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FOREIGN DIRECT INVESTMENT INTO THE UNITED STATES, 1998-2004

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Abstract

This paper examines the flow of international investment into the United States between 1998 and 2004. The impetus behind the paper was to examine the possible impact the terrorist act of September 11, 2001 (often alluded to as 9/11) may have had on foreign direct investment into the United States (defined as inward FDI). The data is reported both annually and quarterly. First, the annual data between 1998-2004 is reviewed. In looking at significant differences between the two periods, quarterly data is examined, as annual aggregation would lead to too few data points. Inward FDI is reported by the Bureau of Economic Analysis by region and then by individual country. The quarter of 9/11/2001 is omitted as being the event defining quarter. In the dataset collected, there are 13 quarters pre- and post- the event quarter. At first glance, the world seems to have definitely lowered its FDI into the United States. However, further examination reveals that except for France, no other country shows a significant reduction in its investments into the United States post- 9/11, compared to their average investments pre- 9/11.

I. Introduction

Given the recent debate in the media over ownership and control of U.S. ports by a Dubai-based foreign firm, this study is a timely examination of which countries have changed their levels of investment into the United States post-9/11 – relative to their pre-9/11 investment activity. The study also examines inward FDI by industry.

There has been a lot of coverage in the media about the flight of U.S. businesses, especially manufacturing, to overseas locations. The commonest reason cited is the lower cost of wages and/or overheads and the subsequent greater profitability (or loss avoidance). Public displeasure over the permanent loss of jobs has been expressed in vocal demonstrations and unfortunate rioting.

In all the above furor, most debaters tend to overlook the fact that, until recently, the United States was also the recipient of the largest inflow of foreign direct investment (inward FDI) in the world, with U.S. subsidiaries of foreign firms owning over $3.5 trillion in assets. In 1998, foreign owned U.S. assets had sales of almost $1.9 trillion and employed over 5.6 million people in the U.S These foreign firms accounted for over 6% of the U.S. total gross product in that year.

II. Motivation

The motivation behind this paper was primarily to examine whether the terrorist attack of September 11th, 2001, had had any negative impact on inward FDI in to the United States. One main concern had to be faced early on. If any changes were to be observed, there are many potential confounding effects that may be contributing factors – other than simply businesses being afraid of terrorist activity. Maniam, Tuey & Chatterjee (2003) specifically point out that the timing of such foreign investments is affected by exchange rate differentials, changes in taxation and the stage of the business cycle. We still thought it is an interesting question to ask, to determine if there had been any changes as a first step. Given the results, further research by controlling such confounding factors could help determine causes and effects of the changes noted.

Another potential drawback could be that, if inward FDI has a long lead-time, would foreign firms be able to immediately react to the 9/11 event? However, prior research (Cooke, 2001) indicates that the majority of the inward FDI in the U.S. occurs through mergers and acquisitions. Thus, given any security concerns, overseas investors can quickly change tack and invest in other countries, or at least back out of their intended investments in the United States.

III. Literature Review

The most comprehensive and detailed examination of Foreign Direct Investment into the United States (inward FDI) is provided by Maniam, Tuey & Chatterjee (2003). Starting with defining inward FDI, the authors offer reasons why such investments may occur, as well as factors that can help determine the timing of the same. Maniam et al. (2003) document prior research and mention the research findings and results of Borga & Mataloni Jr. (2001), Corporate Location (2001), Howenstine (2001), Meade (1997), Nader (1999) and O'Hagan & Anderson (2000). Hence, in the interests of brevity, these studies results are not discussed here.

Amongst other recent pertinent studies, Apfelthaler (2000) is a brief case study of four small/medium-sized Austrian firms. This study, by looking at these specific firms and their path to FDI in the U.S., reports on their rationale behind investing in the United States. This gives rise to the thought, that if our results show that inward FDI to the U.S. has decreased post- 9/11, a direction for further research may be to survey individual firms that did come here and discover the reasons for their investments.

Cooke (2001) hypothesizes that inward FDI in the U.S. has been seeking union avoidance. The author states that while prior research on multinational corporations (MNCs) shows they invest less in countries with higher levels of union membership and contract coverage, yet no study shows the effect of such factors on FDI into the United States. By analyzing the decline in union coverage of foreign corporation in the U.S., the author concludes that his hypothesis is supported.

Hejazi and Safarian (2001) report that trade and FDI are complementary. Their analysis finds that U.S. outward FDI has "a larger predicted impact on U.S. exports than does inward FDI. On the other hand, inward FDI is found to have a larger predicted impact on U.S. imports than does U.S. outward FDI."

Zitta and Powers (2003) examine the motives of firms for inward FDI in the U.S. The authors report that foreign companies arrive seeking either factors such as technology or a skilled workforce to efficiently manufacture their products here or markets for either capital or products.

IV. Data and Methodology

The inward U.S. FDI data was collected from the Bureau of Economic Analysis (BEA) website, which is part of the U.S. Department of Commerce. The data is reported both in annual aggregates, as well as on a quarterly basis. Taking the 9/11/2001 quarter as being the "event" quarter, and seeking symmetry in comparing the pre- and post- data, we collected data from Q2/1998 to Q4/2004. This equates to 13 quarters of inward FDI before the quarter of 9/11, and 13 quarters post 9/11.

The methodology used to identify the differences across sample sub-periods is a significant difference of means test (T-test) with 1% probability of significance as the level of interest. Given the number of factors that may potentially lead to changes in the level of inward FDI, adhering to a stricter level of significance will raise the bar for noting seemingly significant changes in the pre- and post- 9/11 capital inflows. The tests are run both by individual country/region, as well as by industry, as per the NAICS classification.

V. Results

The data was examined both annually and quarterly. Presenting the tabulated inward FDI by quarters over the entire study period was too cumbersome. This data is available from the authors upon request. The annual data is presented by region – but again, in the interests of reasonable tabulation, individual country data is omitted. The country specific data was examined – and is also available upon request. In reporting the differences in inward U.S.

FDI during the study period, only the countries with significant changes are presented. The annual inward FDI data over the study period, 1998-2004, is presented in Table 1.

The table clearly shows that, over the study period, inward FDI in the U.S. peaked in the aggregate, by region, as well as for the majority of individual nations by 2000. This finding supports the following statement from Maniam et al. (2003): "The era of massive foreign direct investment in the U.S. - a major source of dollar strength- may be drawing to a close."

Table 1

U.S. INWARD FOREIGN DIRECT INVESTMENT: CAPITAL INFLOWS ($ MM)

	1998	1999	2000	2001	2002	2003	2004
All countries	174,434	283,376	314,007	159,461	71,331	56,834	95,859
Canada	15,959	26,367	27,258	9,173	1,882	12,198	31,805
Europe	153,111	223,406	251,041	140,661	46,525	22,731	41,396
Latin America and Other Western Hemisphere	-2,569	16,929	12,741	8,232	9,407	9,096	384
South and Central America	1,831	1,422	4,749	-1,606	4,579	4,658	3,365
Other Western Hemisphere	-4,400	15,507	7,991	9,839	4,828	4,438	-2,981
Africa	-601	423	666	-308	36	-23	-571
South Africa	148	113	216	-104	-65	-38	-42
Other	-749	311	450	-204	101	15	-529
Middle East	-762	376	2,389	-401	1,224	360	508
Asia and Pacific	9,295	15,876	19,912	2,104	12,257	12,472	22,337

Source: Bureau of Economic Analysis

Corporate Location (2001) stated that the stock market downturn did not seem to have had any impact on inward FDI. However, what if this slowdown in capital inflow was a function of momentum investing, given the great run of the U.S. economy through the 1990s? Using the Dow Jones Industrial Average (DJIA) as a bellwether of the mood for investing in the U.S. economy, there were no reasons for a slowdown in inward U.S. FDI in 2001, prior to 9/11. Starting with the week ended January 2, 2001 through August 20, 2001, the index closed in five-digit territory for 30 out of 34 weeks. A possible explanation may be the slowdown of the economies of the FDI-making firms' home countries. Exploring this explanation is a potential topic for future research. Post 9/11, the DJIA does drop, but surprisingly resilient, is back in five-digit territory by the first weekend in December. 2002 sees the index in respectable range through the first half of the year. By contrast, inward U.S. FDI across the board presents a vastly shrunken flow of investments. Economists have certified the U.S. recession ended by the last quarter of 2001, so it is less likely that the unattractiveness of the U.S. economy should be keeping investors away. A more likely explanation is the continuing weakness of the domestic economies of the potential investing firms – or their decision to invest domestically or elsewhere in the world.

Table 2 presents the annual inward FDI data for the study period by industry using the NAICS (North American Industry Classification System) classification. This data shows that for inward FDI as a whole, except for a couple of industries, annual foreign capital inflows have been falling since 1999-2000. The difference in individual manufacturing was Electrical Equipment, Appliances and Components, which had its inward FDI peak in 2001. Over the study period, Retail Trade also peaked in 2001, while Information industry saw a surge in the same year before dropping off drastically in 2002. The other noteworthy industry change is in Finance and Insurance (excluding depository institutions), which having peaked in 2000 and troughed in 2002, shows a surge in 2004, the last year of the study.

Table 3 presents the averages of the two periods under study, namely the 13 quarters of inward FDI pre- 9/11 and the 13 quarters of inward FDI post-9/11. This data is presented in columns one and two respectively. Column 3 is a T-test to compare whether the means across these two groups are significantly different. As mentioned earlier, it was decided to use a stricter measure of the 1% level of significance to highlight if there are any changes in the levels of inward FDI between the two periods. The overall inward FDI by all countries is seen to be significantly lower at the 1% level. The post 9/11 quarterly average is a little over $19 billion compared to a pre 9/11 average of about $55 billion. In looking at regional differences, only Europe is seen to be significantly lower, having dropped to an average of about $10 billion from the earlier average of about $44.8 billion. This finding again supports Maniam et al. (2003), where the authors in explaining why pending acquisitions by foreign investors were down state, "The main cause is a drop in direct investment from Europe". However, while the aggregate from Europe is significantly lower, in examining individual countries it is seen that only France has significantly lowered its U.S. inward FDI post 9/11, relative to its average investments pre 9/11. Given the recent political climate between the two nations, one possibility is that French corporations may be staying away from the U.S. for reasons other than the risk of terrorist activity. The only other country to show a significant difference is

Table 2

U.S. INWARD FDI: CAPITAL INFLOWS ($ MM) BY NAICS INDUSTRY

	1998	1999	2000	2001	2002	2003	2004
Manufacturing	140,727	82,382	105,119	51,069	25,715	14,888	19,372
Food	1,158	-1,637	2,281	312	1,300	-242	2,273
Chemicals	7,445	7,435	25,466	16,823	-6,629	7,775	7,485
Primary & fabr. metals	1,217	2,881	8,199	-3,109	629	19	1,211
Machinery	2,047	17,878	2,175	3,560	5,176	611	937
Computers & electronic prod.	18,428	29,481	33,073	-1,403	-6,648	-2,043	-784
Electrical equip, appl., & comp.	1,866	4,206	13,333	20,545	3,182	-959	1,064
Transportation equipment	38,553	7,153	1,653	9,694	5,797	3,332	4,560
Wholesale trade	11,034	16,458	52,501	5,998	10,689	-5,762	15,311
Retail trade	3,327	3,335	4,111	5,881	51	1,506	1,810
Information	1,746	81,894	25,207	51,472	4,958	9,458	-4,632
Depository institutions	5,420	19,471	5,775	6,429	2,756	4,094	16,220
Finance (except dep inst) & insur.	6,617	35,185	50,990	18,156	2,896	19,445	31,835
Real estate and rental and leasing	2,118	5,948	3,473	-2,178	2,615	-2,706	2,542
Prof., scientific & tech. services	1,472	5,826	34,136	9,309	1,241	186	4,425
Other industries	1,972	32,876	32,695	13,326	20,411	15,725	8,976

Source: Bureau of Economic Analysis

Table 3

U.S. INWARD FDI: QUARTERLY CAPITAL INFLOWS ($ MM)

	PRE 9/11 AVG/QTR	POST 9/11 AVG/QTR	T-TEST
All countries, all industries	55,072.83	19,440.23	**0.0008**
Canada	4,417.22	4,076.85	0.8619
Europe	44,863.17	10,200.54	**0.0005**
France	6,473.11	1,676.77	**0.0034**
Latin America and Other Western Hemisphere	2,284.17	1,587.92	0.5490
South and Central America	399.11	889.00	0.5176
Panama	3.72	466.31	**0.0074**
Other Western Hemisphere	1,885.11	698.92	0.1977
Africa	62.89	-101.00	0.1036
South Africa	28.22	-74.67	0.1278
Other	34.89	-32.15	0.3904
Middle East	152.11	148.62	0.9804
Asia and Pacific	3,293.22	3,527.08	0.8602

BOLD = significant difference at 1% level

Source: Bureau of Economic Analysis

Table 4

U.S. INWARD FDI: QUARTERLY CAPITAL INFLOWS ($ MM) BY NAICS INDUSTRY

	PRE 9/11 AVG/QTR	POST 9/11 AVG/QTR	T-TEST
Manufacturing	22,083.56	5,513.62	**0.0037**
Food	205.50	156.85	0.8751
Chemicals	3,496.67	1,088.92	0.0987
Primary and fabricated metals	643.33	9.23	0.1238
Machinery	1,570.78	686.23	0.4209
Computers and electronic products	4,710.17	-870.92	**0.0002**
Electrical equipment, appliances, and components	1,059.94	1,053.36	0.9942
Transportation equipment	3,224.06	1,071.46	0.2858
Wholesale trade	5,419.33	1,443.62	0.1092
Retail trade	969.72	393.31	0.2275
Information	8,818.50	1,473.23	0.0761
Depository institutions	2,310.78	1,955.54	0.7760
Finance (except dep. institutions) and insurance	7,178.06	4,552.00	0.3116
Real estate and rental and leasing	801.33	27.85	0.0692
Professional, scientific, and technical services	2,945.50	394.00	0.0191
Other industries	4,545.83	3,687.15	0.6074

BOLD = significant difference at 1% level

Source: Bureau of Economic Analysis

Panama, and this is a positive difference in that it has increased its U.S. inward FDI post 9/11. This, however, may be due to the fact that they had a very low average in the comparative pre 9/11 period of just $3.7 billion.

Table 4 repeats the T-test of significant difference of means for U.S. inward FDI pre and post 9/11 by industry. While investment in aggregate manufacturing is seen to be significantly lower, the only industry to show a significant difference is the computers and electronic products manufacturing. This is not surprising as it is the only industry that has an average showing net capital outflows by foreign corporations, whereby they are just emulating their American counterparts who have also sought lower cost efficiencies elsewhere.

Thus, while at first glance, the numbers for U.S. inward FDI seemed to have dramatically reduced post 9/11, reassuringly the picture is that the changes are less drastic than they superficially appear to be.

V. Conclusion and Summary

This study decided to examine whether inward FDI in the United States was adversely affected by the terrorist attack of September 11, 2001. On beginning the research, it was realized that while changes in inward FDI would be easy to quantify, it would be harder to ascribe the changes to any specific reason such as fear of potential future terrorist attacks. However, at least examining whether the levels of investment differed post 9/11 was thought of as an important first step in our research.

At first glance, the changes in inward FDI post 9/11 appear to be huge. There is no gainsaying that the dollar amounts seem materially different. According to the data, the overall inward FDI grew from a little over $175 billion in 1998 to peak at about $314 billion in 2000 – and then slumped to about $56 billion in 2003. In 2004, however, it has climbed back a bit to almost $96 billion.

However, on examining the statistical significant difference of means, the picture is far more reassuring. At a 1% level of significance, it is seen that though the overall inward U.S. FDI is significantly different between the pre and post 9/11 periods, the only country to have significantly lower capital investments in the U.S. is France. While it is possible that this may be a political decision rather than an economic one, trying to determine why this result was found is a topic for future research. Based on our research, the fact that post 9/11 there is no significantly lower inward flow of foreign capital to the United States across the board, one could conclude that by the end of 2004, generally foreign investors do not see any potential threat of future terrorist activity as a deterrent to their continued investment in the United States.

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