

Indiana in the Global Economy: Current Export and FDI Activity

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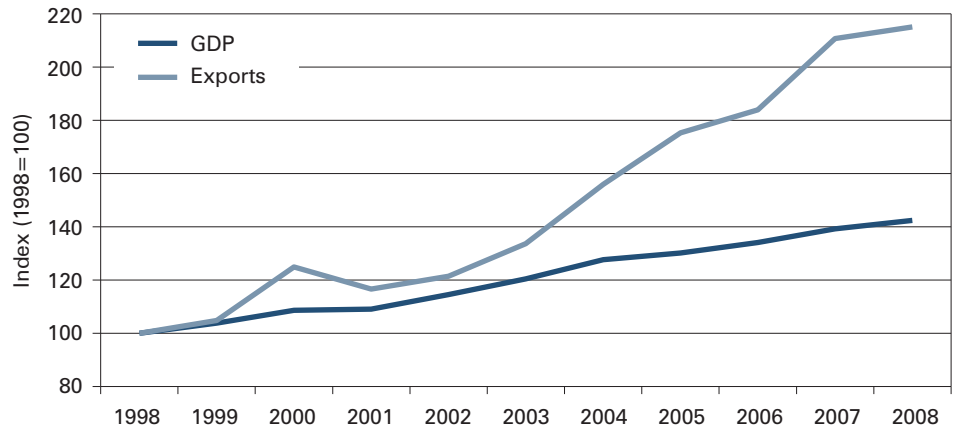
It is difficult to overstate how dramatic the effects of the current economic crisis have been on U.S. exports. In 2009, U.S. GDP was lower than it had been in the preceding year for the first time since 1949. In part, this decline was a result of falling demand across the globe brought about by the recent economic downturn. Compared to the same period in the preceding year, U.S. export growth remained negative in each quarter throughout 2009, reaching a nadir in the second quarter of 2009 when the value of exports was 25.8 percent lower than it had been in the second quarter of 2008.

Negative export growth was also observable at a more local level, with the value of Indiana's 2009 exports declining 14 percent compared to 2008. Trade data for the first two quarters of 2010, however, indicate that export activity is recovering along with the broader economy.

This resurgence in trade activity is important news for Indiana as exports play an ever larger role in the state's economy. Figure 1 shows that export growth has outpaced Indiana's GDP growth in recent years. Between 1998 and 2008, Indiana's export-to-GDP ratio has climbed from 7.2 percent to 10.4 percent.¹ The latter mark ranked Indiana ninth among states in this measure. Given Indiana's ties to the global economy, a return to export growth will play a critical part in the state's economic recovery.

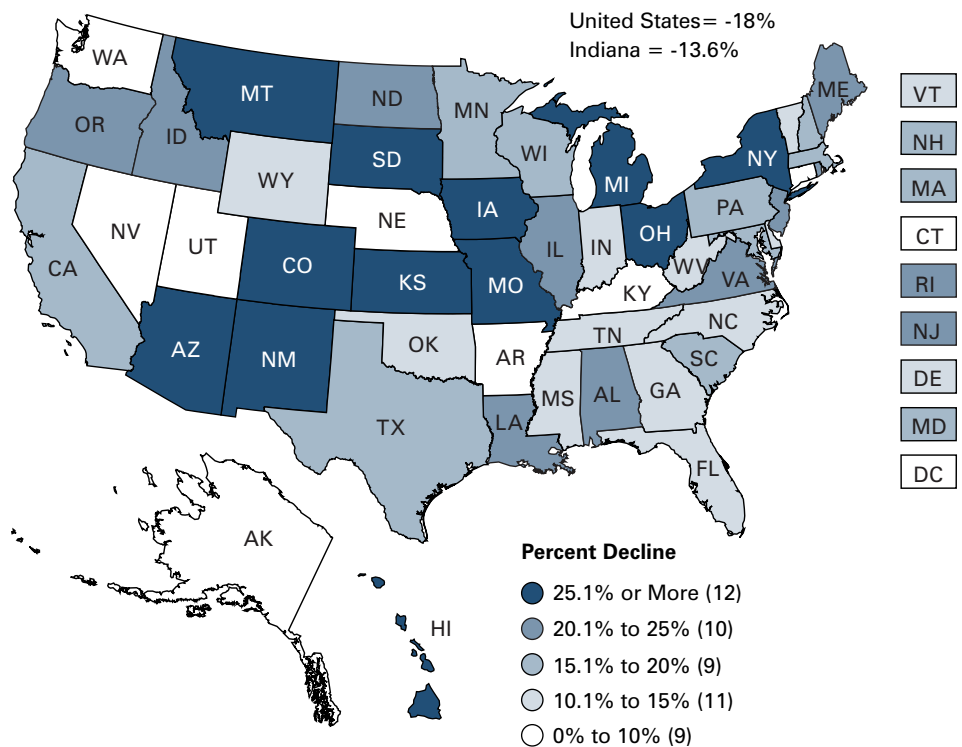
Foreign direct investment (FDI) is also important to the state's economy. Indiana has established itself as a prime destination for FDI and this trend doesn't appear to have abated during the recession. At the time of

FIGURE 1: Indiana's Growth in Exports and GDP, 1998 to 2008



Source: IBRC, using WISERTrade and Bureau of Economic Analysis data

FIGURE 2: Change in the Value of Exports, 2008 to 2009

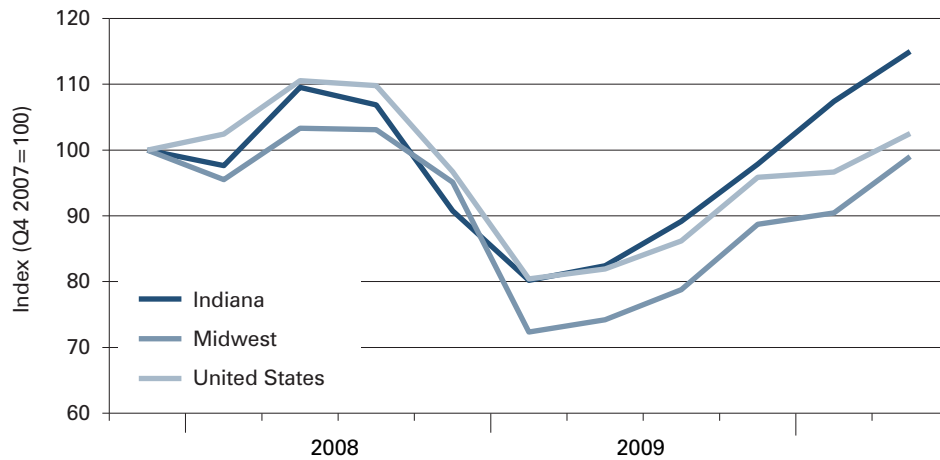


Source: IBRC, using WISERTrade and Bureau of Economic Analysis data

this writing, data on the 2009 FDI inflows into the United States are not yet available. However, we can get a feel for current foreign investment trends by looking at the annual number of FDI announcements as reported by the investment tracking

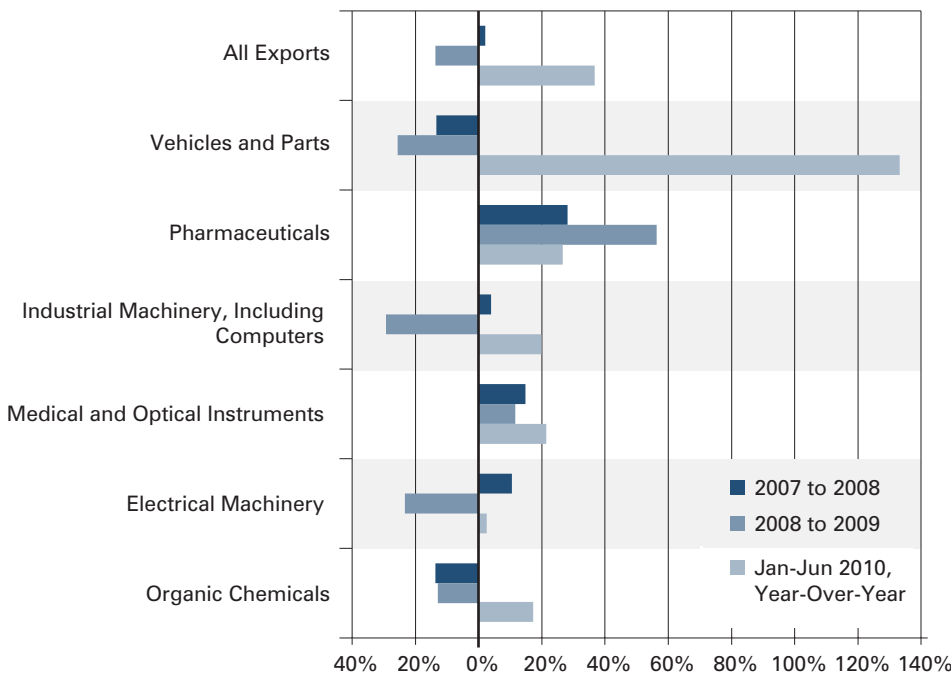
service fDi Markets.² Despite the global recession, fDi Markets reports that both the U.S. and Indiana had their largest number of FDI announcements in 2009 (note, however, that the fDi Markets data series only extends back to 2003).

■ **FIGURE 3: Quarterly Change in the Value of Exports for Indiana, the Midwest, and the United States, 2007:4 to 2010:2**



Source: IBRC, using WISERTrade data

■ **FIGURE 4: Annual Change in the Value of Indiana Exports by Industry, 2008 to 2010**



Source: IBRC, using WISERTrade data

This article examines Indiana's connection to the global economy and whether these connections will help lead Indiana's recovery. Clearly, the national economy is growing at a modest pace, job growth is stagnant, and the recovery remains fragile. However, the most current export and FDI data show encouraging signs that Indiana is emerging from the economic downturn.

Indiana Exports Regain Footing

Export trends offer one more indicator into how widespread the current economic crisis has been. Every state in the nation saw the annual value of its exports decline between 2008 and 2009 with the depth of these declines ranging from as little as 0.6 percent in Utah to 55 percent in New Mexico. The Midwest region (which consists of Indiana, Illinois, Iowa, Kentucky, Michigan, Minnesota, Missouri, Ohio, Tennessee, and Wisconsin) saw the value of its exports fall 21 percent in 2009.

The value of Indiana's exports fell from \$26.5 billion in 2008 to \$22.9 billion in 2009—a 14 percent decline. The recession took such a toll on exports throughout the nation that Indiana's 14 percent decline actually ranked among the top one-third of all states and positioned it well above the U.S. mark of -18 percent (see **Figure 2**).

Fortunately, export activity appears to be recovering since bottoming out in 2009. The value of U.S. exports in the first half of 2010 was 23 percent greater than for the same period in 2009. As **Figure 3** shows, Indiana's rebound has been stronger than that of the United States or the Midwest region. In the first half of 2010, Indiana exported a record \$14.6 billion worth of goods, which was a 37 percent increase over the same period in 2009 and a 7 percent improvement over the first

half of 2008. In contrast, the value of U.S. and Midwestern exports in the first half of 2010 fell short of their 2008 levels for the same period. In fact, Indiana is one of only fourteen states whose value of exports in the first half of 2010 surpassed pre-recession levels.

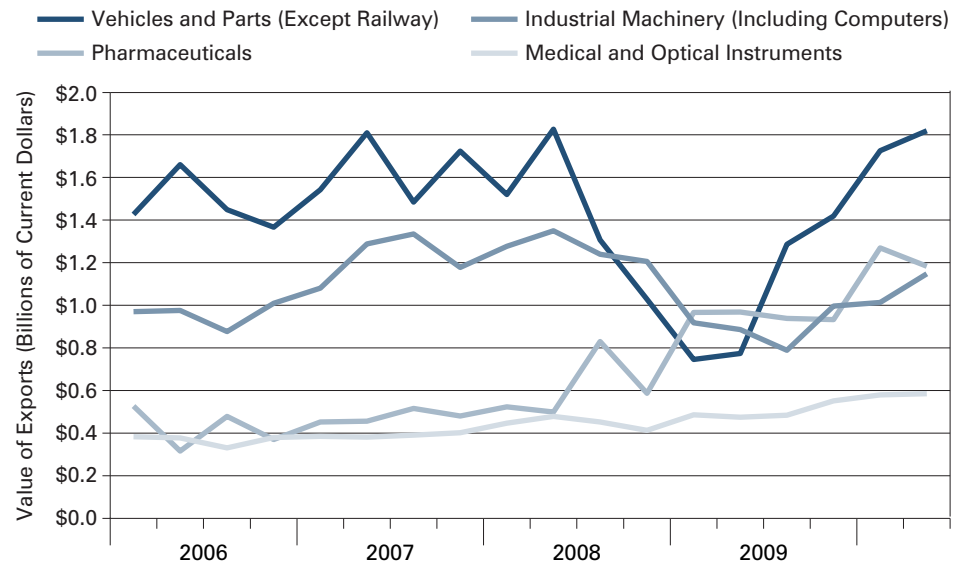
The primary force behind the decline and subsequent rebound of Indiana's exports has been the disruption in the auto industry. As **Figure 4** illustrates, the value of Indiana's vehicle and parts exports declined in both 2008 and 2009. However, Indiana's \$3.5 billion in vehicle exports in the first half of 2010 was more than twice the value for the same period in 2009. Compared to previous high watermarks, Indiana's auto industry exports in the first half of 2010 were a 6 percent improvement over both 2007 and 2008.

While the auto industry accounted for much of the variation in Indiana's export activity through the economic downturn, the state's life science companies largely prevented the level of declines seen in many Midwestern states and in the nation overall. **Figure 5** shows the quarterly value for Indiana's four largest export commodities. These commodities combined to account for 65 percent of the state's total exports in the first half of 2010. Indiana's pharmaceutical exports surged between the second quarter of 2008 and the first quarter of 2009 while vehicles and industrial machinery dropped. Meanwhile, medical and optical instrument exports remained strong through this period.

To underscore Indiana's strength in pharmaceuticals, the state's drug makers exported \$3.8 billion worth of goods in 2009, which ranked first among states. Indiana continues to lead all states in pharmaceutical exports through two quarters of 2010 with \$2.5 billion in foreign sales. It's

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FIGURE 5: Quarterly Value of Exports for Indiana's Top Commodities, 2006 to 2010



Source: IBRC, using WISERTrade data

TABLE 1: Indiana's Top Export Destinations

Country	Value of Exports (Millions of Current Dollars)			Average Annual Rate of Change		
	Jan-Jun 2010	2009	2008	Jan-Jun 2010*	2008-2009	2001-2008
World Total	\$14,561	\$22,889	\$26,502	36.8%	-13.6%	9.1%
Canada	5,461	8,412	10,566	49.9	-20.4	7.9
Mexico	1,280	1,783	2,112	87.3	-15.6	2.6
Germany	913	1,248	1,270	62.5	-1.7	12.6
United Kingdom	852	1,628	1,978	-16.9	-17.7	11.2
France	730	1,291	1,419	-1.0	-9.0	11.3
China	583	868	929	40.2	-6.6	24.5
Japan	558	823	863	51.5	-4.6	3.0
Spain	391	458	417	62.5	9.7	23.5
Brazil	389	534	636	75.7	-16.1	11.9
South Korea	310	435	372	77.1	17.0	7.7

*Year-Over-Year Change
Source: IBRC, using WISERTrade data

interesting to note that Puerto Rico, where many U.S. drug makers have a strong presence, exported \$13.2 billion worth of pharmaceuticals in

2009—a figure that was over three-times greater than Indiana’s.

Indiana’s Largest Trading Partners

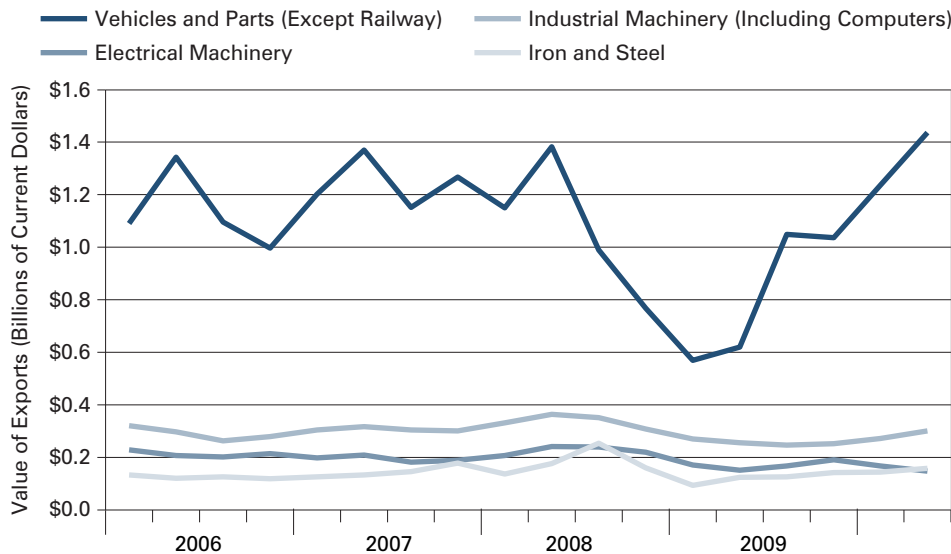
Canada has long been Indiana’s top export market. Our neighbor to the north purchased 37 percent of all Indiana exports in 2009 and 38 percent in the first two quarters of 2010, far ahead of the second largest destination, Mexico which accounted for 9 percent of all the exports in the first half of 2010 (see **Table 1**). A trio of European nations—Germany, the United Kingdom and France—round out Indiana’s top five trading partners. While the United Kingdom and France remain key markets for Indiana companies, the value of their exports from the state continued to decline in the first half of 2010.

Indiana’s fastest growing major trading partner in recent years has been China. The value of the state’s exports to the world’s most populous country grew by an average of 25 percent a year between 2001 and 2008 before declining in 2009. Indiana’s leading export commodity to China in 2009 was industrial machinery, which accounted for 32 percent of all exports, followed by plastics and electrical machinery.

Given that Canada is Indiana’s largest trading partner, it is important to take a closer look at this relationship. **Figure 6** shows that vehicle and parts sales dominate Indiana’s exports to Canada. The auto industry accounted for 39 percent of Indiana exports to Canada in 2009 and 49 percent of the total in the first half of 2010. Even more noteworthy, Canada traditionally accounts for roughly 75 percent of Indiana’s total exports of vehicles and parts. Indiana’s vehicle exports to Canada took a serious hit early in 2009—declining by 24 percent—but have recovered strongly thus far in 2010.

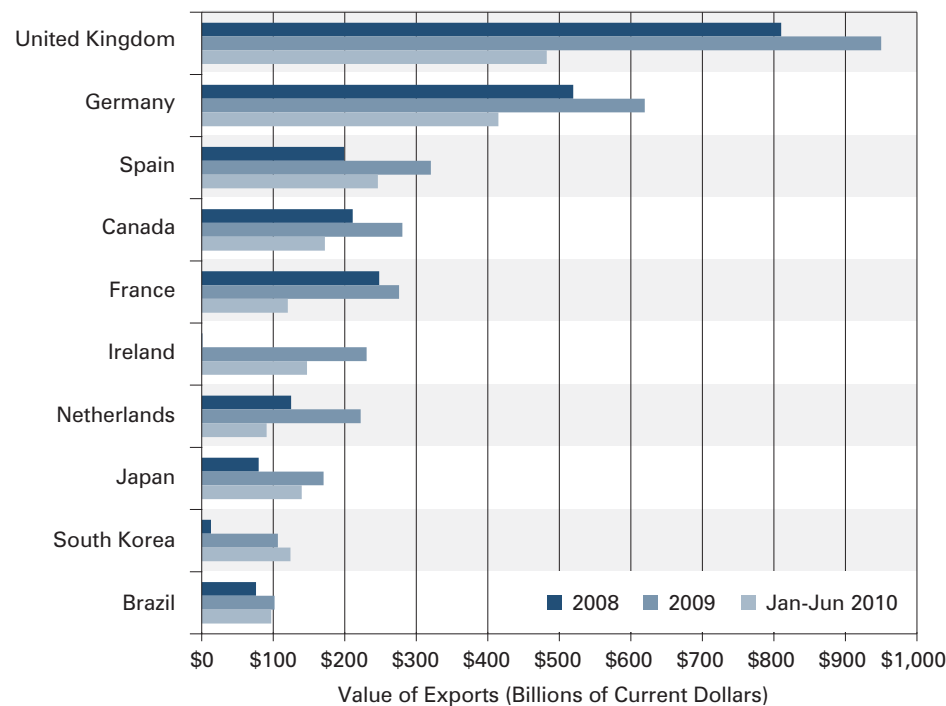
Canada is also an important market for Indiana drug makers, ranking as the fourth largest foreign destination for Indiana

FIGURE 6: Indiana’s Top Export Commodities to Canada, 2006 to 2010



Source: IBRC, using WISERTrade data

FIGURE 7: Indiana’s Top Pharmaceutical Destinations



Source: IBRC, using WISERTrade data

pharmaceuticals in 2009. However, the recent increase in exports of pharmaceutical products was driven primarily by activity in Western Europe, most notably in the United Kingdom, which increased its purchases of Indiana's pharmaceuticals by \$139 million in 2009. Indiana pharmaceutical companies also increased sales to Germany, Spain, and Ireland by a sizable margin in 2009 (see Figure 7).

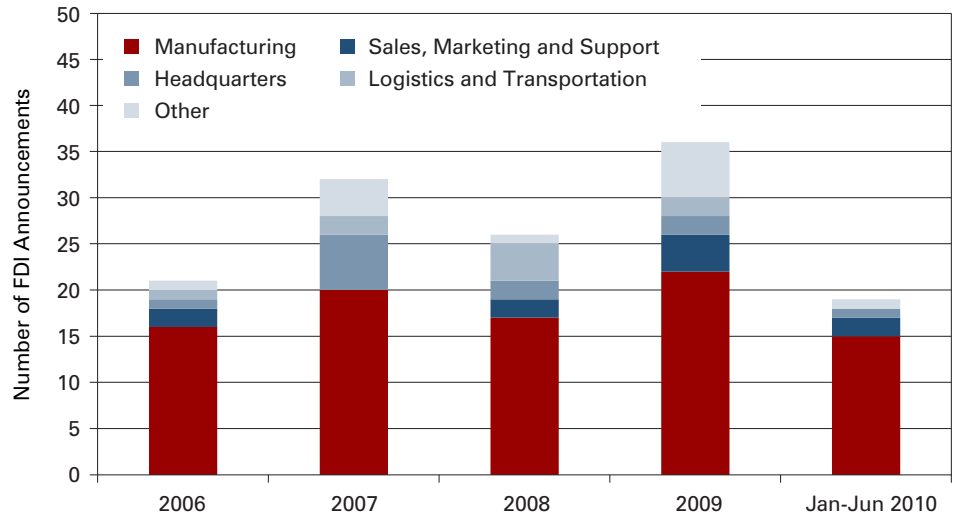
Foreign Direct Investment in Indiana

Indiana has been one of the nation's top beneficiaries of foreign direct investment (FDI). As of 2007, 144,000 Hoosiers worked at firms in which a foreign investor or company had at least a 50 percent stake. This number accounted for 4.5 percent of the state's total private employment at the time, which ranked twelfth nationally. Data are not yet available for FDI-related employment trends during the recession, but the number of FDI announcements in Indiana since 2009 suggests that foreign companies continue to find Indiana an attractive destination for investment.

The investment tracking service fDi Markets reports thirty-six FDI announcements for Indiana in 2009—the largest number of annual announcements since this data series began in 2003. The estimated total value of investment for these thirty-six projects is \$2 billion, which is Indiana's second highest investment total in this data series. The record investment amount occurred in 2006 when BP announced a \$3.6 billion investment in Whiting. Like Indiana, fDi Markets reports that the United States also had its largest tally of FDI announcements in 2009. The total value of these investments trailed only the 2008 mark.

Not surprisingly, the majority of announcements in Indiana are in the manufacturing sector (see

FIGURE 8: Number of FDI Announcements in Indiana by Business Activity, 2006 to 2010



Source: IBRC, using fDi Markets data

Figure 8). There were twenty-two manufacturing announcements in 2009 with the largest project coming from Toyota's \$500 million investment to retool its Princeton facility to begin producing a different type of vehicle. This investment is not likely to generate any new jobs at the facility but it should secure the jobs already there for some time.³ The other largest FDI announcements in 2009 came from BP and Electricite de France for renewable energy projects.

Conclusion

The poor performance of U.S. exports was one of many indications that 2009 was a difficult year. Indiana may have suffered the same fate as the rest of the country—seeing a drop in demand from nearly all of its major trading partners—but there is evidence that this downward trend has been reversed in 2010. It is also encouraging that while 2009's export figures remained broadly negative, there were some bright spots, most notably in the life science industries. We are still in the early stages of recovery, however, and there are no

assurances that global demand will not decline again. That said, strong export growth in the first half of 2010 coupled with numerous FDI announcements are two positive signs that Indiana could be on the road to recovery.

Notes

1. GDP—the sum of all value-added components, such as wages and profits—is not conceptually the same as sales (sales include the price of intermediate inputs as well as value added). However, the export-to-GDP ratio provides a rough measure of the relative dependence a state has on exports.
2. fDi Markets tracks foreign direct investment announcements (media releases) which typically include projected investment values and job creation targets. With this data source, FDI projects are counted in the year they are announced but it may take years before the investments are fully realized, if they are realized at all. Also, fDi Markets collects data on greenfield and expansion related announcements only. Merger and acquisition transactions are not captured.
3. Ted Evanoff, "Toyota's \$500M move refocuses Indiana plant," *Indianapolis Star*, July 7, 2009, www.indy.com/posts/toyota-s-500m-move-refocuses-indiana-plant.