2

Jobs, Trade and Investment: Examining the Ties that Bind

The transatlantic economy remains a key pillar of the global economy. The combined output of the United States and the European Union accounted for roughly one-third of world GDP in terms of purchasing power parity in 2017. Excluding the United Kingdom, the figure – 31% – is still quite substantial, and still higher than the combined output of China and India (one-quarter of world GDP).

The transatlantic economy is not only larger than the twin giants of Asia, it is also significantly wealthier. And because wealth matters, it's little wonder that American and European consumers easily outspend their counterparts in China and India. Combined, the United States and the EU accounted for nearly 51% of global personal consumption in 2016. Combined, China and India accounted for 13%.

In addition to the above, the transatlantic economy is a repository of innovation and technology advancement, and at the forefront of global foreign direct investment and global mergers and acquisitions activity. Taken together, U.S. and European exports to the world accounted for 28.1% of global exports in 2016, the last year of complete data; combined imports represented nearly 33% of the world total. Meanwhile, the U.S. and Europe together accounted for 64% of the outward stock and 56% of the inward stock of global foreign direct investment (FDI) in 2016. Each partner has built up the great majority of that stock in the other economy. Mutual investment in the North Atlantic space is very large, dwarfs trade and has become essential to U.S. and European jobs and prosperity.

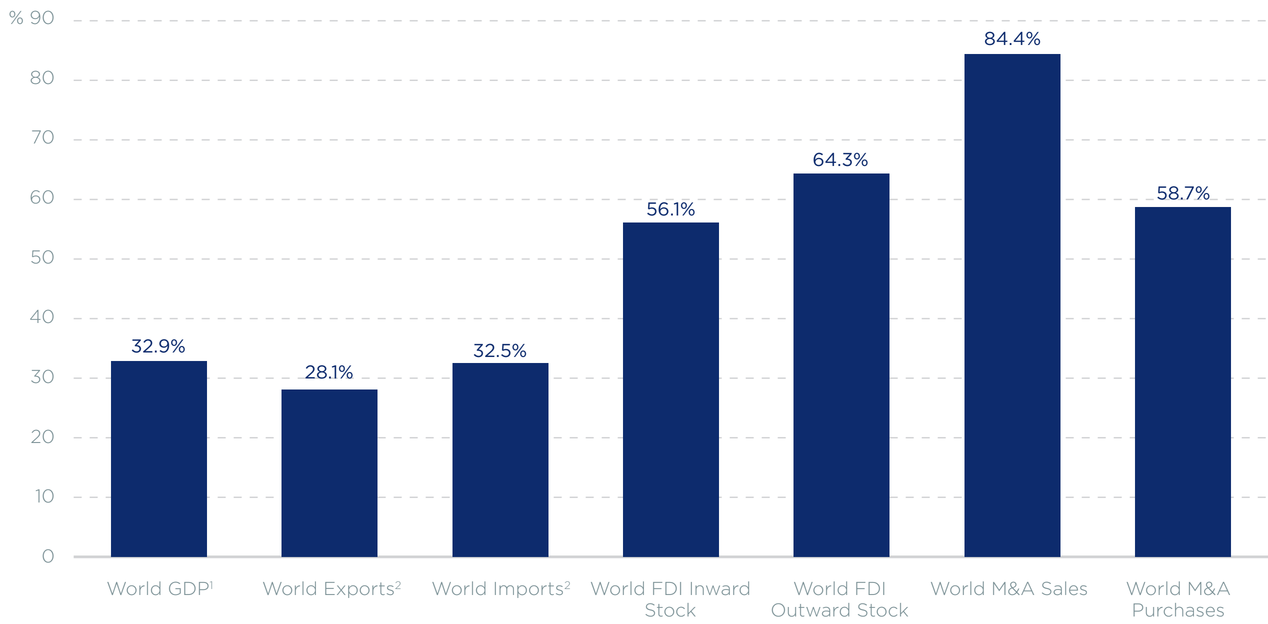
In the end, it is the U.S.-EU partnership that drives and dictates global trade, investment and capital flows, with no commercial artery in the world as large as the investment artery forged between the United States and Europe. Total transatlantic foreign affiliate sales totaled an estimated $5.5 trillion in 2016, easily ranking as the top artery in the world on account of the thick investment ties between the two parties.

That said, the burgeoning middle class of the developing nations represent new sources of supply (labor) and demand (consumers) for U.S. and European firms. Those firms are building out their in-country presence in the developing nations, and for good reason. Growth rates are still above the global average in most nations, populated with young consumers who desire Western goods and services. In addition, the technological skill levels of many developing nations are now on par with many developing nations. China, for instance, is rapidly emerging as an innovative superpower; India lags behind but is advancing. It all makes perfect sense for U.S. and European firms to invest outside the transatlantic economy. Rising powers are resetting the global economy, notably as China increasingly looks outward and the United States has turned inward.

In short, global growth is being rebalanced. This can be a positive global trend for both U.S. and European multinationals, which are working to deepen their respective footprints in developing nations, and replicating the deep ties that are the hallmark of the U.S.-EU relationship. In fact, U.S. and European firms are using global value chains to integrate the added value other nations can contribute to particular products and services into transatlantic bonds of investment and trade. The rise of the "Rest" is a natural economic progression, and more of a complement to, rather than a substitute for, the transatlantic economy.

Within this construct, the transatlantic partnership remains important not only to the United States and Europe, but also to the world. The U.S.-European partnership is too big and too important to fail, as made all too clear in the accompanying exhibits. The "Rise of the Rest" is a healthy dynamic for the global economy. But this dynamic does not signal a retreat on the part of U.S. and European firms from the transatlantic economy. In the end, the core of their global operations – and the foundation of the global economy – center on the United States and Europe. This becomes clear when one dissects the activities of foreign affiliates on both sides of the pond.

Table 1 The Transatlantic Economy vs. The World (Share of World Total)



Sources: UN, IMF, figures for 2016.
1. Based on PPP estimates.
2. Excluding intra-EU, Norway, Switzerland and Iceland trade.

The Ties That Bind: Quantifying the Transatlantic Economy

The United States and Europe are bound together by the activities of foreign affiliates – the foot soldiers of the transatlantic partnership who over the past half century have constructed a formidable economic foundation.

Over the past years we have outlined and examined eight key indices that offer a clear picture of the "deep integration" forces binding the United States and Europe together. This chapter updates those indices with the latest available data and our estimates. Each metric, in general, has ebbed and flowed with the cyclical swings of transatlantic economic activity, but has nevertheless grown in size and importance over the past decade.

1. Gross Product of Foreign Affiliates

As standalone entities, U.S. affiliates in Europe and European affiliates in the United States are among the largest and most advanced economic forces in the world. For instance, the total output of U.S. foreign affiliates in Europe (an estimated $720 billion in 2016) and of European foreign affiliates in the U.S. (estimated at $584 billion) was greater than the total gross domestic product of most nations. Combined, transatlantic affiliate output – $1.3 trillion – was larger than the output of such nations as the Netherlands, Turkey or Indonesia.

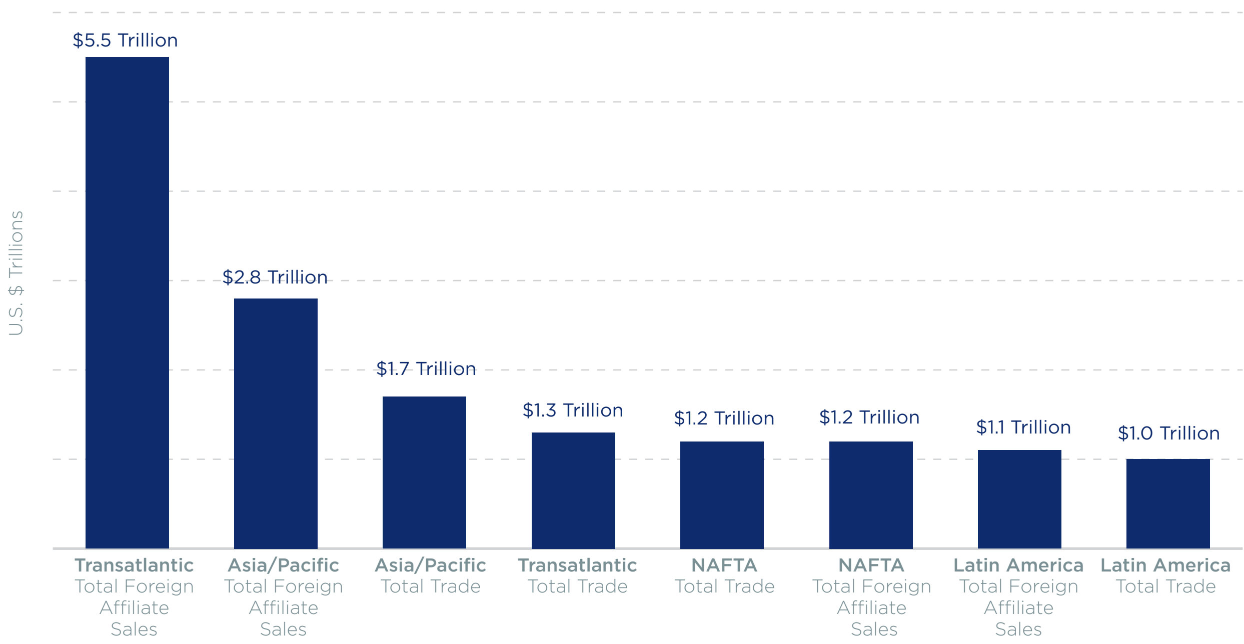
By our estimation, European affiliate output in the U.S. rose by around 4.5% in 2016, while U.S. affiliate output in Europe rose by a slightly faster pace, 5%. European affiliate output in the U.S. has recovered and expanded since falling to a cyclical low of $391 billion in 2009. U.S. affiliate output in Europe has also recovered from its pre-crisis lows.

We expect further gains in U.S. foreign affiliate output in the near term, supported by Europe's improving economic performance over the balance of 2017 and into 2018. In the United States, European affiliates are operating in one of the most dynamic nations in the world and are expected to boost their near-term output as well.

On a global basis, the aggregate output of U.S. foreign affiliates reached $1.4 trillion in 2016, with Europe (broadly defined) accounting for around 50% of the total. The United Kingdom, where U.S. investment ties are deepest, accounted for roughly one-quarter of total affiliate output in Europe in 2016.

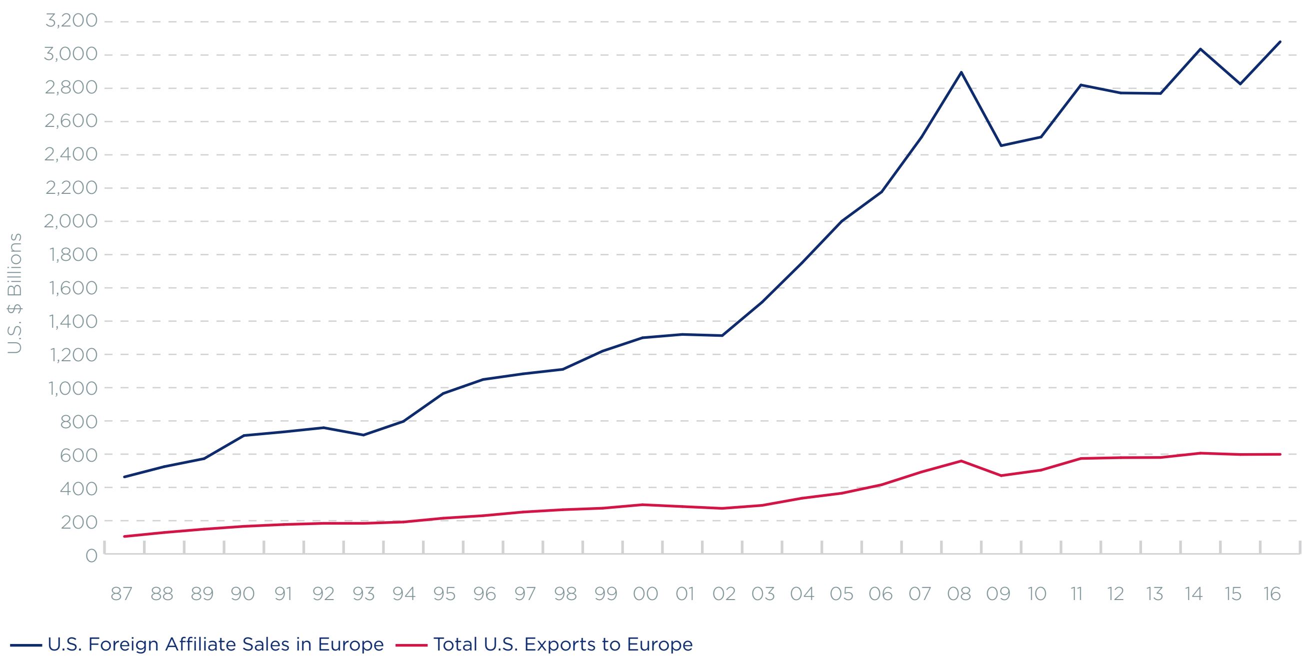
$5.5 trillion
Total transatlantic foreign affiliate sales

Table 2 **America's Major Commercial Arteries**



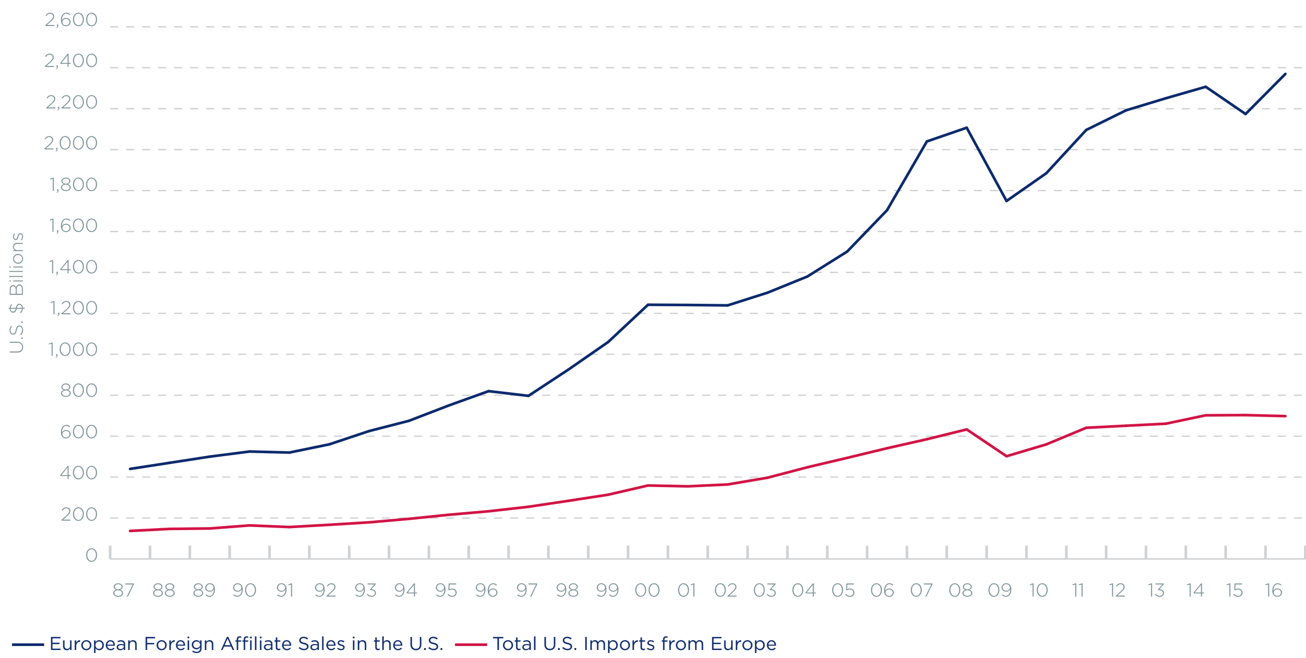
Foreign Affiliate Sales: Estimates for 2016. Total Trade: Data for goods & services, 2016. NAFTA represents U.S. trade and sales linkages with NAFTA member countries, excluding trade and affiliate sales ties between Mexico and Canada.
Source: Bureau of Economic Analysis.

Table 3 **Sales of U.S. Affiliates in Europe vs. U.S. Exports to Europe**



Source: Bureau of Economic Analysis.
Majority-owned non-bank affiliates data: 1987 - 2008. Majority-owned bank and non-bank affiliates: 2009 - 2016.
Foreign Affiliate Sales: Estimates for 2016.

Table 4 Sales of European Affiliates in the U.S. vs. U.S. Imports from Europe



Source: Bureau of Economic Analysis.
Majority-owned non-bank affiliates: 1987 - 2006. Majority-owned bank and non-bank affiliates: 2007 - 2016.
Foreign Affiliate Sales: Estimates for 2016.

Looking at actual figures for 2015 from the U.S. Bureau of Economic Analysis, U.S. affiliate output in Europe ($686 billion) was roughly double affiliate output in all of Asia ($335 billion). While affiliate output in places like China ($66 billion in 2015) and India ($26 billion) has increased over the past decade, what U.S. affiliates produce in these two emerging Asian giants pales in comparison to affiliate output in Germany ($87 billion), Ireland ($87 billion), and the United Kingdom ($173 billion).

In the U.S., meanwhile, European affiliates are major economic producers in their own right, with British firms of notable importance. The U.S. output of British companies reached $136 billion in 2015, roughly a quarter of the European total. For the same year, output from German affiliates operating in the United States totaled $109 billion, or roughly 20% of the total.

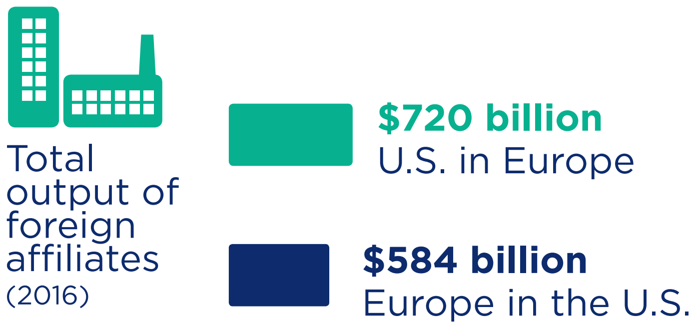
Beyond Europe, only Canada and Japan have any real economic presence in the U.S. Japanese affiliate output totaled nearly $123 billion in 2015, the last year of actual data, while Canadian affiliate output totaled $74 billion. Overall, U.S. affiliates of foreign multinationals contributed roughly $895 billion to U.S. aggregate production in 2015, with European affiliates accounting for nearly two-thirds of the total.

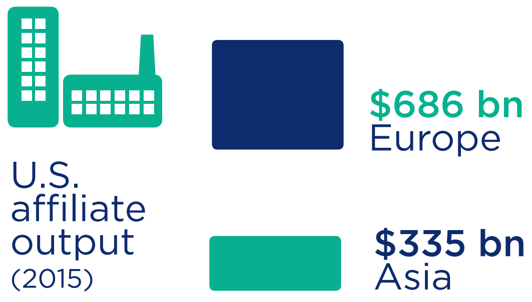
2. Assets of Foreign Affiliates

The global footprint of Corporate America and Corporate Europe is second to none, with each party each other's largest foreign investor. According to the latest figures from the Bureau of Economic Analysis, U.S. foreign assets in Europe totaled $15.2 trillion in 2015, representing roughly 60% of the global total.

For 2016, we estimate that U.S. foreign assets in Europe reached $15.7 trillion, close again to 60% of the global total. Within the region, the bulk of U.S. assets were in the United Kingdom, with U.S. assets in excess of $5 trillion, or around 20% of the global total.

$15.2 trillion U.S. foreign assets in Europe





U.S. assets in the Netherlands (around $2.8 trillion) were the second largest in Europe in 2015. America's significant presence in the Netherlands reflects its strategic role as an export platform/distribution hub for U.S. firms doing business across the continent. More than half of affiliate sales in the Netherlands are for export, namely within the EU.

Meanwhile, America's asset base in Germany ($794 billion in 2015) was roughly one-quarter larger than its asset base in all of South America. America's asset base in Poland, the Czech Republic and Hungary (roughly $164 billion) was much larger than corporate America's assets in India ($131 billion). America's assets in Ireland ($1.4 trillion in 2015) are much larger than either those in France ($387 billion), or Switzerland ($835 billion), and light years ahead of those in China ($392 billion).

As for foreign-owned assets in the United States, Europe's stakes are sizable and significant. Total assets of European affiliates in the United States were valued at roughly $7.8 trillion in 2015, and by our estimates topped $8 trillion in 2016, or $8.2 trillion. The United Kingdom ranked first, followed by Germany, Switzerland and French firms. In 2015, the last year of available data, European assets accounted for nearly 60% of total foreign assets in the United States.

3. Affiliate Employment

U.S. and European foreign affiliates are the major source of onshored jobs for each side of the Atlantic. Affiliates of both U.S. and European parent companies employ more workers in the United States and Europe than in other places in the world. Most foreign workers on the payrolls of U.S. foreign affiliates are employed in the developed nations, notably Europe.

U.S. foreign affiliate employment in Europe has increased steadily over the past decade and a half, with affiliate employment in Europe rising from 3.7 million workers in 2000 to 4.7 million workers in 2015, the last year of available data. That represents a 25% increase. We forecast that U.S. foreign affiliates in Europe employed 4.8 million workers in 2016.

While aggregate employment levels continue to rise, U.S. affiliate manufacturing employment has plateaued since 2000. U.S affiliate manufacturing employment totaled 1.9 million in 2000 and a similar amount in 2015. However, while the overall number has stayed the same, the country composition has changed. The largest employment declines were reported in the United Kingdom, with the total manufacturing work force falling from 431,000 in 2000 to 312,000 in 2015. Employment in France dropped from 249,000 to 195,000, while a slight decline from 388,000 to 385,000 was reported in Germany between 2000 and 2015. In terms of net gains, not losses in manufacturing jobs, Poland has been a significant winner, with U.S. affiliate manufacturing employment more than doubling between 2000 and 2015, rising from 51,000 to over 122,000 in 2015, and continuing on an upward trend.

On a global basis, U.S. majority-owned affiliates (including banks and non-bank enterprises) employed 14.1 million workers in 2015, with the bulk of these workers – roughly 33% – toiling in Europe. That share is down from 41% in 2008, with the decline reflecting the cyclical slowdown in Europe over the past few years and the fact that a rising share of U.S. overseas capacity is expanding at a faster pace in the faster-growing emerging markets versus slow-growth developed nations. Another factor at work – more and more U.S. firms are opting to stay home due to competitive wage and energy costs, as opposed to shipping more capacity abroad. The sweeping overhaul of the U.S. corporate tax code, which significantly lowers America's tax rate relative to many in Europe, will also spur more investment to come home or stay in the United States.

Most employees of U.S. affiliates in Europe live in the United Kingdom, Germany and France. Meanwhile, U.S. majority-owned firms are on balance hiring more people in services activities than in manufacturing.

The latter accounted for just 40% of total U.S. foreign affiliate employment in Europe in 2015. The key industry in terms of manufacturing employment was transportation, with U.S. affiliates employing nearly 376,000 workers, followed by chemicals (300,000). Wholesale employment was among the largest sources of services-related employment, which includes employment in such activities as logistics, trade, insurance and other related functions.

Although services employment among U.S. affiliates has grown at a faster pace than manufacturing employment over the past decade, U.S. affiliates employed more manufacturing workers in Europe in 2015 (1.9 million) than in 1990 (1.6 million). This reflects the EU enlargement process, and hence greater access to more manufacturing workers, and the premium U.S. firms place on highly skilled manufacturing workers, with Europe one of the largest sources in the world.

While the aggregate number of U.S. manufacturing jobs in Europe has increased over the past decades, the geographic distribution of such jobs has shifted. In general, the shift has been towards low-cost locations like the Czech Republic, Poland and Hungary, at the expense of the UK, Germany and France. The latter three nations just mentioned accounted for 67% of total U.S. affiliate manufacturing employment in Europe in 1990. By 2015, however, their collective share had dropped to 48%. The United Kingdom took the biggest hit, with the UK's share of manufacturing employment accounting for just 17% of the total in 2015, versus a share of 29% in 1990. Meanwhile, the combined share of U.S. affiliate manufacturing employment in Poland, the Czech Republic and Hungary jumped from virtually zero to nearly 12% in 2015, indicative of the eastern spread of U.S. European operations.

Even given these changes, the manufacturing workforce of U.S. affiliates in Germany totaled 385,000 in 2015 – greater than the number of manufactured workers employed in Brazil (313,000) and India (219,000) but well below China (756,000).

When it comes to affiliate employment, trends in the United States are similar to those in Europe. In other words, despite stories on the continent about local European companies relocating to lower cost locales in central Europe and Asia, most foreign workers of European firms are employed in the U.S. Based on the last figures, European majority-owned foreign affiliates directly employed 4.3 million U.S. workers in 2015 – some 165,000 more workers than in 2014, although roughly 334,000 workers less than U.S. affiliates employed in Europe. In 2015, the top five European employers in the U.S. were firms from the United Kingdom (1.1 million), France (677,000), Germany (674,000), Switzerland (468,000) and the Netherlands (460,000). French, Irish and UK firms largely accounted for the boost in U.S. employment by European companies between 2014, with companies from the three countries employing over 115,000 more U.S.-based workers in 2015 than in 2014. European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2015.

Table 5 The U.S. - European Employment Balance

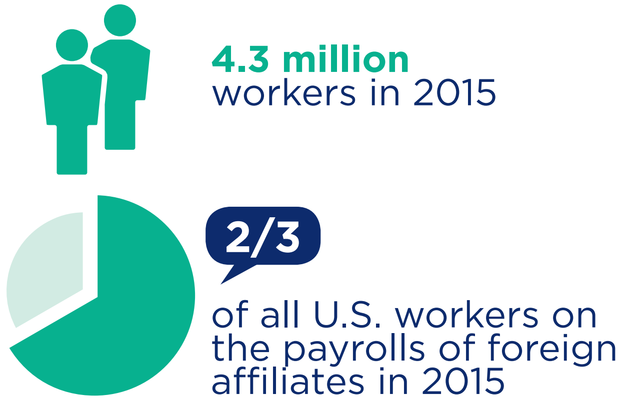
Thousands of employees, 2016*

Country	European Affiliates of U.S. Companies	U.S. Affiliates of European Companies	Employment Balance
Austria	50.8	17.0	-33.8
Belgium	129.6	153.4	23.8
Czech Republic	96.1	0.0	-96.1
Denmark	41.6	38.0	-3.6
Finland	26.0	24.2	-1.8
France	488.0	691.1	203.1
Germany	717.3	687.4	-29.9
Greece	16.9	2.6	-14.4
Hungary	68.6	0.1	-68.5
Ireland	127.3	274.0	146.7
Italy	217.2	76.8	-140.4
Luxembourg	23.6	7.1	-16.4
Netherlands	251.2	469.6	218.4
Norway	49.3	7.1	-42.1
Poland	189.2	0.7	-188.5
Portugal	30.3	0.7	-29.6
Romania	66.4	0.0	-66.4
Spain	181.6	83.3	-98.2
Sweden	73.0	214.8	141.8
Switzerland	102.4	477.6	375.2
United Kingdom	1,444.0	1,162.8	-281.2
Europe	**4,751.1**	**4,405.6**	**-345.5**

Note: Employment balance «+» favors the United States.
Source: Bureau of Economic Analysis.
**2016 Estimates. Majority-owned bank and non-bank affiliates.*

In the aggregate, the transatlantic workforce directly employed by U.S. and European foreign affiliates in 2015 was roughly 9 million strong, up 4% from the year before. In 2017, modest gains in employment were most likely achieved on both sides of the pond, with employment levels in the U.S. most likely rising at a faster pace than in Europe. Employment

European foreign affiliate employment in the U.S.



U.S. foreign affiliate employment in Europe

growth is expected to be solid again in 2018. That said, as we have stressed in the past, these figures understate the employment effects of mutual investment flows, since these numbers are limited to direct employment, and do not account for indirect employment effects on non-equity arrangements such as strategic alliances, joint ventures, and other deals. Moreover, foreign employment figures do not include jobs supported by transatlantic trade flows. Trade-related employment is sizable in many U.S. states and many European countries.

In sum, direct and indirect employment remains quite large. We estimate that the transatlantic workforce numbers some 13-15 million workers. Europe is by far the most important source of "onshored" jobs in America, and the U.S. is by far the most important source of "onshored" jobs in Europe.

4. Research and Development (R&D) of Foreign Affiliates

The United States and Europe no longer have a monopoly on global R&D. As the globalization of R&D has gathered pace this decade, more and more global R&D expenditures are emanating from Asia in general, and China in particular. As mentioned earlier, China is rapidly emerging as an innovative superpower, with Beijing unrelentingly focused on being a global leader in artificial intelligence, quantum computing, space exploration, cyber security, life sciences, electric vehicles, supercomputing, semiconductors and 5G wireless devices. To wit, innovation is at the core of the 13th Five-Year Plan (2016-2020), with the stated objective of making China an "innovative nation" by 2020; an "international innovation leader" by 2030; and a "world powerhouse of scientific and technological innovation" by 2050.

While governments and corporations are the main drivers of R&D spending, foreign affiliates of multinationals are also in the thick of things. In fact, foreign affiliate R&D has become more prominent over the past decades as firms seek to share development costs, spread risks, and tap into the intellectual talent of other nations. Alliances, cross-licensing of intellectual property, mergers and acquisitions, and other forms of cooperation have become more prevalent characteristics of the transatlantic economy in the past decade. The internet, in particular, has powered greater transatlantic R&D. The complexity of scientific and technological innovation is leading innovators to partner and share costs, find complementary expertise, gain access to different technologies and knowledge quickly, and collaborate as part of "open" innovation networks. Cross-border collaboration with foreign partners can range from a simple one-way transmission of information to highly interactive and formal arrangements. Developing new products, creating new processes, and driving more innovation – all of these activities result from more collaboration between foreign suppliers and U.S. and European firms.

That said, bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2015, the last year of available data, U.S. affiliates sank $31.3 billion on research and development in Europe, down slightly from the prior year. On a global basis, Europe accounted for roughly 57% of total U.S. R&D in 2015. R&D expenditures by U.S. affiliates were the greatest in Germany ($8.0 billion), the United Kingdom ($6.2 billion), Switzerland ($3.9 billion), Ireland ($3.0 billion), France ($2.2 billion) and the Netherlands ($1.2 billion). These six nations accounted for 78% of U.S. spending on R&D in Europe in 2015.

In the United States, meanwhile, expenditures on R&D performed by majority-owned foreign affiliates totaled $57 billion in 2015, up slightly from the prior year. As in previous years, a sizable share of this R&D spending emanated from world-class leaders from Europe, given their interest in America's highly skilled labor force and world-class university system. Most of this investment took place among European firms in such research-intensive sectors as autos, energy, chemicals, and telecommunications. In 2015, R&D spending by European affiliates totaled $41 billion, accounting for 72% of total foreign R&D spending in the United States.

R&D spending of foreign affiliates
(2015)

U.S. in Europe:
$31.3 billion

Europe in the U.S.:
$41 billion

By nation, Swiss-owned affiliates were the largest foreign source of R&D in the United States in 2015, with Swiss firms pumping some $9.7 billion in R&D spending in the United States. Swiss firms accounted for nearly a quarter of the European total. British firms accounted for the second largest percentage of affiliate expenditures, with a 19.5% share in 2015. Germany's share was close, at 17.6%, followed by France, 13.1%. As Table 6 highlights, some of the world's most innovative companies are domiciled in the United States and Europe.

Table 6 The Top 20 R&D Spenders

		R & D Spending			
2017	**Company**	**2017, $U.S. Billions**	**Change from 2016**	**Country**	**Industry**
1	Amazon	16.1	28.3%	United States	Software and Internet
2	Alphabet	13.9	13.6%	United States	Software and Internet
3	Intel	12.7	5.0%	United States	Computing and Electronics
4	Samsung	12.7	-0.1%	South Korea	Computing and Electronics
5	Volkswagen	12.1	-7.7%	Germany	Auto
6	Microsoft	12.0	-0.5%	United States	Software and Internet
7	Roche Holding	11.4	14.0%	Switzerland	Healthcare
8	Merck	10.1	51.0%	United States	Healthcare
9	Apple	10.0	24.5%	United States	Computing and Electronics
10	Novartis	9.6	0.6%	Switzerland	Healthcare
11	Toyota	9.3	5.7%	Japan	Auto
12	Johnson & Johnson	9.1	0.5%	United States	Healthcare
13	General Motors	8.1	8.0%	United States	Auto
14	Pfizer	7.9	2.4%	United States	Healthcare
15	Ford	7.3	9.0%	United States	Auto
16	Daimler	6.9	3.3%	Germany	Auto
17	Oracle	6.8	17.8%	United States	Software and Internet
18	Cisco	6.3	1.4%	United States	Computing and Electronics
19	Honda	6.2	13.3%	Japan	Auto
20	Facebook	5.9	22.9%	United States	Software and Internet
		194.5	**9.4%**		

Source: Bloomberg data, Capital IQ data, Strategy& analysis.

5. Intra-firm Trade of Foreign Affiliates

While cross-border trade is a secondary means of delivery for goods and services across the Atlantic, the modes of delivery – affiliate sales and trade – should not be viewed independently. They are more complements than substitutes, since foreign investment and affiliate sales increasingly drive cross-border trade flows. Indeed, a substantial share of transatlantic trade is considered intra-firm or related-party trade, which is cross-border trade that stays within the ambit of the company. Intra-firm or related party-trade occurs when BMW or Siemens of Germany sends parts to BMW of South Carolina or Siemens of North Carolina; when Lafarge or Michelin send intermediate components to their Midwest plants, or when 3M ships components from its office products or communications sectors from the Midwest to affiliates in Germany or the UK.

The tight linkages between European parent companies and their U.S. affiliates are reflected in the fact that roughly 60% of U.S. imports from the European Union consisted of related-party trade in 2016. That is much higher than the related-party imports from the Asia-Pacific nations (around 40%) and well above the global average (49%). The percentage was even higher in the case of Ireland (85%) and Germany (69%).

Table 7 Related Party Trade, 2016

Country	U.S. Imports: "Related Party Trade," as % of Total	U.S. Exports: "Related Party Trade," as % of Total
European Union	59.9	35.9
Germany	68.7	35.4
France	46.6	28.0
Ireland	85.4	30.0
Netherlands	51.7	51.9
United Kingdom	52.3	30.0

Source: U.S. Census Bureau.

Meanwhile, nearly 36% of U.S. exports to Europe in 2016 represented related-party trade, but the percentage is much higher for some nations. For instance, more than half of total U.S. exports to the Netherlands (52%) were classified as related-party trade. The comparable figure for Germany was 35% and 28% for France.

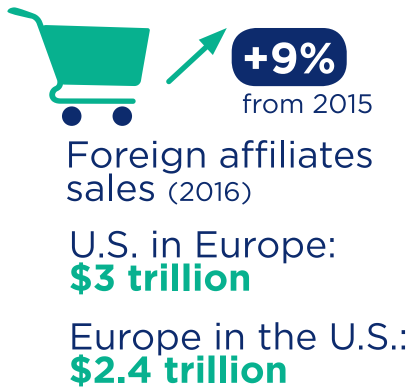
6. Foreign Affiliate Sales

U.S. majority-owned foreign affiliate sales of goods and services on a global basis totaled an estimated $7 trillion in 2016, having rebounded from the decline in 2009 caused by the global recession. Total U.S. exports, in contrast, were $2.2 trillion in 2016, or roughly 30% of foreign affiliate sales. This gap underscores the primacy of foreign affiliate sales over U.S. exports. As we have noted many times before, one of the best kept secrets in Washington is how U.S. firms actually deliver goods and services to foreign customers.

As usual, Europe accounted for the bulk of U.S. affiliate sales in 2016. We estimate that U.S. foreign affiliate sales in Europe were $3 trillion, up roughly 9% from the prior year. U.S. affiliate sales in Europe, by our estimates, amounted for almost half of the global total.

Reflecting the primacy of Europe when it comes to U.S. foreign affiliate sales, sales of U.S. affiliates in Europe were two-thirds larger than the comparable figures for the entire Asian region in 2015, the last year of available data. Affiliate sales in the United Kingdom ($623 billion) were almost double total sales in South America. Sales in Germany ($357 billion) were over double the combined sales in Africa and the Middle East.

Affiliate sales are also the primary means by which European firms deliver goods and services to customers in the United States. In 2016, for instance, we estimate that majority-owned European affiliate sales in the U.S. ($2.4 trillion) were more than triple U.S. imports from Europe. Affiliate sales rose by 9% by our estimates. By country, and using the last year of available data, sales of British firms were the largest ($514 billion) in 2015, followed by Germany ($465 billion), and the Netherlands ($292 billion). For virtually all countries in Europe, foreign affiliate sales were easily in excess of their U.S. imports in 2015.



7. Foreign Affiliate Profits

Transatlantic profits have rebounded from the depressed levels of 2009, when the global financial crisis and ensuing recession triggered a sharp downturn in affiliate income/earnings on both sides of the pond. In 2016, U.S. affiliate income in Europe rose to a record $243 billion, and by another 5% in 2017 by our estimate. The figure for 2016 was more than one-third larger than the depressed levels of 2009, when affiliate income earned in Europe plunged to $179 billion. Income earned last year was another record, estimated at $255 billion. Meanwhile, European affiliate income earned in the United States in 2017 (estimated at $113 billion) was relatively flat from the year before ($115 billion).

Accelerating growth in Europe, along with a weaker U.S. dollar versus the euro, made for a very benign earnings backdrop for U.S. foreign affiliates in Europe in 2017. Owing in part to these dynamics, the region still accounts for the bulk of U.S. global foreign affiliate income, with the region accounting for roughly 56% of global income in the first nine months of 2017. Europe, in other words, remains a very important market to U.S. multinationals. As a footnote, we define Europe here in very broad terms, including not only the EU28 but also Norway, Switzerland, Russia and smaller markets in central and Eastern Europe.

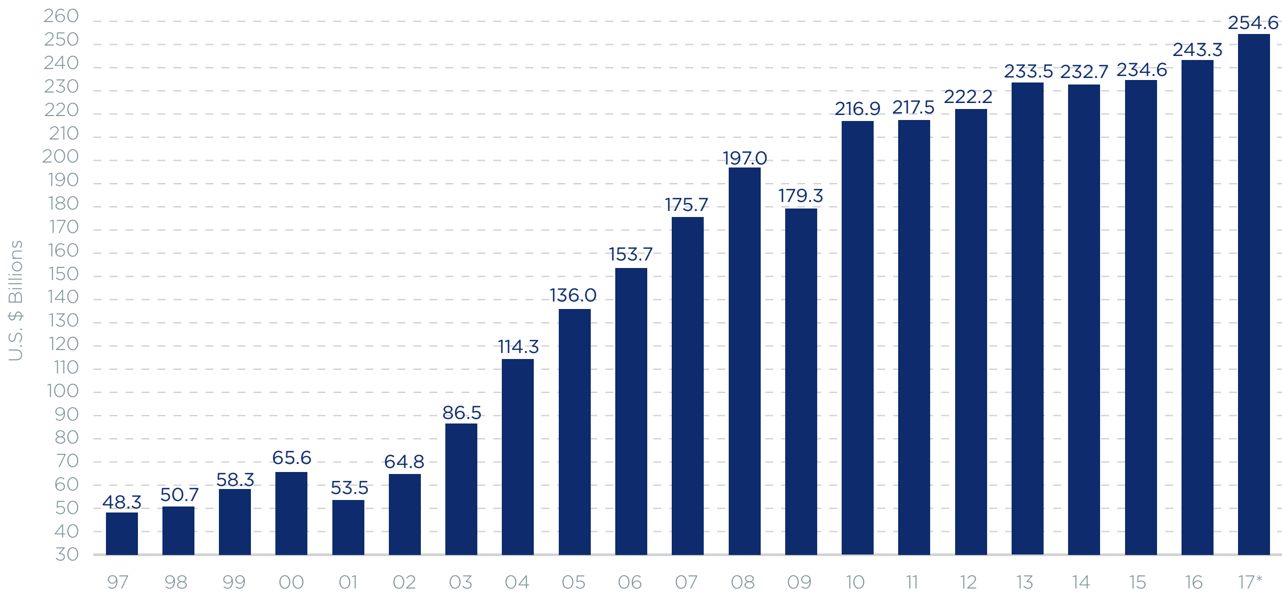
On a comparative basis, U.S. affiliate income from Europe is simply staggering, with foreign affiliate income in Europe – $191 billion in the first nine months of 2017 – more than the combined affiliate income of Latin America ($62 billion) and Asia ($63 billion). It is interesting to note that combined U.S. affiliate income from China and India in 2016 ($16 billion), the last year of full data, was a fraction of what U.S. affiliates earned/reported in the Netherlands, the United Kingdom and Ireland.

Still, there is little doubt that the likes of China, India and Brazil are becoming more important earnings engines for U.S. firms. To this point, in the first nine months of 2017, U.S. affiliate income in China alone ($10 billion) was well in excess of affiliate income in Germany ($4.5 billion), France ($2 billion), and Spain ($2.7 billion). U.S. affiliates in India earned $4.3 billion in the January-September period, well more than that earned in many European nations.

All that said, we see rising U.S. affiliate earnings from the emerging markets as a complement, not a substitute, to earnings from Europe. The latter very much remains a key source of prosperity for corporate America.

Similarly, the United States remains the most important market in the world in terms of earnings for many European firms. Profits of European affiliates

Table 8 U.S. Earnings from Europe Hitting New Highs (U.S. foreign affiliate income from Europe)



Source: Bureau of Economic Analysis.
**Data for 2017 is estimate.*

in the United States plunged 21.3% in 2009 before rebounding in 2010 and 2011. In the first nine months of 2017, the income of European affiliates in the U.S. was basically flat from the same period a year ago.

8. Transatlantic Services Linkages

Services are the sleeping giant of the transatlantic economy, and a key area offering significant opportunities for stronger and deeper transatlantic linkages.[1]

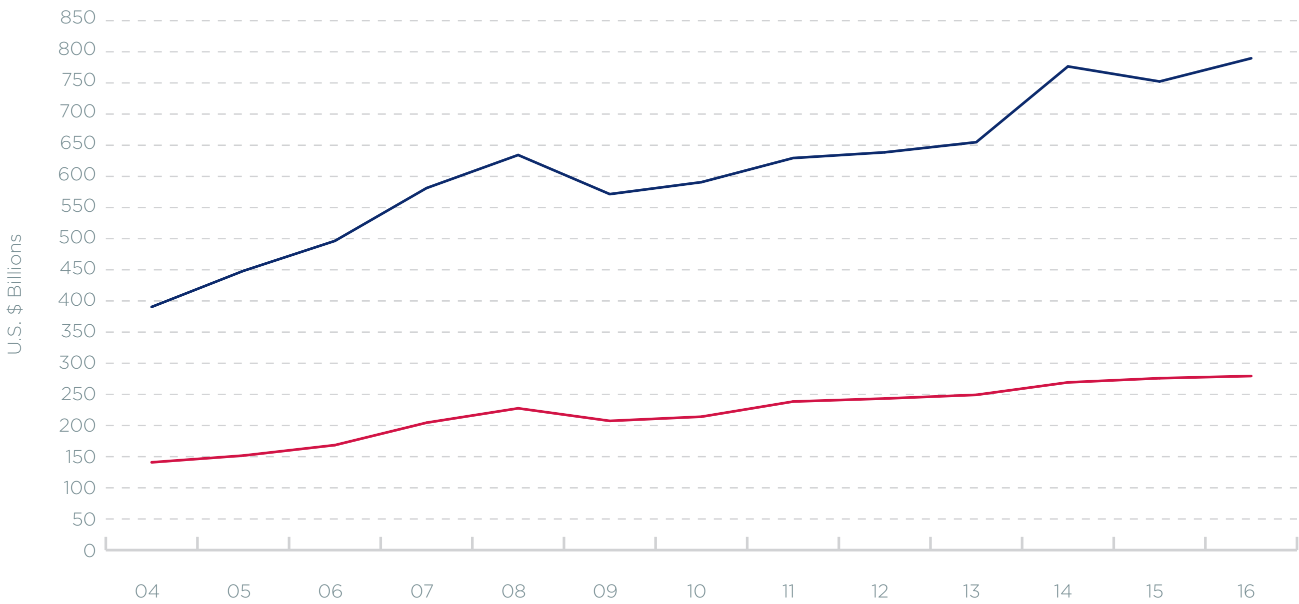
That said, transatlantic ties in services – both in trade and investment – are already quite large. Indeed, the services economies of the United States and Europe have become even more intertwined over the past decade, with cross border trade in services and foreign affiliate sales of services continuing to expand in the post-crisis environment. By sectors, transatlantic linkages continue to deepen in insurance, education, telecommunications, transport, utilities, advertising and computer services. Other sectors such as aviation, e-health and e-commerce are slowly being liberalized and deregulated.

On a regional basis, Europe accounted for 37% of total U.S. service exports and for 42% of total U.S. services imports in 2016.

Four out of the top ten export markets for U.S. services in 2016 were in Europe. The United Kingdom ranked first, followed by Ireland (ranked 4th), Switzerland (6th), and Germany (8th). Of the top ten service providers to the U.S. in 2016, five were European states, with the United Kingdom ranked first, Germany second, Switzerland seventh, Ireland eighth, and France ninth. The U.S. enjoyed a $67 billion trade surplus in services with Europe in 2016, versus a $167 billion trade deficit in goods with Europe.

U.S. services exports to Europe reached a record $279 billion in 2016, up more than one-third from the cyclical lows of 2009, when exports to Europe plunged 9%. Service exports (or receipts) have been fueled by a number of services-related activities like travel, passenger fares, education and financial services. In terms of transport, the top five export markets in 2016, ranking order, were Japan, the UK, Canada, China, and Germany. The United Kingdom ranked as the largest market for exports of insurance services; the UK and Luxembourg also ranked in the top five in financial services. Ireland was the top export market for U.S. trade in intellectual property – or charges or fees for the use of intellectual property rights. The United Kingdom ranked number one in telecommunications, computer and information services. As for "other business service exports,"

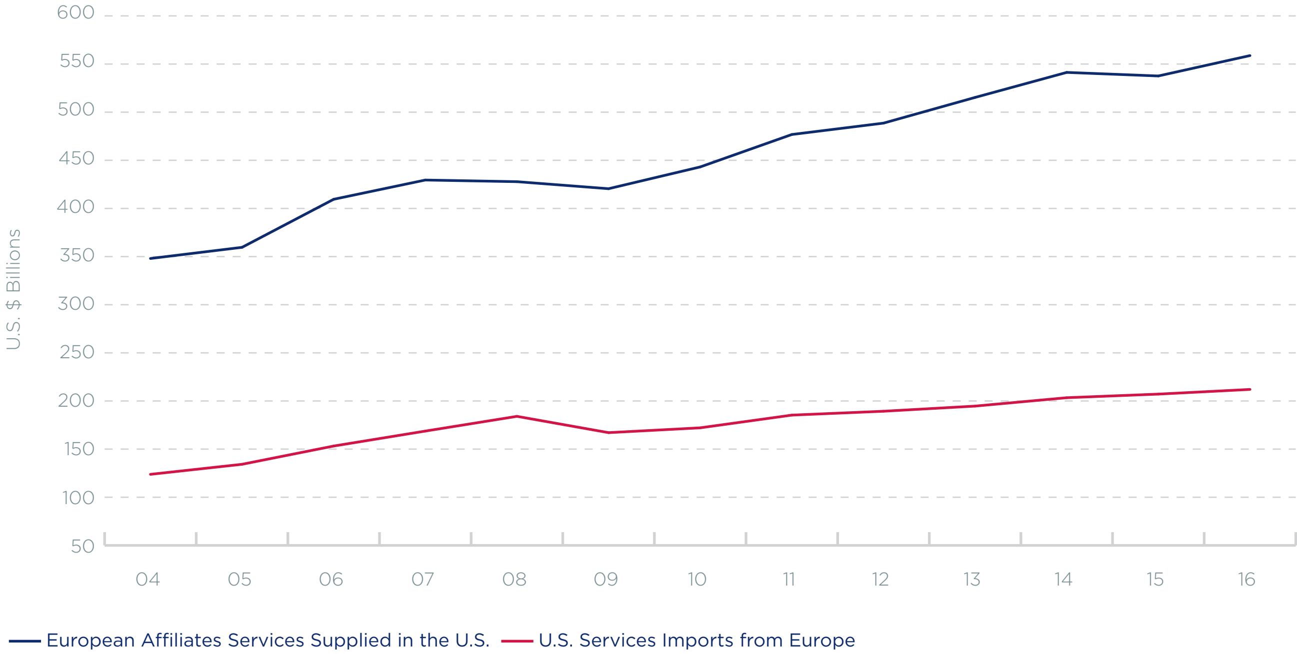
Table 9 **U.S. - Europe Services Linkages**



U.S. Affiliates Services Supplied in Europe. U.S. Services Exports to Europe

Source: Bureau of Economic Analysis.
Majority-owned bank and non-bank affiliates. Services supplied in Europe estimates for 2016.

Table 10 Europe - U.S. Services Linkages



Source: Bureau of Economic Analysis.
Majority-owned bank and non-bank affiliates. Services supplied in the U.S. estimates for 2016.

or activities like management consulting and R&D, Ireland ranked number one in 2016, followed by Switzerland and the UK.

As for U.S. services imports from Europe, figures for 2016 were at all-time highs. U.S. services imports from Europe totaled $212 billion, up 27% from the depressed levels of 2009. The United Kingdom, Germany, Switzerland, Ireland, France and Italy all rank as top service exporters to the United States.
Beyond services trade, there are the activities of foreign affiliates, with transatlantic foreign affiliate sales of services much deeper and thicker than traditional trade figures suggest. Indeed, sales of affiliates have exploded on both sides of the Atlantic over the past few decades thanks to the falling communication costs and the proliferation of the internet. Affiliate sales of services have not only supplemented trade in services but also have become the overwhelming mode of delivery in a rather short period of time. Worldwide affiliate sales of U.S. services almost doubled in the ten years from 2005 to 2015, exceeding $1 trillion for the first time in 2007. In 2015, the last year of full data, U.S. affiliate services sales ($1.5 trillion) were roughly double the level of U.S. services exports ($753 billion).

Sales of services of U.S. foreign affiliates in Europe retreated slightly in 2015 to $752 billion, but have risen 30% since 2009, when services sales plunged on account of the transatlantic recession. U.S. services exports to Europe in the same year totaled $276 billion, well below sales of services by affiliates. In other words, like goods, U.S. firms deliver services in Europe (and vice versa) primarily by U.S. foreign affiliates. The United Kingdom accounted for roughly 31% of all U.S. affiliate services sales in Europe; affiliate sales totaled $231 billion, a figure greater than total affiliate sales in South and Central America ($127 billion), Africa ($14 billion) and the Middle East ($21 billion). Affiliate sales in Ireland remain quite large – $115 billion – and reflect strong U.S.-Irish foreign investment ties with leading U.S. internet, software and social media leaders. On a global basis, Europe accounted for over 50% of total U.S. affiliate service sales.

We estimate that sales of services of U.S. affiliates in Europe rose by around 5%, to $790 billion in 2016. U.S. services exports to Europe for the same year were $279 billion, well below sales of affiliates.

U.S. affiliate sales in services in Europe continue to exceed sales of services by U.S. affiliates of European firms. In 2015, the last year of complete data, European affiliate services sales in the United States totaled $538 billion, about 30% below comparable sales of U.S. affiliates in Europe. That said, European affiliates are the key provider of affiliate services in the United States. Foreign affiliate sales of services in the U.S. totaled $952 billion in 2015, with European firms accounting for 56% of the total. By country, British affiliates lead in terms of affiliate sales of services in Europe ($135 billion), followed closely by Germany ($132 billion).

We estimate that European affiliate services sales in the U.S. totaled $559 billion in 2016, well above U.S. services imports from Europe ($212 billion) in the same year. The difference between affiliate sales and services imports reflects the ever-widening presence of European services leaders in the U.S. economy.

In the end, the U.S. and Europe each owe a good part of their competitive position in services globally to deep transatlantic connections in services industries provided by mutual investment flows. A good share of U.S. services exports to the world are generated by European companies based in the United States, just as a good share of European services exports to the world are generated by U.S. companies based in Europe.

In sum, these eight indices convey a more complex and complete picture of U.S.-European engagement. Transatlantic commerce goes well beyond trade but cross-border in and of itself is an important ingredient of the U.S.-European relationship. Foreign direct investment and foreign affiliate sales, not trade, represent the backbone of the transatlantic economy. The eight variables just highlighted underscore the depth and breadth of the transatlantic commercial relationship.

Table 11 America's FDI Roots in Europe (Billions of $)

Industry	U.S. FDI to Europe	Europe's % of Total U.S. FDI
European Total, all industries	3,175	60%
Manufacturing	319	48%

Note: Historic-cost basis, 2016.
Source: Bureau of Economic Analysis.

Table 12 Europe's FDI Roots in the U.S. (Billions of $)

Industry	U.S. FDI from Europe	Europe's % of Total U.S. FDI
Total from Europe, all industries	2,606	70%
Manufacturing	1,196	78%

Note: Historic-cost basis, 2016.
Source: Bureau of Economic Analysis.

Foreign direct investment and foreign affiliate sales, not trade, represent the **backbone of the transatlantic economy**

Endnotes

1 See Daniel S. Hamilton and Joseph Quinlan, eds., *Sleeping Giant: Awakening the Transatlantic Services Economy* (Washington, DC: Center for Transatlantic Relations, 2007).