



## Economic Shifts in Industrial IFDI during the Great Recession

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### Abstract

Multinationals operating in America tend to be clustered in the manufacturing sector. This paper explores the evolving origins of this global industry producing and assembling goods in America. American Inward Foreign Direct Investment (IFDI) related to industry has increasingly become an important cog in the domestic economy, although multinational manufacturing has traditionally invested less in America than in other countries as a percentage of all industry. Following the trend of an increasing American reliance on international industry investment for the health of the national economy, this study will assess developments in American IFDI since the international economic stagnation starting in 2007. Using government data from 1997-2011, American IFDI trends by region, including Canada, Europe, Latin America, Africa, the Middle East, and Asia/Pacific, will be examined in order to assess these shifts from past norms. Areas of the world increasing in American IFDI as well as trends in domestic manufacturing rates originating from these countries will also be identified.

**Keywords:** Global manufacturing, inward foreign direct investment, international economics, industry, global management

### Introduction

The increased reliance on global industrial organizations operating within America has resulted in stronger health of the national economy. However, since the international economic stagnation that started in 2007, developments and trends in American IFDI have prompted shifts in worldwide FDI flows. This study assesses the changing nature of American regional IFDI origination, which will be presented based on data before and during the recent global recession.

### Background-Global IFDI

Kudrle (1991) surmised that global investment “essentially means the multinational corporation” (p. 398). Modern Foreign Direct Investment (FDI), or Inward Foreign Direct Investment (IFDI) from the perspective of the receiver, has become increasingly mobile, and the amount of global investment has risen sharply in the past generation (Stallings, 2007; Lee, 2013; Nicholls, 2013). Global IFDI has increased from \$1.46 trillion (US dollars) in 1990 to \$12.38 trillion in 2010 (OECD, 2012). Kang (1997) reported that United States experienced new “dramatic highs in IFDI,” which constituted a “surge” of IFDI in the 1980s (Goodman et al., 1996) although in 1988, American IFDI was still only half of its total of FDI abroad (Kudrle, 1991). Kudrle also noted that the IFDI in the US was still “far lower” than in any other industrialized country except Japan but that it was growing rapidly (p. 398).

These IFDI movements have been a key ingredient “contributing to sustained economic growth in the United States” (Kornecki, 2013). The health of the economy has become increasingly reliant on IFDI as a compensation for the lack of domestic investment, and it can help kick-start the process of economic development (Economics, 2013). While many reports in the media focus on the negative aspects of domestic firms outsourcing operations overseas, Desai et al. (2009) reported that domestic firms which successfully expand into foreign operations greatly enhance their own domestic operations as a result.

The IFDI stock in the United States as a percentage of GDP rose from 14% in 1995 to 23% by 2011 (Kornecki, 2013). Overall American IFDI increased to \$3.5 trillion in 2011 from just \$83 billion in 1980 (Kornecki, 2013). Today, IFDI represents an integral component of the United States economy.

### Background: IFDI in the Manufacturing Sector

Multinationals operating in America tend to be in the manufacturing sector. American production affiliates, or multinational corporations assembling goods in US factories, have vastly increased their investments in the past several decades. The US Department of Commerce (1986) reported that of all global investment from 1970-1984, the capital dedicated specifically to industry increased by 725%. From 1977-1984, manufacturing accounted for 29.3% of total IFDI, but from 1985-1990 it rose to 46.5% (Orr, 1991). Still, multinationals have historically been less invested in America than in the rest of the world (Tolentino, 2013; Cullen et. al, 2013). In 1986, for example, international companies controlled only 7% of manufacturing employment in the US, versus 13% in Germany, 14% in the UK, and 21% in France (Kudrle, 1991).

Nevertheless, American IFDI related to industry has become an increasingly important cog in the domestic economy. And although multinational manufacturing traditionally has invested less in America than in other countries as a percentage of all industry, these investments by international industrialists have caused positive host country spillover effects and have resulted in increasing proportions of US GDP as their capital flows have risen sharply over the past several decades. Trade and IFDI tend to result in these positive spillover effects to the host economy, causing a common policy of a “high and rising standard of living” (Richardson, 1990, p. 112). The US Department of Commerce-Bureau of Economic Analysis reported that US industry has a higher multiplier effect, or overall net benefit, on the domestic economy than any other sector with “\$1.40 in additional value added in other sectors for every \$1.00 in manufacturing

value added” (World Economic Forum, 2012, p. 9). This added value comprises investment from industry whose parent company is internationally based as well. In general, IFDI “increases GDP, initially through the FDI itself, but this will be followed by a positive multiplier effect on the receiving economy so that the final increase in national income is greater than the initial injection of FDI” (Economics, 2013, p. 2). Desire for this type of increase has prompted US state governments to actively solicit foreign industry as a method of economic growth. US economic policies to solicit international industry have “like a phoenix, risen from the ashes” (Naude & Szirmai, 2012, p. 3)

### **Background: Global Financial Crisis and its Effect on IFDI**

As a general rule, international investment tends to be greatly curtailed during a recession (Sauvant et. al, 2009; Verma, 2013). In 2007, global FDI flows had reached a historic peak that even surpassed the prior record established in 2000 before the attacks on 9-11 prompted decreased trade. However, starting in late 2007, international markets were “less attractive to invest in...and hence depressed FDI flows” (Sauvant, 2008, p. 7). The global recession led to a progressive deterioration of international investments in the global economy (Kegley & Raymond, 2011; Kornecki, 2013), which contributed to the inconsistent and “erratic” behavior of IFDI in the United States and elsewhere (Kornecki, 2013).

As a result, international FDI flows around the world have greatly declined (Ramamurti & Hashai, 2011; Economics, 2013). Between 2007 and 2008, worldwide FDI flows declined by 14% (UNCTAD, 2011). This FDI decreased between 2007 and 2008 by varying amounts depending on the area. For example, it seemed to negatively affect European markets more than other regions; FDI outflows fell by 16.7% in developing countries, 17.6% in the US, but by 25.7% in Europe. However, FDI actually increased by 6.7% in Southeast Asia during this time (Sauvant et al., 2009). Total worldwide outward investment went down by 14.9% from 2008 to 2011 (Pasquali, 2013). Apparently, the global recession prompted vast changes in FDI flows.

This economic deterioration seemed to hurt FDI flows into less developed countries the least. De Beule and Van Den Bulcke (2010) reported that while developed countries suffered a fall in FDI of 29% in this period, the “developing” countries and the “transition” economies, including developing and/or underdeveloped areas, respectively registered an increase of 37% and 17%. In fact, the developing continents and regions all benefited from an expansion of FDI in 2008, with an increase of 27% in Africa, an increase of 17% in South, East, and Southeast Asia, an increase of 16% in West Asia, and an increase of 13% in Latin America between 2007 and 2008 (De Beule & Van Den Bulcke, 2010). This discrepancy might be attributed to factory executives deciding to produce in lower-cost locations to achieve efficiencies in production and logistics. As Jensen (2006) reported, multinational organizations today “search the world for investment opportunities, playing governments against one another ... in an attempt to obtain higher returns” (p. 69).

This trend did not first appear but simply accelerated during the start of the global recession. Developing countries have become more industrialized and have gradually taken a greater share of worldwide FDI. Starting in 2001, the share of global FDI destined for the EU, including intra-EU investments, declined substantially, from 45% to 23% in 2010, mostly in favor of “emerging” economies (EC, 2013). Global IFDI seemed to rebound in 2011 with the strongest growth in Asia and Latin America, but the situation reversed in 2012 when global IFDI declined by 18% (Pasquali, 2013). Regional flows in FDI seem to be evolving in today’s macro-global environment.

### **Background: Stability in the Manufacturing IFDI Sector**

IFDI dedicated to manufacturing actually tends to be more stable than IFDI in other sectors. Between 2008 and 2009 IFDI fell by 70% in the financial sector and 68% in the services sector, but by only 31% in the manufacturing sector (Kornecki, 2013). The United States has experienced steady increases in global manufacturing capital even during the economic downturn that started in 2008, when manufacturing employment accounted for 32.5% of total investment (Payne & Yu, 2011).

According to the United States federal government’s Bureau of Economic Analysis (2009), a Majority-Owned Affiliate (MOA) is any US business that has at least 10% ownership by a single foreign entity, be it an individual, partnership, corporation, bank, or government. MOAs often provide much more than basic low-wage jobs and tend to be more stable than American-owned manufacturing jobs. From 1998-2008, the decade before the US recession, total manufacturing employment in the US fell by 24% overall, but only by 11% for MOAs (Payne & Yu, 2011). In 2009, 36% of foreign firms’ employment was in manufacturing, more than two times the share of manufacturing employment in the US economy as a whole, with average annual compensation (wages and benefits) per worker of about \$63,000 (Jackson, 2012).

MOAs operating in America tend to provide higher and more stable wages than US-based manufacturing companies. Payne and Yu (2011) reported that average pay is 30% higher for workers in MOAs in the US than in average US companies. MOAs account for less than 3% of all US manufacturing establishments, but their value of shipments have six to seven times more value added than those of other manufacturing establishments (Jackson, 2012). MOAs paid wages on average that were 60% higher than other US manufacturing firms and are generally more efficient, with 40% higher productivity per worker and 58% greater output per worker than domestic manufacturing plants (Jackson, 2012). Today, MOAs play an integral role in the American economy.

The drastically-changing landscape of IFDI has prompted scholars to speculate about the evolving dynamics of industrial IFDI in America, in light of the increasing reliance on it for the health of the domestic economy, especially since IFDI related to industry tends to be more stable than other IFDI. European-like decreases of IFDI in America might foreshadow similar trends in the future.

### **Methods/Results**

Government data will be used to examine American IFDI in order to assess shifts from past norms. These trends will be contrasted based on region, including Canada, Europe, Latin America, Africa, the Middle East, and Asia/Pacific.

Areas of the world increasing in American IFDI as well as trends in domestic manufacturing rates originating from these countries will also be identified.

The most recent Survey of Current Business data published by the US Bureau of Economic Analysis (BEA) provided several data files labeled “Foreign Direct Investment in the United States” (2013). Of these, the “Foreign Direct Investment Position in the United States on a Historical-Cost Basis” 2006–2010 was utilized (BEA, 2013). This report supplies information regarding direct investment position from select areas of the world in categories including manufacturing, wholesale trade, retail trade, information, banking, finance and insurance, real estate, professional/scientific/technical, and other. The data from the “manufacturing” classification was extracted from this report and is included in the following table. The percent of manufacturing FDI by region was broken down as a percentage. The data from 2006 did not show data from the Middle East and the Asia/Pacific regions and as such, 2007 data was used for both of those areas. Based on this data, European manufacturing constituted 80.34% of all American IFDI related to industry.

Table 1.  
*American Industrial IFDI by region as a percentage, 2006*

|   | <b>2006</b> | <b>as a % of world in 2006</b> |
|---|-------------|--------------------------------|
| IFDI- all areas                                     | 1,840,463   |                                |
| IFDI- manufacturing                                 | 569,324     |                                |
| Canada all  | 165,281     |                                |
| Canada manufacturing                                | 28,622      | 5.03%                          |
| Europe all  | 1,326,738   |                                |
| Europe manufacturing                                | 457,405     | 80.34%                         |
| Latin America and other W. Hemisphere all           | 66,583      |                                |
| Latin America and other W. Hemisphere manufacturing | 8,661       | 1.52%                          |
| Africa all  | 1,976       |                                |
| Africa manufacturing                                | 134         | 0.02%                          |
| Middle East all                                     | 15,028*     |                                |
| Middle East manufacturing                           | 1,366*      | 0.21%*                         |
| Asia and Pacific all                                | 294,976*    |                                |
| Asia and Pacific manufacturing                      | 83,973*     | 12.96%*                        |

\*2007 statistics

As noted, the global recession prompted changes in American IFDI trends. Table 2 below shows the Foreign Direct Investment position in the United States from the same report in the latest year data was provided (2010), which was several years after the global recession first began. During this year, the European percentage went down, constituting 78.18% of all American IFDI related to industry.

Table 2.  
*American Industrial IFDI by region as a percentage, 2010*

|   | <b>2010</b> | <b>as a % of world in 2010</b> |
|---|-------------|--------------------------------|
| IFDI- all areas                                     | 2,342,829   |                                |
| IFDI- manufacturing                                 | 748,279     |                                |
| Canada all  | 206,139     |                                |
| Canada manufacturing                                | 35,728      | 4.77%                          |
| Europe all  | 1,697,196   |                                |
| Europe manufacturing                                | 585,004     | 78.18%                         |
| Latin America and other W. Hemisphere all           | 60,074      |                                |
| Latin America and other W. Hemisphere manufacturing | 15,454      | 2.07%                          |
| Africa all  | 2,010       |                                |
| Africa manufacturing                                | 135         | 0.02%                          |
| Middle East all                                     | 15,407      |                                |
| Middle East manufacturing                           | 3,536       | 0.47%                          |
| Asia and Pacific all                                | 362,003     |                                |
| Asia and Pacific manufacturing                      | 108,421     | 14.49%                         |

Changes in American IFDI from Tables 1 and 2 are shown below. American IFDI related to industry decreased as a percentage of the total amount when it originated from Canada, Europe, and Africa, while it increased when it originated from Latin America, the Middle East, and Asia/Pacific.

Table 3.  
Total Change in American Industrial IFDI by Region, 2006-2010.

|              | Change in American Industrial IFDI '06-'10 |        |        |
|--------------|--|--------|--------|
|              | 2006                                       | 2010   | change |
| Canada       | 5.03%                                      | 4.78%  | -0.25% |
| Europe       | 80.34%                                     | 78.18% | -2.16% |
| Latin A.     | 1.52%                                      | 2.07%  | 0.54%  |
| Africa       | 0.02%                                      | 0.018% | -0.01% |
| Middle East  | 0.21%                                      | 0.47%  | 0.26%  |
| Asia/Pacific | 12.96%                                     | 14.49% | 1.53%  |

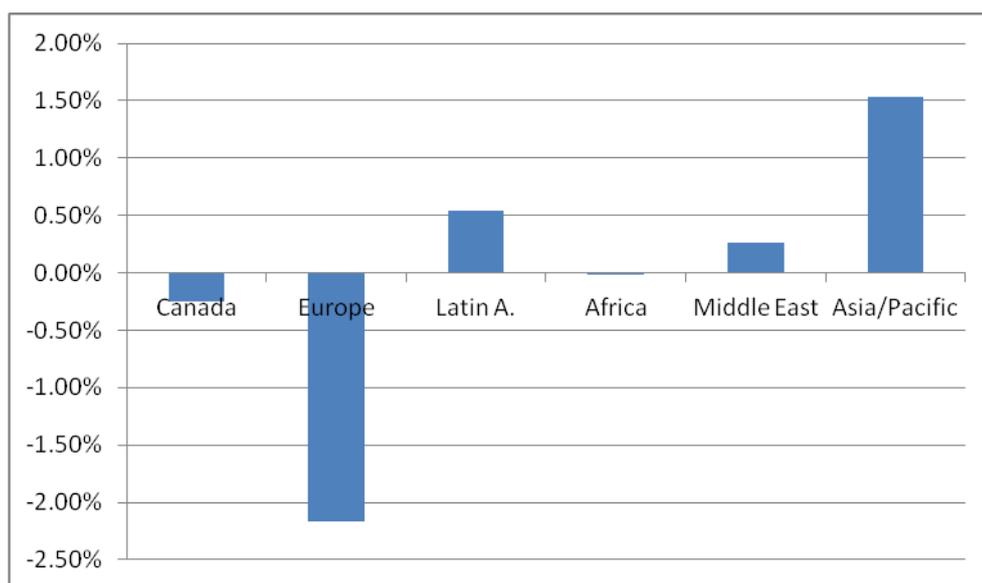


Figure 1.  
Total Change in American Industrial IFDI by region, 2006-2010.

The table below shows changes in all American IFDI as well as in IFDI dedicated to industry. While all IFDI increased by 127.3%, the IFDI dedicated to industry increased by an even higher amount: 131.4%. This underscores the notion that IFDI related to manufacturing is a more viable source of IFDI in the midst of uncertainty in global origins of IFDI.

Table 4.  
Total Change in American Industrial IFDI, 2006-2010.

|           | 2006      | 2010      | change |
|-----------|-----------|-----------|--------|
| all areas | 1,840,463 | 2,342,829 | 127.3% |
| manuf.    | 569,324   | 748,279   | 131.4% |

### Reactions/Future Studies

This study provided a snapshot of American IFDI trends during the worldwide economic downturn. Shifts accelerated by the global recession point to an increase in dependence on manufacturing, especially capital coming from Asia. In only a few years, between 2007 and 2010, American IFDI from Asia related to industry increased by 29%. While reports show FDI flows increased into Asia and underdeveloped countries during the recession, FDI from Asia into the US increased as well. Trends reported in this study may provide future rationale of other variables positively affecting Asian outward FDI such as taxes, excess capital, and currency fluctuations.

However, even though American IFDI from Europe went down as a percentage of all IFDI, overall European IFDI went up during the global recession. While many economists have noted trends toward decentralized manufacturing to underdeveloped areas in the past decades, there has been a lack of studies related to manufacturing dollars coming into America in the form of IFDI. Future studies might assess variables affecting comparatively decreasing European outward FDI including EU regulations, pan-European economic stagnation, and local content laws.

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