



# High-Tech Industries

The Role of FDI in Driving Innovation and Growth

2017

Investment Analysis  
SelectUSA

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## INTRODUCTION

This brief explores the landscape of high-tech industries in the United States. This report defines high-tech industries, examines where they are concentrated across the United States, explores unique characteristics of foreign direct investment (FDI) in the high-tech sector, and finds that FDI is a significant contributor to the competitiveness of the U.S. high-tech sector. In turn, high-tech industries are important drivers of growth for the U.S. economy. These industries advance innovation, employ millions of highly skilled and highly educated workers, further U.S. competitiveness in an increasingly globalized world, and contribute to greater prosperity in our communities.

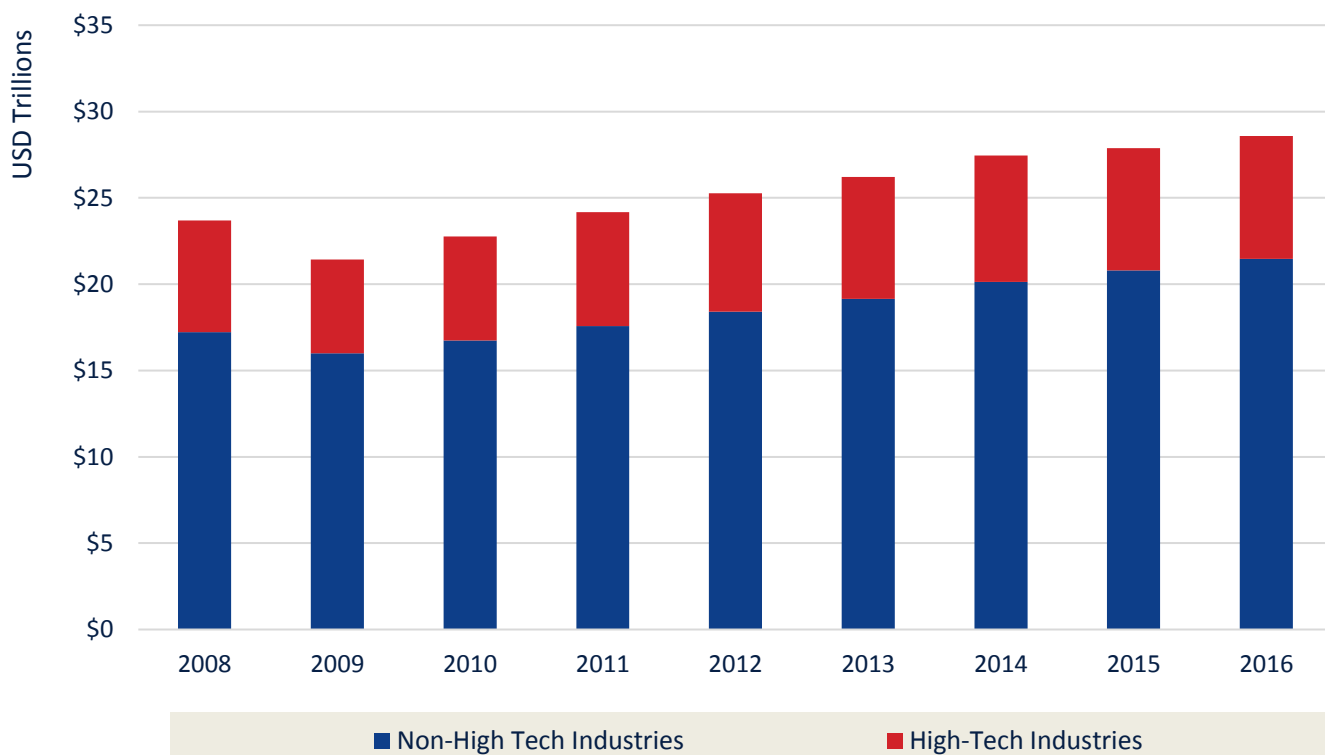
The high-tech sector's impact on the U.S. economy is strong; high-tech industries accounted for nearly 25 percent of total U.S. economic output in 2016. High-tech industries employed nearly 18.3 million Americans – 14.6 percent of all U.S. employment.<sup>1</sup> In 2016, high-tech industries accounted for nearly \$3.9 trillion in value-add, meaning contributions towards U.S. GDP measured by

the final value of goods and services they produced within the United States. The total gross output of high-tech industries, including both final and intermediate products, amounted to more than \$7.1 trillion in gross output in 2016 (see Figure 1).<sup>2</sup>

Foreign direct investment in the United States plays a significant role in the U.S. high-tech sector:

- FDI stock in high-tech industries amounted to more than \$1.6 trillion as of 2016.
- FDI accounted for nearly 10 percent of the total value added to the U.S. economy in the high-tech sector.
- The value-add of foreign investment in high-tech industries has been growing at a faster rate (an average of 5.1 percent) than that of domestic high-tech industries (2.4 percent) for the past seven years.
- FDI in high-tech industries supported 2.1 million jobs in 2015, 11.6 percent of all U.S. high-tech workers.

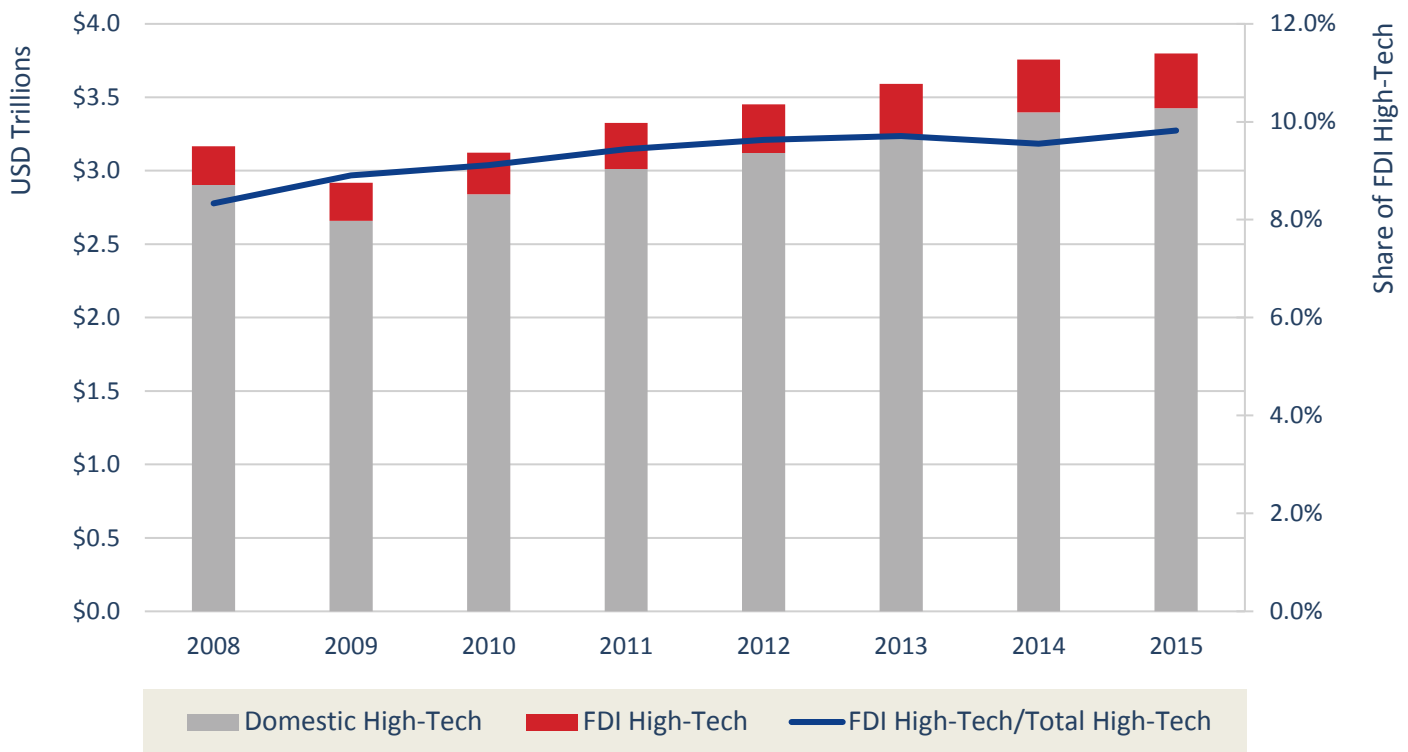
**FIGURE 1: HIGH-TECH SECTOR CONTRIBUTION TO U.S. ECONOMY**  
GROSS OUTPUT, 2008-2016



Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed July 6, 2017, [www.bea.gov/iTable/index\\_industry\\_gdpIndy.cfm](http://www.bea.gov/iTable/index_industry_gdpIndy.cfm)  
Note: Data for some high-tech industries has not been included due to lack of available data.



FIGURE 2: OWNERSHIP OF U.S. HIGH-TECH SECTOR ECONOMIC CONTRIBUTIONS  
FOREIGN AND DOMESTIC VALUE-ADD, 2008-2015



Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Aug. 17, 2017, [www.bea.gov/iTable/index\\_industry\\_gdplndy.cfm](http://www.bea.gov/iTable/index_industry_gdplndy.cfm) and [www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm)  
Note: Data for some high-tech industries has not been included due to lack of available data.

## WHAT IS HIGH-TECH?

High-technology, or “high-tech,” is a relatively fluid concept that has not yet been consistently defined by the U.S. government in terms of industry classification. In general terms, high-tech, or advanced industries, rely heavily on a skilled and educated workforce, act as innovative producers in our economy, and create and utilize advanced technologies. Some institutions, including the Brookings Institution and the Bureau of Labor Statistics (BLS), have developed their own methodologies for defining the high-tech sector.<sup>3</sup> Both institutions use a 4-digit NAICS classification method to identify high-tech industries.

In order to analyze foreign direct investment in the high-tech sector using FDI data published by the Bureau of Economic Analysis (BEA), SelectUSA created a 3-digit NAICS methodology to define the high-tech sector. Similar to the BLS, we define a high-tech industry as one in which its share of science, technology, engineering, and mathematics (STEM) occupational workers was more than twice that of the national average.<sup>4</sup> For our definition of STEM employment, we applied the 2010 Standard Occupational Classification

(SOC) system in which 100 occupations were classified as STEM. According to the SOC, STEM workers include various types of engineers, IT workers, scientists, postsecondary teachers, and managers of these workers. Using these occupational codes, we analyzed employment figures published in the Occupational Employment Statistics (OES) from the BLS.<sup>5</sup> Using this method, we identified 16 industries as high-tech; a complete list of the qualifying high-tech industries is presented in Figure 3 and corresponding codes for the BEA’s international surveys industry (ISI) classification are presented in the Appendix.

It is notable that the professional, scientific, and technical services industry is quite large; more than 2.6 million jobs are supported by this industry in STEM occupations and nearly 8.5 million in all occupations nationally. This pattern will also be visible in the following discussions of our findings.



**FIGURE 3: HIGH-TECH SECTOR CLASSIFICATION**  
NATIONAL, BY INDUSTRY, 2015

Industry	NAICS	STEM Employment	Total Employment	STEM/Total Employment
Data Processing, Hosting, and Related Services	518	133,130	290,780	45.8%
Computer & Electronic Product Manufacturing	334	405,170	1,050,150	38.6%
Other Information Services	519	86,210	232,110	37.1%
Publishing Industries	511	228,240	727,710	31.4%
Professional, Scientific, and Technical Services	541	2,623,250	8,483,010	30.9%
Oil & Gas Extraction	211	45,460	193,680	23.5%
Telecommunications	517	176,840	808,100	21.9%
Chemical Manufacturing	325	147,020	806,060	18.2%
Management of Companies & Enterprises	551	362,520	2,259,540	16.0%
Pipeline Transportation	486	7,310	47,360	15.4%
Utilities	221	82,110	553,890	14.8%
Transportation Equipment Manufacturing	336	23,4100	1,599,730	14.6%
Petroleum & Coal Products Manufacturing	324	16,040	110,530	14.5%
Machinery Manufacturing	333	153,280	1,128,950	13.6%
Electrical Equipment, Appliance, and Component Manufacturing	335	52,080	382,030	13.6%
Wholesale Electronic Markets and Agents and Brokers	425	10,6920	895,400	11.9%
<b>National (All Industries)</b>		<b>8,015,480</b>	<b>137,833,790</b>	<b>5.8%</b>

Source: Bureau of Labor Statistics, Occupational Employment Statistics, May 2015 estimates. Accessed Oct. 24, 2016. <http://www.bls.gov/oes/>

## CONCENTRATION OF HIGH-TECH INDUSTRIES BY STATE AND METRO AREA

### STATES

Applying our 16 industry high-tech classification to data from the Census Bureau’s 2015 County Business Patterns reveals top states with the greatest number of employees and establishments in high-tech industries.<sup>6</sup> California ranks first in terms of high-tech employment and number of high-tech establishments<sup>7</sup>, followed by Texas in both categories (see Figure 4). In both states, the majority of high-tech employment is in the professional, scientific, and technical services industry, and establishments are primarily in the management of companies and enterprises industry.

Looking at the intensity of high-tech employment, or the percentage of high-tech employment as a part of total private industry employment, the District of Columbia places first, with more than 26 percent of all employees in the District working in a high-tech industry (see Figure 5), more than ten percentage points higher than the national average. The concentration of high-tech in the District of Columbia can be explained by its small population, a highly educated workforce, and the

prevalence of the professional service industry. More than 74 percent of the District’s high-tech employment can be attributable to workers in the professional, scientific, and technical services industry. Some of the major companies with headquarters in the District of Columbia include Danaher and Blackboard, Inc. The District is also home to many research-focused institutions, such as the World Bank, Pew Research Center, and the American Institutes for Research.

Virginia ranks second with 22 percent of total employment in high-tech industries and Washington ranks third, with nearly 21 percent. Northern Virginia in particular is home to the “Dulles Technology Corridor,” which houses numerous defense and technology companies. Some of the major companies with headquarters in Virginia include Booz Allen Hamilton, Northrop Grumman, and General Dynamics. Washington’s ranking is mainly due to the professional, scientific, and technical services industry and management of companies and enterprises industry, accounting for nearly 52 percent of high-tech employment. Washington is also headquarters to several global tech companies, including Amazon, Microsoft, Expedia, and Zillow.

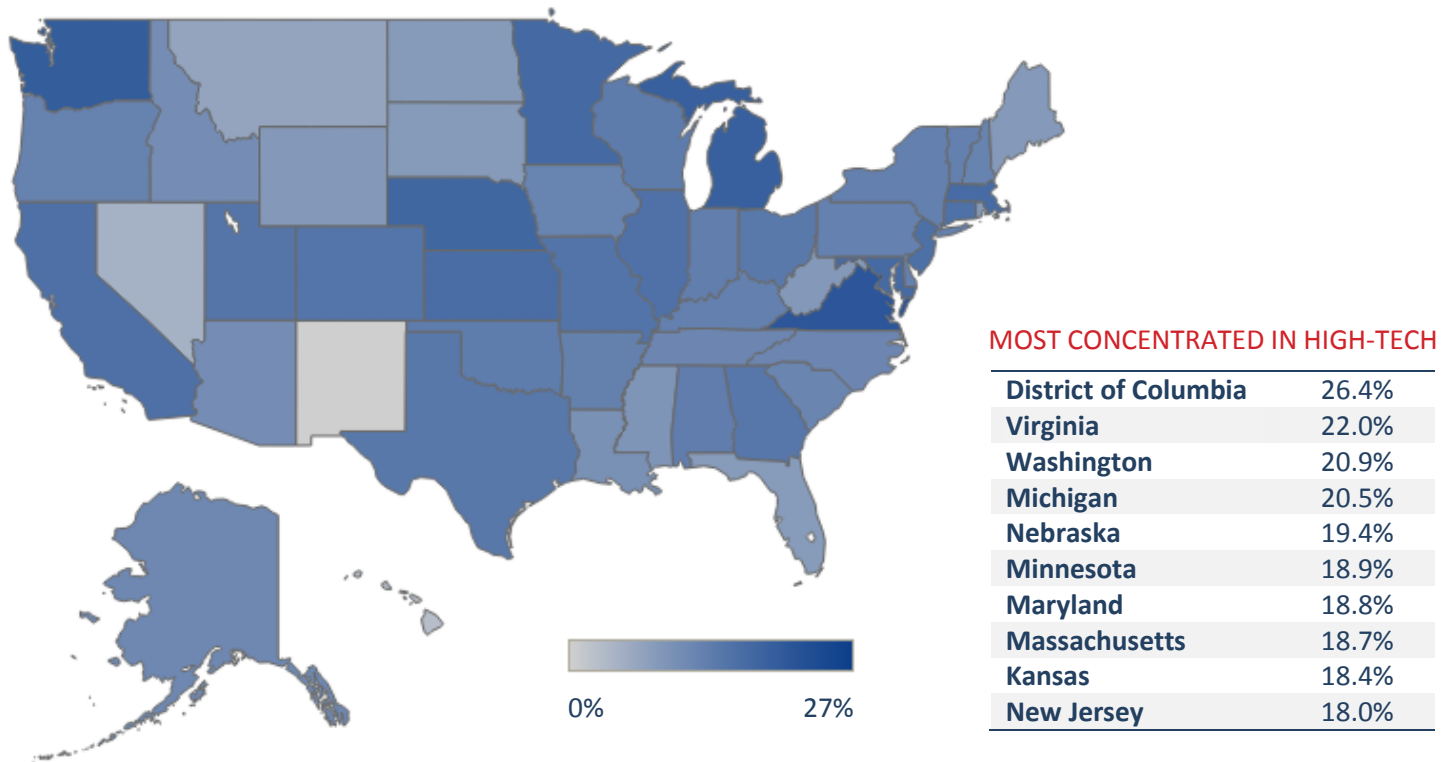


**FIGURE 4: HIGH-TECH INDUSTRY STATE RANKINGS**  
 BY NUMBER OF EMPLOYEES AND ESTABLISHMENTS, 2015

	BY EMPLOYEES	BY ESTABLISHMENTS
1	California   2,565,479	California   157,612
2	Texas   1,723,888	Texas   94,784
3	New York   1,255,076	Florida   93,306
4	Illinois   966,740	New York   78,620
5	Florida   934,005	Illinois   52,355
6	Pennsylvania   821,236	Pennsylvania   42,348
7	Ohio   783,609	Georgia   38,191
8	Michigan   762,213	New Jersey   37,603
9	Virginia   703,126	Virginia   37,574
10	New Jersey   638,839	Ohio   35,853

Source: U.S. Census Bureau, 2015 County Business Patterns, Accessed July 6, 2017, factfinder.census.gov

**FIGURE 5: HIGH-TECH INDUSTRY EMPLOYMENT CONCENTRATION (STATE)**  
 HIGH-TECH EMPLOYMENT/ALL EMPLOYMENT, BY STATE, 2015



Source: U.S. Census Bureau, 2015 County Business Patterns, Accessed July 6, 2017, factfinder.census.gov



## METRO AREAS

Metropolitan areas are home to nearly 88 percent of high-tech employment in the United States. Disaggregating the data further, Figure 6 presents the rankings of metro areas according to their level of high-tech employment and number of establishments. The metro area with the most employees and establishments in the high-tech industries is New York-Newark-Jersey City, with more than 1.4 million workers in high-tech. The Los Angeles and Chicago metro areas follow in second and third place in both categories, respectively. These three cities are among the most densely populated in the United States. Most of their high-tech employment can be attributed to the professional services industry and management of companies and enterprises industry.

An analysis of the intensity of employment in the high-tech sector – measured by employment in high-tech compared to total employment in the area – reveals that San Jose-Sunnyvale-Santa Clara, California, has the highest concentration of high-tech workers among all metro areas, at more than 34 percent (see Figure 7).

Nearly 347,000 workers out of more than 1 million in the San Jose metro area are employed in high-tech industries. Though the majority of high-tech employment in the San Jose metro area can be attributed to the professional services industry and management of companies and enterprises industry (more than 54 percent combined), nearly 13 percent of high-tech employment is due to computer and electronic product manufacturing. San Jose is the largest city within the Silicon Valley area and the metro area serves as headquarters for several large companies, including Intel, PayPal, Applied Materials, and VMware.<sup>8</sup>

The metro area with the second highest concentration of high-tech employment is Elkhart-Goshen, Indiana, with nearly 33 percent of total employment in high-tech industries. Most of the high-tech employment in Elkhart can be attributed to the transportation equipment manufacturing industry, which employs nearly 82 percent of the high-tech sector in the metro area. Elkhart metro area's economy is heavily influenced by

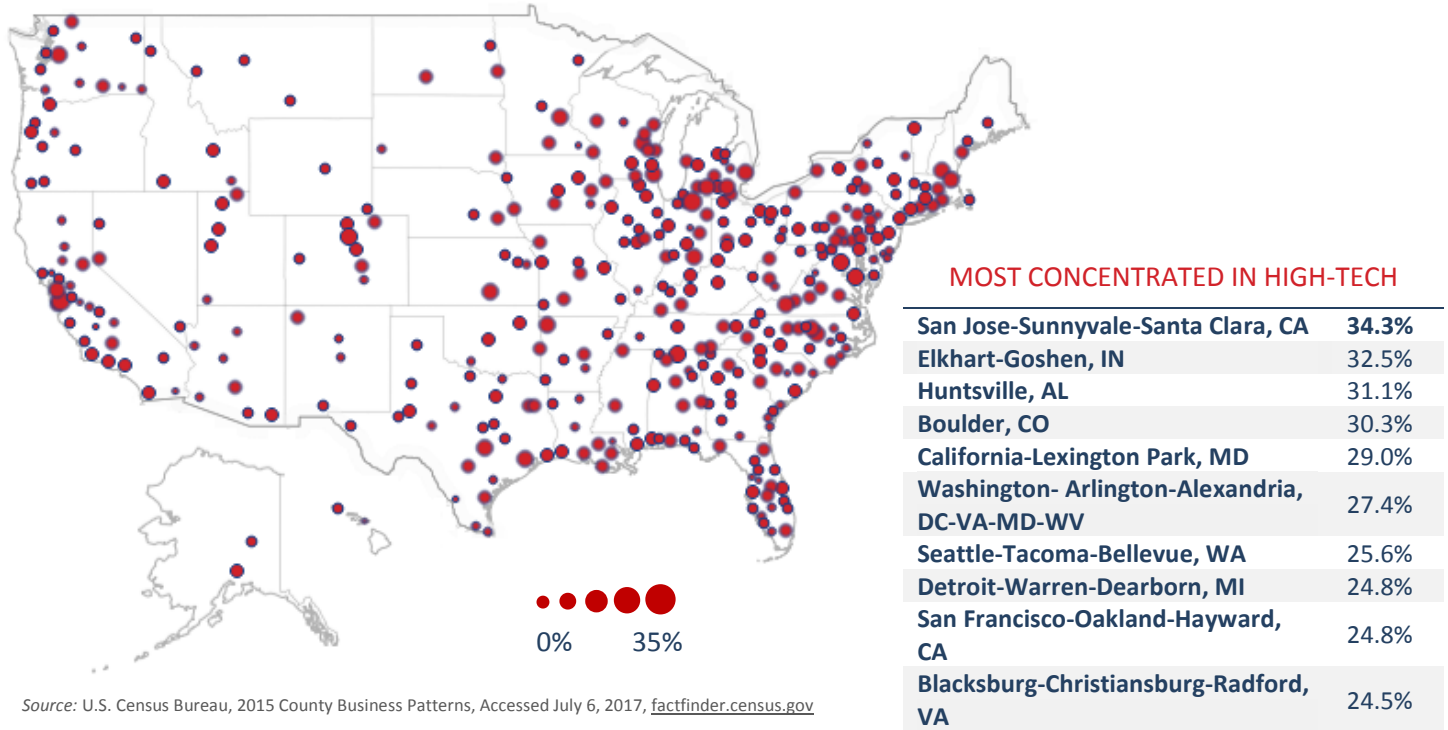
**FIGURE 6: HIGH-TECH INDUSTRY METRO AREA RANKINGS**  
BY NUMBER OF EMPLOYEES AND ESTABLISHMENTS, 2015

	BY EMPLOYEES	BY ESTABLISHMENTS
1	New York-Newark-Jersey City, NY-NJ-PA   1,403,313	New York-Newark-Jersey City, NY-NJ-PA   89,636
2	Los Angeles-Long Beach-Anaheim, CA   974,100	Los Angeles-Long Beach-Anaheim, CA   63,210
3	Chicago-Naperville-Elgin, IL-IN-WI   757,027	Chicago-Naperville-Elgin, IL-IN-WI   43,927
4	Washington-Arlington-Alexandria, DC-VA-MD-WV   702,080	Miami-Fort Lauderdale-West Palm Beach, FL   37,920
5	Dallas-Fort Worth-Arlington, TX   567,424	Washington-Arlington-Alexandria, DC-VA-MD-WV   37,830
6	Houston-The Woodlands-Sugar Land, TX   545,974	Dallas-Fort Worth-Arlington, TX   29,074
7	Boston-Cambridge-Newton, MA-NH   509,432	Atlanta-Sandy Springs-Roswell, GA   27,879
8	San Francisco-Oakland-Hayward, CA   506,990	San Francisco-Oakland-Hayward, CA   27,198
9	Atlanta-Sandy Springs-Roswell, GA   446,583	Houston-The Woodlands-Sugar Land, TX   25,090
10	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   442,235	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD   24,962

Source: U.S. Census Bureau, 2015 County Business Patterns, Accessed July 6, 2017, [factfinder.census.gov](http://factfinder.census.gov)



**FIGURE 7: HIGH-TECH INDUSTRY EMPLOYMENT CONCENTRATION (METRO AREA)**  
 HIGH-TECH EMPLOYMENT/ALL EMPLOYMENT, BY METRO AREA, 2015



Source: U.S. Census Bureau, 2015 County Business Patterns, Accessed July 6, 2017, [factfinder.census.gov](http://factfinder.census.gov)

recreational and commercial vehicle manufacturing. Some of the major employers in the metro area include Norfolk Southern, Elkhart General Hospital, Always in Stone Monument Co., and Jayco Inc.<sup>9</sup>

The third-most concentrated metro area is Huntsville, Alabama, with more than 31 percent of employment in high-tech industries. The sector in Huntsville is heavily concentrated in the professional, scientific, and technical services industry, accounting for more than 68 percent of high-tech employment in the area. The metro area is home to many aerospace, defense contractor, and military technology firms, including those that support NASA’s Marshall Space Flight Center.<sup>10</sup>

## FOREIGN DIRECT INVESTMENT SUPPORTS HIGH-TECH INDUSTRIES

With such a robust portfolio of competitive high-tech industries, it is unsurprising that global firms are attracted to doing business in the United States. Best-in-class global firms investing in innovative U.S. economic sectors ensures the United States retains its global competitiveness in these industries.

### FDI POSITION

Foreign direct investment (FDI) plays a critical role in the growth of high-tech industries. Since the height of the economic recession in 2009, the stock of FDI in high-tech industries has increased by an annual average of more than 10 percent. In 2016, the FDI position in high-tech industries amounted to more than \$1.6 trillion, a significant increase from \$815 billion in 2009 (see Figure 8). High-tech FDI accounted for nearly 44 percent of all FDI in the United States in 2016.<sup>11</sup>

### EMPLOYMENT

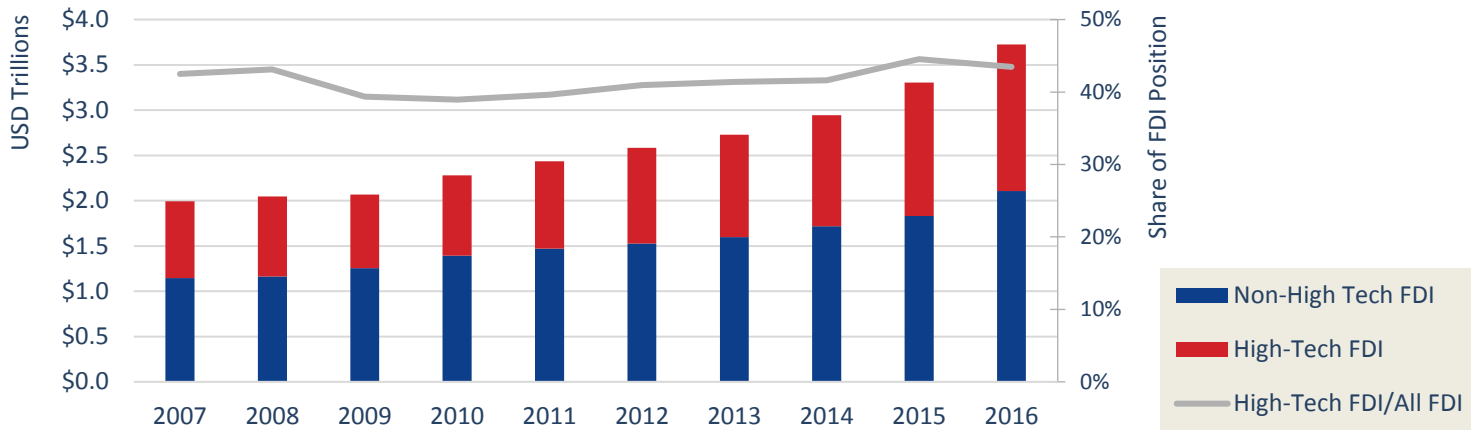
Foreign majority-owned firms directly supported more than 6.8 million jobs in the United States in 2015. Nearly 31 percent of these jobs, or 2.1 million, were in high-tech industries. FDI alone directly supported 11.6 percent of all U.S. high-tech workers in 2015 (see Figure 9).

In 2015, the United Kingdom was the largest foreign employer of workers in the high-tech industry, directly supporting more than 288,200 jobs (see Figure 10). Japan followed as the second largest foreign employer, directly supporting more than 285,700 jobs in high-tech. Since 2007, French firms experienced the most growth (50 percent) in terms of the number of high-tech jobs supported in the United States.



**FIGURE 8: HIGH-TECH FDI POSITION IN UNITED STATES**

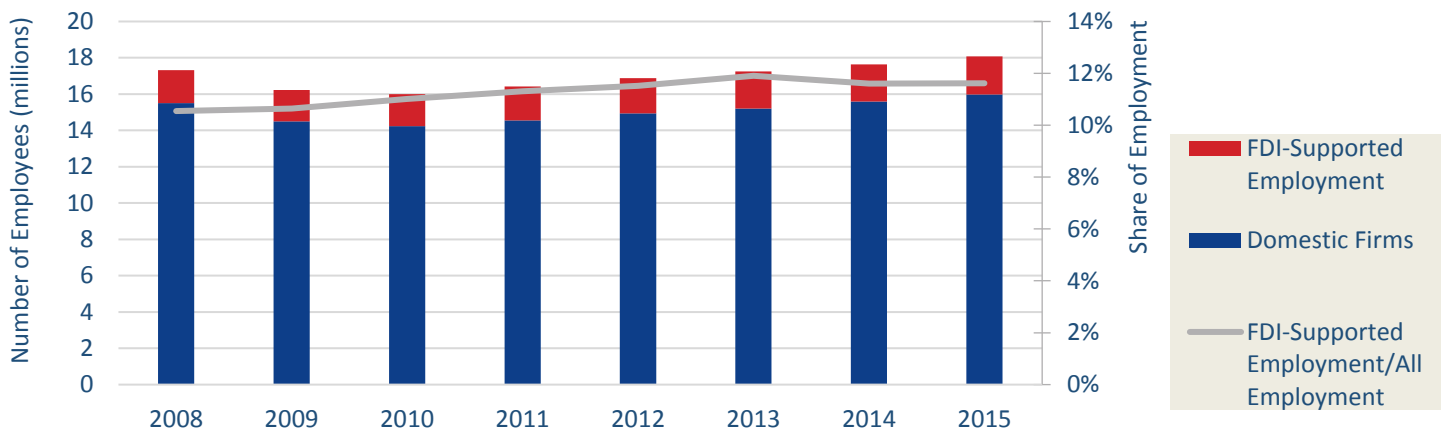
HISTORICAL-COST BASIS



Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Aug. 17, 2017, [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm)

**FIGURE 9: FDI-SUPPORTED HIGH TECH EMPLOYMENT**

BY MAJORITY FOREIGN-OWNED U.S. AFFILIATES

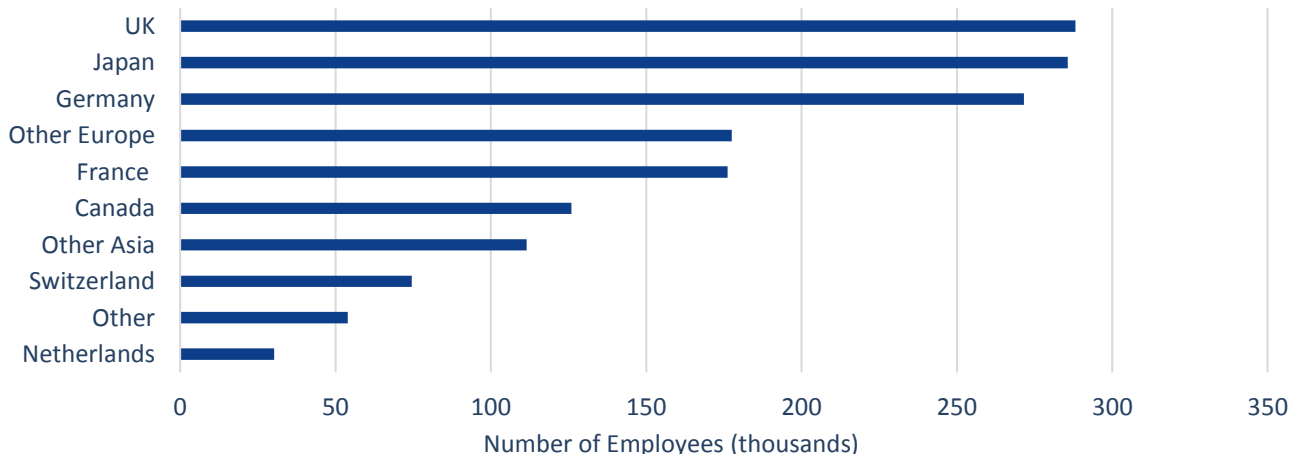


Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Aug. 17, 2017. FDI-Supported high-tech employment, [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm). Total employment, [http://www.bea.gov/iTable/index\\_nipa.cfm](http://www.bea.gov/iTable/index_nipa.cfm).

Note: Data for some high-tech industries has not been included due to lack of available data.

**FIGURE 10: SOURCES OF HIGH-TECH EMPLOYMENT**

BY MAJORITY FOREIGN-OWNED U.S. AFFILIATES AND BY UBO\*, 2015



Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Aug. 17, 2017, [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm)

\*UBO: Ultimate Beneficial Owner, the entity at the top of an affiliate's ownership chain

Note: Data for some high-tech industries has not been included due to lack of available data. Data for some countries is also suppressed.





## COMPENSATION

According to the latest available data, the average compensation per worker for FDI-supported employment in high-tech industries in the United States was \$101,141 in 2015. This is higher than the average wage per worker of all foreign firms across all industries, which is \$79,040. Swiss companies paid the highest average annual wage in high-tech industries at \$173,847 (see Figure 11).

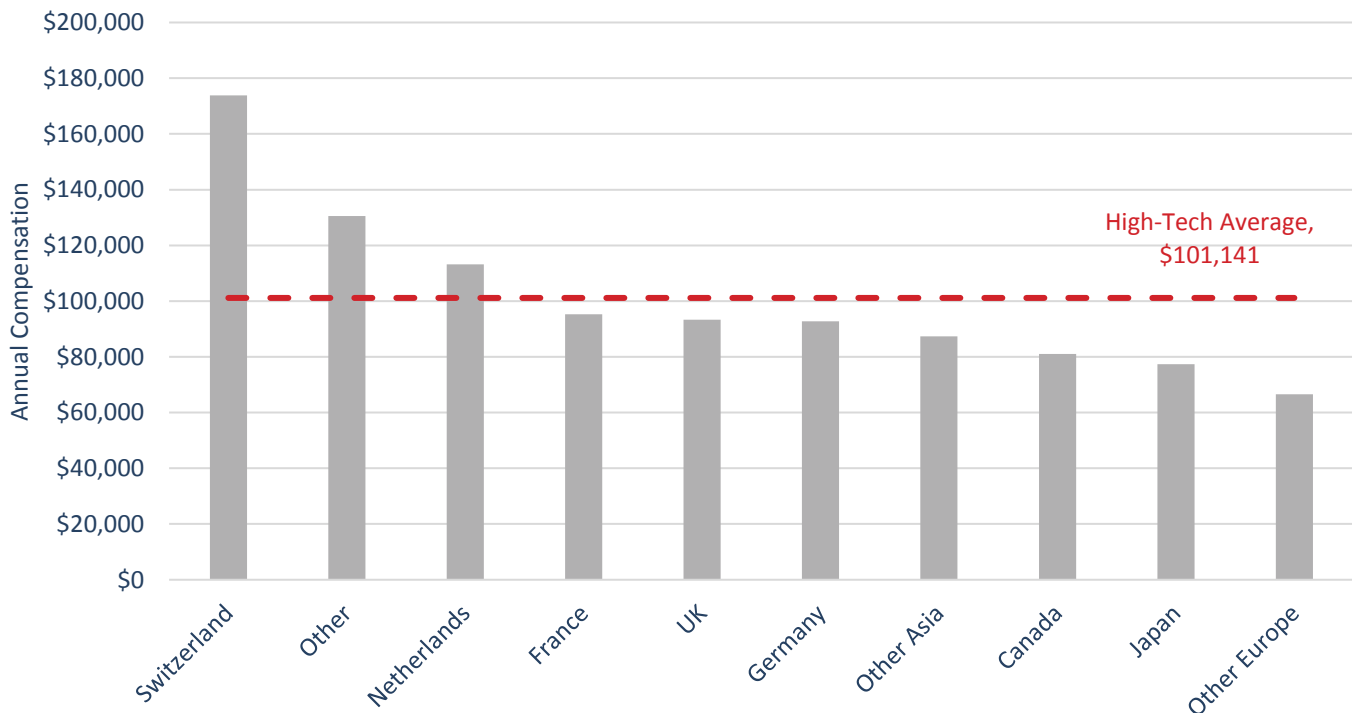
One example of Swiss investment in U.S. high-tech is Switzerland's Kudelski Group, a provider of digital security and solutions for the delivery of digital and interactive content. In June 2016, the company announced it would open a second global headquarters in Phoenix, Arizona. Kudelski Group will create a significant number of high-wage jobs during the next three years. Former U.S. Ambassador to Switzerland and Liechtenstein Suzan G. LeVine, the team at the U.S. Embassy, and SelectUSA assisted the company with customized research reports and facilitated access to federal-level services.

## R&D, EXPORTS, AND VALUE-ADD

U.S. affiliates of international businesses in the United States not only support U.S. employment in high-tech industries, but also make significant contributions to the economy through research and development (R&D) spending, exports, and value-add activities. R&D spending by foreign firms in high-tech industries grew by an average of 5.3 percent each year from 2010-2015, and reached a total of nearly \$42 billion by 2015 (see Figure 12). In 2015, R&D expenditures in high-tech industries accounted for 74 percent of all R&D spending by foreign firms in the United States. The value of U.S. goods exports contributed by majority foreign-owned firms in high-tech industries grew by an average of 5.9 percent each year from 2010-2015, and reached a total of nearly \$154 billion in 2015. The contributions of foreign-owned firms to value-add activities in high-tech industries increased by an average of 5.6 percent each year from 2010-2015, and reached a total of more than \$373 billion in 2015.

FIGURE 11: FDI HIGH-TECH COMPENSATION

COMPENSATION PER WORKER, BY MAJORITY FOREIGN-OWNED U.S. AFFILIATE AND BY UBO\*, 2015



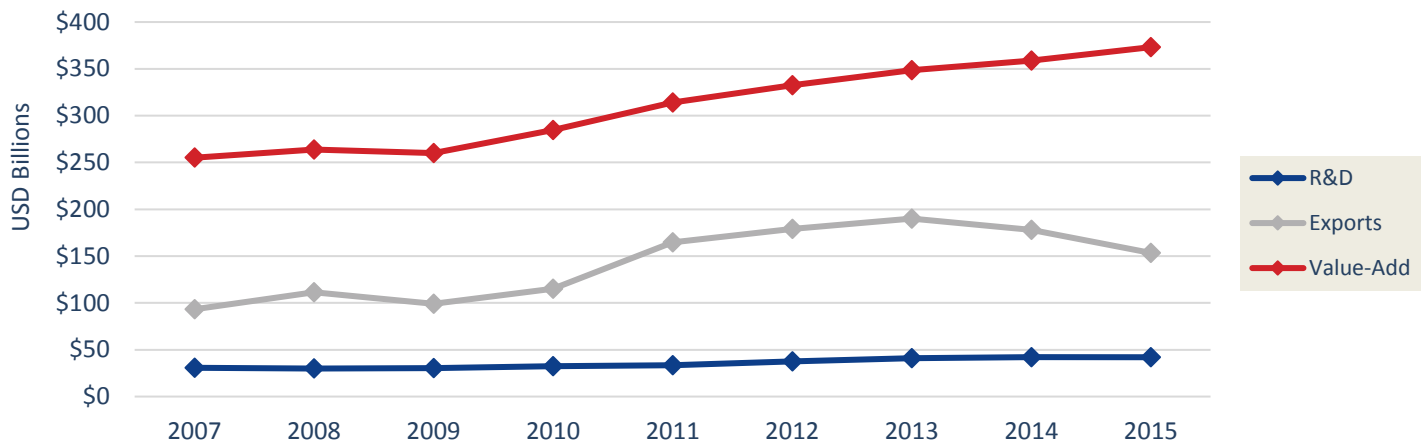
Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Oct. 24, 2016, [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm)

\*UBO: Ultimate Beneficial Owner, the entity at the top of an affiliate's ownership chain

Note: Data for some high-tech industries has not been included due to lack of available data. Data for some countries is also suppressed.

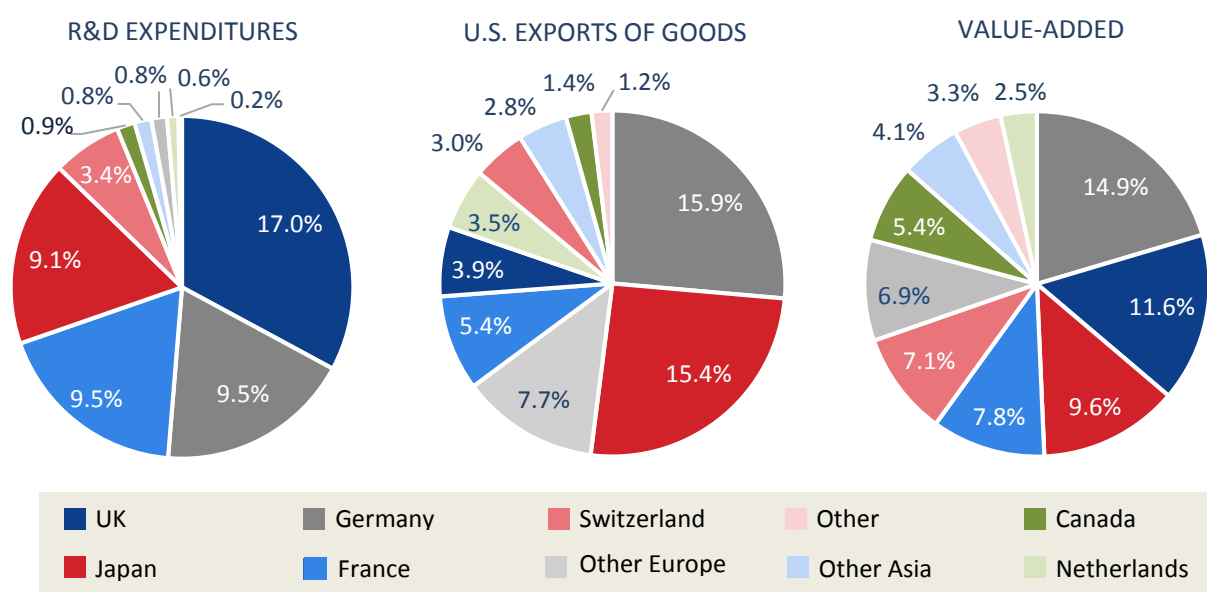


**FIGURE 12: FDI IMPACT IN U.S. HIGH-TECH INDUSTRIES**  
BY MAJORITY FOREIGN-OWNED U.S. AFFILIATES



Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Oct. 24, 2016, [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm)  
Note: Data for some high-tech industries has not been included due to lack of available data.

**FIGURE 13: FDI IMPACT IN HIGH-TECH BY SOURCE COUNTRY**  
PERCENT OF TOTAL, BY MAJORITY FOREIGN-OWNED U.S. AFFILIATES AND BY UBO\*, 2015



Source: Department of Commerce, U.S. Bureau of Economic Analysis, Accessed Oct. 24, 2016, [http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm)  
\*UBO: Ultimate Beneficial Owner, the entity at the top of an affiliate's ownership chain  
Note: Data for some high-tech industries has not been included due to lack of available data. Data for some countries is also suppressed.

Diving deeper into the sources of this productive FDI, we find that Germany, the United Kingdom, France, and Japan are the largest source markets for R&D spending, exports, and value-added activities in high-tech industries (see Figure 13).

The United Kingdom was the largest source of R&D spending in high-tech industries in 2015, capturing 17 percent of all R&D spending among foreign-owned firms. German majority-owned firms were the largest source of U.S. goods exports in high-tech industries in 2015, capturing 15.9 percent of total high-tech exports among

foreign-owned firms. Germany was also the largest contributor to value-added activities in the high-tech industry in 2015, capturing 14.9 percent of total value-added activities in the high-tech sector among foreign-owned firms. Many of our traditional trading partners, including Germany, the United Kingdom, France, and Japan, are significantly invested in the U.S. high-tech sector, thus strengthening our relationships and deepening our economic ties.



## CONCLUSION & KEY HIGHLIGHTS

High-tech industries play a significant role in fostering growth in the U.S. economy. High-tech industries in the United States employed nearly 18.3 million people in 2016, and accounted for nearly \$3.9 trillion in value-added activities and more than \$7.1 trillion in gross output. The impact of the high-tech sector is strongly felt; these industries represent only 14.6 percent of all U.S. employment, but contributed nearly 25 percent of total output in the United States in 2016.

Just as global investment benefits international firms, foreign direct investment plays a significant role in furthering the competitiveness of the U.S. high-tech sector on a global scale. The U.S. FDI position in high-tech industries amounted to more than \$1.6 trillion in 2016, or nearly 44 percent of total FDI in the United States. These U.S. affiliates of international businesses directly supported nearly 2.1 million U.S. jobs in the high-tech sector in 2015. Additionally, U.S. affiliates of international businesses in the high-tech sector spent a total of nearly \$42 billion in research and development in 2015. The value-add of foreign investment in high-tech has been growing at a faster rate than the value-add of domestic high-tech for the past seven years. FDI in the high-tech sector continues to grow and to support the competitiveness of the U.S. economy in global markets.

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## REFERENCES

<sup>1</sup> U.S. Bureau of Economic Analysis, "Full-Time and Part-Time Employees by Industry." Accessed August 17, 2017.

<sup>2</sup> U.S. Bureau of Economic Analysis, "Industry Economic Accounts." Accessed July 6, 2017.  
<http://www.bea.gov/industry/index.htm>

<sup>3</sup> Muro, Mark et al. (Feb. 2015). "America's Advanced Industries: What They Are, Where They Are, and Why They Matter." Brookings Institution.

Wolf, Michael & Terrell, Dalton. (May 2016). "The high-tech industry, what is it and why it matters to our economic future." Bureau of Labor Statistics, Beyond the Numbers, 5(8).

Hecker, Daniel E. (2005). "High-technology employment: a NAICS-based update." Bureau of Labor Statistics, Monthly Labor Review.

<sup>4</sup> Hecker, Daniel E. (2005). "High-technology employment: a NAICS-based update." Bureau of Labor Statistics, Monthly Labor Review.

<sup>5</sup> The OES survey defines employees as all part-time and full-time workers who are paid a wage or salary. The survey does not cover the self-employed, owners and partners in unincorporated firms, household workers, or unpaid family workers.

<sup>6</sup> The County Business Patterns series excludes data on self-employed individuals, employees of private households, railroad employees, agricultural production employees, and most government employees. For more information about the NAICS sectors that are excluded from the series, visit the Industry and Geographic Classification [here](#). Data for the Wholesale Electronic Markets and Agents and Brokers industry was not available.

<sup>7</sup> An establishment is defined as a fixed physical location or permanent structure where some form of business activity is conducted. Most government establishments are excluded from tabulation, though the County Business Patterns does include some government sponsored industries. More information can be found [here](#).

<sup>8</sup> "San Jose, CA." Forbes.  
<http://www.forbes.com/places/ca/san-jose/>

<sup>9</sup> "Major Employers for Elkhart County." Hoosiers by the Numbers, Indiana Department of Workforce Development.  
[http://www.hoosierdata.in.gov/major\\_employers.asp?areaid=039](http://www.hoosierdata.in.gov/major_employers.asp?areaid=039)

<sup>10</sup> "Huntsville, AL." Forbes.  
<https://www.forbes.com/places/al/huntsville/>

<sup>11</sup> U.S. Bureau of Economic Analysis. "Direct Investment and Multinational Enterprises (MNEs)." Accessed August 17, 2017.  
[http://www.bea.gov/iTable/index\\_MNC.cfm](http://www.bea.gov/iTable/index_MNC.cfm). Unless otherwise noted, all information presented in this section uses official U.S. Bureau of Economic Analysis Direct Investment data.



## APPENDIX

TABLE 1: NAICS AND ISI CONCORDANCE FOR HIGH-TECH INDUSTRIES

Industry	NAICS	ISI
Oil & Gas Extraction	211	2111
Utilities	221	2211, 2212, 2213
Petroleum & Coal Products Manufacturing	324	3242, 3243, 3244
Chemical Manufacturing	325	3251, 3254, 3252, 3253, 3255, 3256, 3259
Machinery Manufacturing	333	3331, 3332, 3333, 3334, 3335, 3336, 3339
Computer & Electronic Product Manufacturing	334	3344, 3345, 3341, 3342, 3343, 3346
Electrical Equipment, Appliance, and Component Manufacturing	335	3351, 3352, 3353, 3359
Transportation Equipment Manufacturing	336	3361, 3362, 3363, 3364, 3365, 3366, 3369
Wholesale Electronic Markets and Agents and Brokers	425	4251
Pipeline Transportation	486	4863, 4868
Publishing Industries	511	5111, 5112
Telecommunications	517	5171, 5172, 5174, 5179
Data Processing, Hosting, and Related Services	518	5182
Other Information Services	519	5191
Professional, Scientific, and Technical Services	541	5413, 5415, 5416, 5411, 5412, 5414, 5417, 5418, 5419
Management of Companies & Enterprises	551	5512, 5513

Note: Bureau of Economic Analysis International Surveys Industry (ISI) classifications are adapted from the 2012 North American Industry Classification System (NAICS) and are used in the industry classifications for the BEA's surveys of direct investment and services. For more information on the ISI classifications, see the guide here:

[http://www.bea.gov/industry/pdf/2012\\_industry\\_code\\_guide.pdf](http://www.bea.gov/industry/pdf/2012_industry_code_guide.pdf).



## ABOUT SELECTUSA

SelectUSA is a U.S. government-wide program housed in the International Trade Administration at the United States Department of Commerce. Our mission is to facilitate job-creating business investment into the United States and raise awareness of the critical role that foreign direct investment (FDI) plays in the U.S. economy. Since its inception, SelectUSA has facilitated more than \$23.8 billion in investment, creating and/or retaining thousands of U.S. jobs.



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### FOR MORE INFORMATION, PLEASE CONTACT:

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