3. United States foreign direct investment in Japan (Millions of dollars)

Source: United States Department of Commerce, Survey of Current Business, various issues.

Year	TDI (literate/ decrease)	Market value adjusted	Adjusted FDI (to 1992 values)
1960 +	80 ×	236.1/ 28.6	660.42
1961 +	8×	236.1/ 33.7	56.05
1962 +	4 ×	236.1/ 31.5	29.98
1963 +	10 x	236.1/ 35.3	66.88
1964 -	8×	236.1/ 41.5	-45,51
1965 -	32 x	236.1/ 45.0	-167.89
1966 +	46 x	236.1/ 43.8	247.96
1967 -	15 x	236.1/ 47.7	-74.25
1968 +	5 x	236.1/ 51.7	22.83
1969 +	75 x	236.1/ 51.2	345.85
1970 -	5 x	236.1/ 43.9	26.89
1971 +	53 ×	236.1/ 52.1	240.18
1972 -	456 ×	236.1/ 58.6	-1 837.23
1973 +	73 ×	236.1/ 58.0	297.16
1974 +	306 x	236.1/ 44.7	1 616.26
1975 +	193 ×	236.1/ 46.5	979.94
1976 +	246 x	236.1/ 55.0	1 056.01
1977 +	587 x	236.1/ 52.2	2 654.99
1978 +	577 ×	236.1/ 51.1	2 665.94
1979 +	1686 ×	236.1/ 55.3	7 198.27
1980 +	1 282 ×	236.1/ 64.7	4 678.21
1981 +	2974 x	236.17 69.4	10 117.60
1982 +	1980 ×	236.1/ 64.3	7 270.26
1983 +	1659 ×	236.17 86.9	4 507.36
1984 +	4 708 ×	236.17 87.2	12 747.23
1985 +	3 269 ×	236.1/100.0	7 718.11
1986 +	7511 x	236.1/126.2	14 051.88
1987 +	8 327 ×	236.1/159.2	12 349.28
1988 +	15 975 ×	236.1/147.6	25 553.51
1989 +	16 142 ×	236.1/178.2	21 386.79
1990 +	15.823 ×	236.1/188.1	19 860.77
1991 +	9 805 ×	236.1/214.6	10 787.33
1992 +	3 847 ×	236.1/236.1	3 847.00
Sum			170 916.06

 Table 4. Japanese foreign direct investment in the United States
 (Millions of dollars)

Source: United States Department of Commerce, Survey of Current Business, various issues.

Table 5. United States and Japan foreign-direct-investment stocks between 1982-1992, adjusted data, end 1992 values

United States FDI in Japan Year (1)	Japanese FDI in the United States (2)	Annual ratio (2)/(1) (3)
1982	38 107	0.40
1983 100 197	42.614	0.42
1984 101 009	55 361	0.55
1985 104 036	63 080	0.61
1986 107 294	77 131	0.72
1987 110 646	89 481	0,81
1988 112 146	115 034	1.03
1989 E13 243	136 421	1.20
1990 115 101	156 282	1.36
1991	167.069	1.42
118 286 and 1997 and	170 916	1.44

(Millions of dollars)

Source: United States Department of Commerce, Survey of Current Business, various issues.

According to these Japanese data, as of 31 March 1993, the stock (accumulated flows of FDI approvals/notifications over the fiscal years 1951-1992) of Japanese FDI in the United States was \$162 billion. The stock of United States FDI in Japan, estimated in the same way, was \$11 billion. The ratio of Japanese FDI in the United States to United States FDI in Japan is 14:1. Thus, the data of the Japanese Ministry of Finance are even more misleading than the United States data in that they greatly exaggerate that ratio. The reporting of approved, instead of actual, FDI appears to significantly overestimate both Japanese FDI in the United States and United States FDI in Japan compared to the actual data reported by the United States Department of Commerce.

Related literature

Robert Z. Lawrence (1993), like C. F. Bergsten and M. Noland (1993), has accepted the premise that the low level of FDI in Japan can be attributed to a "history of official inhibitions of FDI" (p. 86). He also argued that the FDI data on notifications by the Ministry of Finance actually overstate

United States FDI in Japan, since there have been major withdrawals of these investments in recent years. Lawrence reported that the value of the total stock of FDI in Japan in 1989, at historical cost, was only about \$9 billion (p. 86), according to balance-of-payments data from the Bank of Japan that exclude reinvested earnings. Robert Z. Lawrence also reported FDI stock data by the United States Department of Commerce (as in table 2) showing that United States FDI in Japan is about half of all FDI in Japan. Robert Z. Lawrence interpreted these data to mean that the growth of United States FDI in Japan has been dominated by the activities of United States transnational corporations (TNCs) already in Japan and that the inflow of new equity capital from the United States into Japan in the 1980s was negative. Indeed, the key point made by Lawrence is that there are significant barriers to the acquisition of Japanese firms. These obstacles mean that the preferred mode of FDI is greenfield operations, or that foreign firms are forced into licensing. In particular, Lawrence found that there are very low levels of FDI in keiretsu networks because the extensive cross-holdings of stocks by the network members act as a device to prevent inward FDI to Japan.

A somewhat related, but essentially different, argument to the one made here was advanced by Kenichi Ohmae (1987). Using data for 1984, Ohmae demonstrated that the "real" trade balance was close to zero. This occurs when United States exports to Japan (\$26 million) are supplemented by the production and sales affiliates of United States TNCs in Japan (\$43 million in 1984). The total of \$70 million represents Japan's consumption of goods and services produced by United States firms. In contrast, in 1984, Japanese exports to the United States (\$57 million) were supplemented by \$13 million of production and sales of affiliates of Japanese TNCs in the United States, making a total of \$70 million. Since 1984, the sales of Japanese affiliates in the United States must have increased, but Ohmae's data reinforce the emphasis placed here on the tremendous importance of the stock of United States FDI already in Japan, that, in 1984, led to sales in Japan being twice as high as the flow of United States exports to Japan.

Dennis Encarnation (1992, 1993) went into much greater depth than Ohmae in his analysis of bilateral intra-company trade. Encarnation found that TNCs in Japan have not contributed to the bilateral trade balance because they do not import very much from the United States. He argued that United States FDI in Japan has an above-average share of minority affiliates and that they do not purchase as many goods and services from the United States as do United States (majority-owned) affiliates in other developed countries. Thus, the United States-Japan trade deficit is worsened by the relatively small amounts of imports from the United States by United States firms in Japan. In contrast, Japanese FDI in the United States has usually been in the form of majority holdings, and majority-owned affiliates import from Japan much more than United States affiliates in Japan import from the United States.

These are interesting data, but there is no reason to assume that bilateral intra-company trade flows should balance; such an imbalance, for example, also reflects differing industrial structures. Evidence that the bilateral trade and investment imbalances are the result of different industrial structures is found in Lincoln (1990). According to Edward J. Lincoln (1990), the intra-industry trade index (theoretically, equal to 100 when imports equal exports) for Japan in 1985 was unusually low at 26, whereas that index was 61 for the United States and 67 for Germany. The latter ratios are more representative of countries with a significant transnational presence and two-way flows of FDI. Lincoln, and others, interpreted the very low number of intraindustry trade as evidence that Japan has adopted an institutional structure that limits imports of United States (and other) manufactured goods and that this structure is pervasive throughout the public administration and business. Robert Z. Lawrence (1991) further argued that the dominant role of keiretsu limits Japanese imports from the United States and that United States TNCs have not penetrated these network relationships to any significant degree.

The findings in this article are also consistent with those in a recent article in this journal by Ramstetter and James (1994), in particular, their statement that "Japanese restrictions on United States transnational corporations are not a major factor" in explaining the relatively low sales of United States affiliates in Japan compared with Japanese affiliates in the United States.

Finally, Alan Rugman (1990) provides a different perspective on Japanese FDI in the United States (in comparison to Canadian FDI in the United States). In that study, several aspects of the "quality" of FDI in the United States are discussed. For example, although the stock of Japanese FDI in the United States in 1987 was double that of Canada's, the Canadian affiliates in the United States employed twice as many people as did the Japanese affiliates in the United States. The reason was that nearly half of all the Canadian FDI in the United States was in manufacturing in 1987, whereas only 8 per cent of Japanese FDI in the United States was in manufacturing (with over 80 per cent of it in wholesale trade, i.e., distribution). Thus, the quality of FDI needs to be examined, as well as its stock. In this regard most United States FDI in Japan is in manufacturing, reinforcing the quality of such FDI and again helping to "balance" the bilateral United States-Japan FDI stocks.

Conclusions

The policy implications of this article are of great importance. Once the actual data on stocks of United States-Japanese FDI are understood to be in approximate balance, rather than tremendously asymmetrical in favour of Japan, the most obvious policy implication is to have no policy! There is no need for the Government of the United States to continue applying pressure on the Government of Japan to open up its market to United States FDI, since the stock of United States FDI in Japan is not "too small" relative to the stock of Japanese FDI in the United States. The correct data on relative stocks of FDI do not provide any support for United States allegations that the Japanese market is relatively closed to United States FDI; indeed United States TNCs have obviously performed rather well in Japan during the last thirty years despite the alleged barriers to entry and transaction costs involved in penetrating the Japanese distribution system. The United States does continue to have a large bilateral trade deficit with Japan, and part of this is probably due to relative differences in intra-firm and intra-industry trade. However, United States-Japanese economic relations should not be entirely driven by their bilateral trade performances, and the apparent misunderstanding of the bilateral FDI balance should be addressed at once by policy makers and analysts.

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