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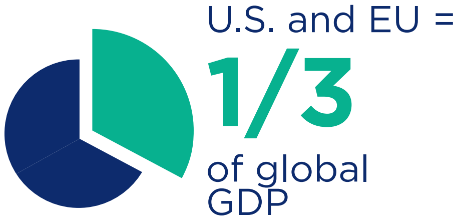
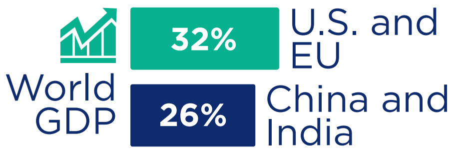
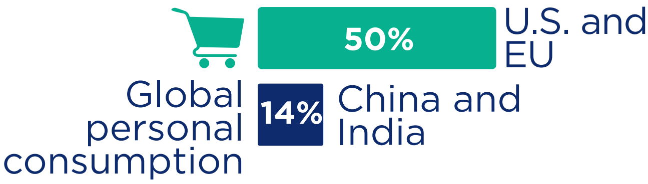
Jobs, Trade and Investment: Enduring Ties that Bind



Notwithstanding the rise of the middle class in many emerging markets and the robust growth rates of countries such as China and India, the United States and the European Union remain each other's most important foreign market in the world. This is not likely to change any time soon given the deep and entangled commercial ties that link the transatlantic economy, and given that the United States and the European Union are each embroiled in increasingly contentious trade and investment tensions with China.



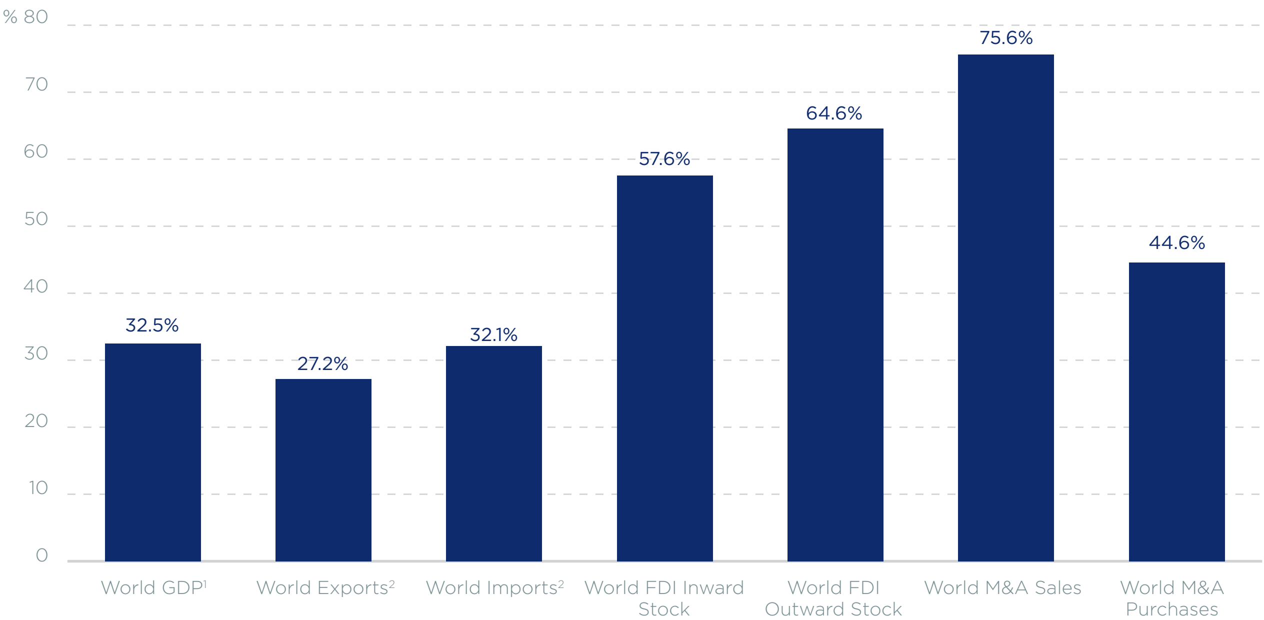
Thanks to the dense interlinkages of investment, trade, technology, innovation and jobs that bind the two sides of the North Atlantic together, the transatlantic economy remains a key pillar of the global economy. The combined output of the United States and the European Union (plus Switzerland, Norway and Iceland) accounted for roughly one-third of world GDP in terms of purchasing power parity in 2018. Even if one excludes the United Kingdom, which has signaled its intent to leave the EU, the U.S. and the EU account for a substantial 30% of world GDP – higher than the combined output of China and India (26% of world GDP).



The transatlantic economy is not only larger than the twin giants of Asia but also significantly wealthier. And because wealth matters, it's little wonder that consumers in the U.S. and the EU easily outspend their counterparts in China and India. As mentioned in Chapter One, the U.S. and EU combined accounted for 50% of global personal consumption in 2017, versus a combined share of just 14% for China and India.

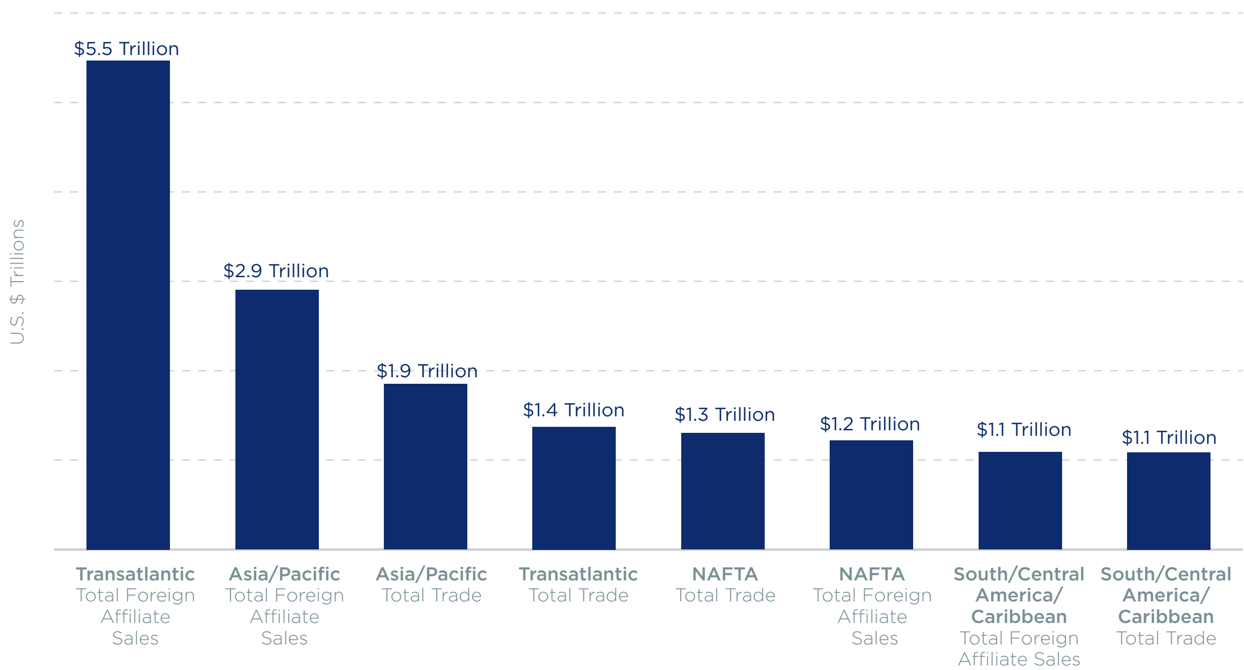
In addition to the above, the transatlantic economy is a repository of innovation and technological advancement, and at the forefront of global foreign direct investment and global mergers and acquisitions activity. Taken together, U.S. and European exports to the world accounted for 27% of global exports in 2017, the last year of complete data; combined imports represented over 32% of the world total. Meanwhile, the U.S. and Europe together accounted for 58% of inward stock of foreign direct investment (FDI) and 65% of outward stock of FDI. 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.

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



Sources: UN, IMF, figures for 2017. Transatlantic economy measured as U.S., EU, Norway, Switzerland and Iceland.
1. Based on PPP estimates.
2. Excluding intra-EU, Norway, Switzerland and Iceland trade.

Table 2 America's Major Commercial Arteries



Foreign Affiliate Sales: Estimates for 2017. Total Trade: Data for goods & services, 2017. 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.

In the end, it is the U.S.-EU partnership that continues to drive and dictate global trade, investment and capital flows. No commercial artery in the world is as large as the investment artery forged between the United States and Europe. Total transatlantic foreign affiliate sales were estimated at $5.5 trillion in 2017, easily ranking as the top artery in the world on account of the thick investment ties between the two parties. Total transatlantic foreign affiliate sales are roughly double total sales between the U.S. and Asia-Pacific region, over four times those with NAFTA partners Canada and Mexico,[1] and five times more than with South America, Central America and the Caribbean.

That said, the burgeoning middle class of the developing nations represents new sources of supply (labor) and demand (consumers) for U.S. and European firms. American and European firms are building out their in-country presence in the developing nations, and for good reason. Economic 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 developed nations. China, for instance, is rapidly emerging as an innovation superpower; India lags behind but is advancing; more people in Latin America, Africa and the Middle East are online and connecting to the digital economy. It all makes perfect sense for U.S. and European firms to invest outside the transatlantic economy. What is often missing from this either-or picture, however, is the fact that for many U.S. and European companies, the transatlantic economy is the geo-economic base from which they can engage successfully in other parts of the world. Many European car companies, for instance, invest in the United States and then export cars made in the U.S. to China and other countries. U.S. services companies, in turn, use the scale offered by their dense investment linkages across the transatlantic economy to be globally competitive when it comes to offering services in other parts of the world. Many U.S. multinationals – for both goods and services – also use their presence in Europe to serve the markets of North Africa and the Middle East, with operations preferable in stable and secure Europe versus the volatility of the Middle East/Africa.

In all of these ways, 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 when dissecting the activities of foreign affiliates on both sides of the pond.

The transatlantic economy

A launchpad to the rest of the world for U.S. and European companies

Box 1. Not by Trade Alone

There is a widespread tendency in political circles, by the media, among the broader public, and even by some in the business community to equate international commerce with trade in goods. By this reckoning, surpluses in goods trade are "good" and deficits are "bad." Yet trade deficits can arise due to factors other than trade, such as differing domestic growth, consumption or savings rates among countries. Equally important is a simple fact: trade in goods, as even trade itself, is a misleading benchmark of international commerce. This is especially true when it comes to the transatlantic economy.

As we document in this study, the broad-based nature of U.S.-European commercial ties cannot be understood by looking at merchandise trade figures alone. While some may associate the EU's large trade surplus in goods with the United States as a key competitive advantage for Europe, there are several other modes through which global companies reach consumers. These include services trade broadly, as well as digitally-deliverable services in particular – both key U.S. strengths. U.S. companies also deliver goods and services to Europeans through U.S. affiliates operating in Europe. They also generate so-called "primary income" from their foreign affiliate earnings as well as from investment income earned in Europe. These are all factors underscoring why investment, not trade, is the engine of the transatlantic economy. Of course, European companies do the same in the United States.

Taking all of these factors into consideration leads to a more balanced view of transatlantic commerce. While the United States does run a large deficit in goods with the EU (-$153 billion in 2017), the U.S. surplus in services trade (+$51 billion) and primary income (+$108 billion) with the EU more than offsets the goods imbalance. U.S. primary income receipts from the EU were almost $400 billion in 2017, versus EU-based companies' profits and investment income of just $288 billion in the United States.

In short, we believe the eight indices we set forth in this chapter offer a more accurate view of the nature and significance of the transatlantic economy than a narrow focus on goods trade alone.

The Ties That Bind – Quantifying the Transatlantic Economy

An essential key to understanding the enduring strength and importance of the transatlantic economy is to recognize that investment, not trade, drives U.S.-EU commercial relations. It is the activities of foreign affiliates – the foot soldiers of the transatlantic partnership – that bind the United States and Europe together. They have constructed a formidable foundation on both sides of the Atlantic over the past half century.

Over the past years we have outlined and examined eight key indices that offer a clear picture of the "deep integration" forces binding the U.S. 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 cyclical swings in 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. The total output, for instance, of U.S. foreign affiliates in Europe (an estimated $695 billion in 2017) and of European foreign affiliates in the U.S. (estimated at $586 billion) was greater than the total gross domestic product of most countries. Combined, transatlantic affiliate output – nearly $1.3 trillion – was larger than the output of such countries as the Netherlands, Turkey or Indonesia.

Total output of foreign affiliates
(2017)

$695 billion
U.S. in Europe

$586 billion
Europe in the U.S.

U.S. affiliate output
(2016)

$665 bn
Europe

$329 bn
Asia

By our estimation, European affiliate output in the United States rose by around 4% in 2017, while U.S. affiliate output in Europe rose by a slightly faster pace of 4.5%. We expect modest gains in U.S. foreign affiliate output in the near term, reflecting weaker economic conditions across Europe. In the United States, European affiliates are operating in one of the most dynamic economies in the world and are expected to boost their near-term output again this year.

On a global basis, the aggregate output of U.S. foreign affiliates was an estimated $1.4 trillion in 2017, with Europe (broadly defined) accounting for around 51% of the total.

Looking at actual figures for 2016 from the Bureau of Economic Analysis, U.S. affiliate output in Europe ($665 billion) was more than double affiliate output in the entire Asia-Pacific region ($329 billion). While affiliate output in places like China ($65 billion in 2016) and India ($29 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 ($81 billion), Ireland ($91 billion), and the United Kingdom ($166 billion).

In the United States, 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 an estimated $144 billion in 2017, about one-quarter of the European total. For the same year, output from German affiliates operating in the United States totaled $109 billion, or nearly 20% of the European total.

In 2016, the last year of available data, European affiliates in the United States accounted for nearly two-thirds of the roughly $911 billion that U.S. affiliates of foreign multinationals contributed overall to U.S. aggregate production.

Beyond Europe, only Canada and Japan have any real economic presence in the United States. Japanese affiliate output totaled nearly $135 billion in 2016, the last year of actual data, while Canadian affiliate output totaled $81 billion.

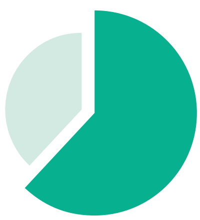
2. Assets of Foreign Affiliates

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 $15.6 trillion in 2016, representing roughly 62% of the global total. For 2017, we estimate that U.S. foreign assets in Europe reached $16 trillion, close again to the 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.

U.S. assets in the Netherlands (around $2.9 trillion) were the second largest in Europe in 2016. 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. To this point, more than half of affiliate sales in the Netherlands are for export, particularly within the EU.

Meanwhile, America's asset base in Germany ($811 billion in 2016) was more than a quarter larger than its asset base in all of South America. America's asset base in Poland, the Czech Republic and Hungary (roughly $144 billion) was on par with Corporate America's assets in India ($141 billion). America's assets in Ireland ($1.4 trillion) were much larger than those in either France ($376 billion) or Switzerland ($923 billion) and light years ahead of those in China ($404 billion).

U.S. foreign assets in Europe
$15.6 trillion
(2016)



62% of total U.S. foreign assets globally

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 $7.7 trillion in 2016. The United Kingdom ranked first, followed by Germany, Switzerland and French firms. In 2016, the last year of available data, European assets in the United States accounted for nearly 60% of all foreign-owned assets in the United States.

3. Affiliate Employment

U.S. and European foreign affiliates are a major source of employment for the general transatlantic workforce. Indeed, on a global basis, affiliates of both U.S. and European parents 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 since the turn of the century, with affiliate employment in Europe rising from 3.7 million workers in 2000 to 4.7 million workers in 2016, the last year of available data. That represents a 27% increase. We estimate that U.S. foreign affiliates in Europe employed 4.8 million workers in 2017, a slight increase from the year before.

While aggregate employment levels continue to rise modestly, manufacturing employment has plateaued since 2000. U.S affiliate manufacturing employment totaled 1.9 million in 2000, on par with the levels of 2016. However, while the overall number has stayed roughly the same, the country composition has changed. 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 largest employment declines were reported in the United Kingdom, with the total manufacturing work force falling from 431,000 in 2000 to 311,000 in 2016. U.S. manufacturing employment in France dropped from 249,000 to 197,000, while a slight decline from 388,000 to 382,000 was reported in Germany between 2000 and 2016.

Combined, the UK, Germany and France accounted for 67% of total U.S. affiliate manufacturing employment in Europe in 1990. By 2016, however, their collective share had dropped below 50%. Meanwhile, the combined share of U.S. affiliate manufacturing employment in Poland, the Czech Republic and Hungary jumped from virtually zero to nearly 15% in 2016, indicative of the eastern spread of U.S. European operations. In terms of net gains, not losses in manufacturing jobs, Poland has been a significant winner, with U.S. affiliate manufacturing employment growing more than 2.5 times, from 51,000 in 2000 to 128,000 in 2016, and continuing on an upward trend.

Even given these changes, the manufacturing workforce of U.S. affiliates in Germany (382,000) in 2016 was greater than the number of manufactured workers employed in Brazil (310,000) and India (209,000) – although well below China (740,000).

Roughly 35% of all manufacturing workers employed by U.S. foreign affiliates outside the United States in 2016 were based in Europe.

On a global basis, U.S. majority-owned affiliates (including banks and non-bank affiliates) employed 14.3 million workers in 2016, with the bulk of these workers – roughly 33% – toiling in Europe. That share is down from 38% in 2009. That decline is in part a consequence of Europe's cyclical slowdown for some years, and in part due to the fact that U.S. overseas capacity is expanding at a faster pace in faster-growing emerging markets than slow-growth

European foreign affiliate employment in the U.S.

4.6 million
workers in 2018
(estimate)

2/3
of all U.S. workers on the payrolls of foreign affiliates in 2015

U.S. foreign affiliate employment in Europe

4.9 million
workers in 2018
(estimate)

3.7 million
workers in 2000

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 in 2017, which significantly lowered America's tax rate relative to many in Europe, has spurred more investment to come home or stay in the United States – more on that in Chapter 5. That said, however, with the U.S. labor market the tightest in decades, U.S. firms are even more dependent on European workers to drive production and sales.

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 2016. The key industry in terms of manufacturing employment was transportation, with U.S. affiliates employing nearly 378,000 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 2016 (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 of skilled talent in the world.

When it comes to affiliate employment, trends in the United States are similar to those in Europe. Despite stories on the continent about local European companies relocating to lower cost locales in eastern Europe and Asia, most foreign workers of European firms are employed in the United States. Based on the latest figures, European majority-owned foreign affiliates directly employed 4.5 million U.S. workers in 2016 – some 155,000 more workers than in 2015, although roughly 225,000 workers less than U.S. affiliates employed in Europe. In 2016, the top five European employers in the United States were firms from the United Kingdom (1.2 million, up 113,000 from 2015), France (729,000, down 10,000 from 2015), Germany (692,000, up 11,000 from 2015), Switzerland (471,000, up 13,000 from 2015) and the Netherlands (475,000, up 21,000 from 2015). European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2016.

Table 3 The U.S. - European Employment Balance
Thousands of employees, 2017*

Country	European Affiliates of U.S. Companies	U.S. Affiliates of European Companies	Employment Balance
Austria	49.0	16.7	-32.2
Belgium	128.2	148.3	+20.1
Czech Republic	84.9	0.0	-84.9
Denmark	41.1	39.4	-1.7
Finland	20.8	23.9	+3.1
France	491.0	743.1	+252.0
Germany	715.3	706.0	-9.3
Greece	16.0	2.8	-13.3
Hungary	68.7	0.1	-68.6
Ireland	123.4	268.6	+145.1
Italy	228.1	79.8	-148.3
Luxembourg	23.0	6.5	-16.4
Netherlands	255.8	484.7	+228.9
Norway	42.8	7.0	-35.8
Poland	196.2	0.9	-195.3
Portugal	31.2	0.7	-30.5
Romania	74.3	0.0	-74.3
Spain	179.2	81.9	-97.3
Sweden	73.1	216.1	+143.0
Switzerland	104.8	480.4	+375.7
United Kingdom	1,502.9	1,262.3	-240.6
Europe	**4,809.9**	**4,585.1**	**-224.8**

Note: Employment balance "+" favors the United States
Source: Bureau of Economic Analysis.
**2017 Estimates. Majority-owned bank and non-bank affiliates.*

In the aggregate, the transatlantic workforce directly employed by U.S. and European foreign affiliates in 2016 was roughly 9.2 million strong, up roughly 3% from the year before. In 2017, modest gains in employment were most likely achieved on both sides of the pond. We estimate that U.S. affiliates based in Europe directly employed about 4.81 million European workers, and European affiliates based in the United States directly employed about 4.59 million Americans.

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 nonequity 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 nations.

In sum, direct and indirect employment remains quite large. We estimate that the transatlantic workforce numbers some 14-16 million workers. Europe is by far the most important source of "onshored" jobs in America, and the United States 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 remain primary drivers of global R&D. Yet as the globalization of R&D has gathered pace, more and more global R&D expenditures are emanating from Asia in general and China in particular. Beijing is 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. The goal of Beijing's 13th Five-Year Plan (2016-2020) is to make 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. The digital economy has become a powerful engine of 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.

Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2016, the last year of available data, U.S. affiliates spent $31.3 billion on research and development in Europe, down slightly from the prior year. On a global basis, Europe accounted for roughly 58% of total U.S. R&D in 2016, up slightly from 2015. R&D expenditures by U.S. affiliates were the greatest in Germany ($9.0 billion), the United Kingdom ($6.0 billion), Switzerland ($3.0 billion), Ireland ($2.9 billion), France ($2.3 billion) and Belgium ($1.7 billion). These six nations accounted for 83% of U.S. spending on R&D in Europe in 2016.

In the United States, meanwhile, expenditures on R&D performed by majority-owned foreign affiliates totaled $60.1 billion in 2016, over $3 billion more than in 2015. 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 by European firms took place in such research-intensive sectors as autos, energy, chemicals, and telecommunications. In 2016, R&D spending by European affiliates increased by almost $3 billion over 2015 to total $44 billion, accounting for 73% of total foreign R&D spending in the United States.

On a country basis, Swiss-owned affiliates were the largest foreign source of R&D in the United States in 2016, spending some $10.6 billion. Swiss firms accounted for nearly a quarter of the European total. British firms accounted for the second largest percentage of affiliate expenditures, with a 20% share in 2016. Germany's share was close, at 17.7%, followed by France, 12.9%. As Table 4 highlights, some of the world's most innovative companies are domiciled in the U.S. and Europe.

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

R&D spending of foreign affiliates
(2016)

$31.3 billion
U.S. in Europe

$44 billion
Europe in the U.S.

Table 4 The Top 20 R&D Spenders

2018	Company	R&D Spending: 2018, $U.S. Billions	R&D Spending: Change from 2017	Country	Industry
1	Amazon	22.6	40.6%	United States	Retailing
2	Alphabet	16.2	16.3%	United States	Software and Services
3	Volkswagen	15.8	14.1%	Germany	Auto
4	Samsung	15.3	6.8%	South Korea	Technology Hardware
5	Intel	13.1	2.8%	United States	Semiconductors
6	Microsoft	12.3	-5.7%	United States	Software and Services
7	Apple	11.6	15.3%	United States	Technology Hardware
8	Roche Holding	10.8	-8.7%	Switzerland	Healthcare
9	Johnson & Johnson	10.6	16.0%	United States	Healthcare
10	Merck & Co.	10.2	0.8%	United States	Healthcare
11	Toyota	10.0	2.6%	Japan	Auto
12	Novartis	8.5	-11.1%	Switzerland	Healthcare
13	Ford	8.0	9.6%	United States	Auto
14	Facebook	7.8	31.0%	United States	Software and Services
15	Pfizer	7.7	-2.7%	United States	Healthcare
16	General Motors	7.3	-9.9%	United States	Auto
17	Daimler	7.1	-9.2%	Germany	Auto
18	Honda Motor	7.1	8.7%	Japan	Auto
19	Sanofi	6.6	5.8%	France	Healthcare
20	Siemens	6.1	4.9%	Germany	Capital Goods
		214.5	**7.3%**		

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

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 General Motors or 3M ships components from Detroit, Michigan or St. Paul, Minnesota 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, the last year of available data. That is much higher than the related party imports from the Pacific Rim nations (around 40%) and South/Central America (42%) and well above the global average (49%). The percentage was even higher in the case of Ireland (85%) and Germany (69%).

Table 5 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 on a global basis (goods and services) totaled an estimated $6.2 trillion in 2017. Total U.S. exports, in contrast, were $2.4 trillion in 2017, or roughly 38% 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 2017. We estimate that U.S. foreign affiliate sales in Europe totaled $3 trillion, up roughly 7% from the prior year. U.S. affiliate sales in Europe, by our estimates, amounted for roughly half of the global total.

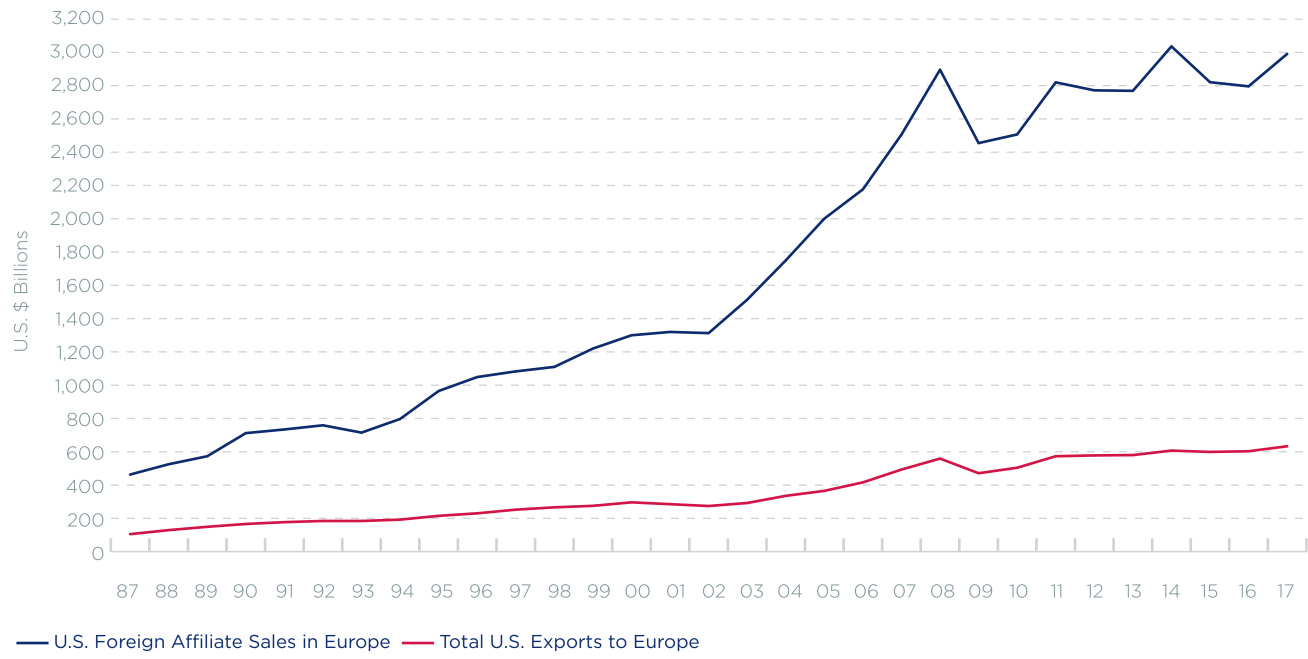
Reflecting the primacy of Europe when it comes to U.S. foreign affiliate sales, sales of U.S. affiliates in Europe were roughly 75% larger than the comparable figures for the entire Asian region in 2016, the last year of available data. Affiliate sales in the United Kingdom ($607 billion) were double total sales in South America. Sales in Germany ($341 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 2017, for instance, we estimate that majority-owned European affiliate sales in the United States ($2.5 trillion) were more than triple U.S. imports from Europe. Affiliate sales in the U.S. rose 11% by our estimates. By country, sales of British firms were the largest ($534 billion) in 2016, followed by Germany ($471 billion), and the Netherlands ($323 billion). For virtually all countries in Europe, foreign affiliate sales were easily in excess of their U.S. imports in 2016.

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 2017, U.S. affiliate income in Europe rose to a record $265 billion, and by another 6% in 2018 by our estimate, to a record $281 billion. The figure for 2018 was more than 50% larger than the depressed levels of 2009, when affiliate income earned in Europe plunged to $179 billion. Meanwhile, European affiliate income earned in the United States in 2018 was also at record levels; by our estimate, affiliate income totaled $132 billion, up roughly 12% from the prior year.

Table 6 Sales of U.S. Affiliates in Europe vs. U.S. Exports to Europe



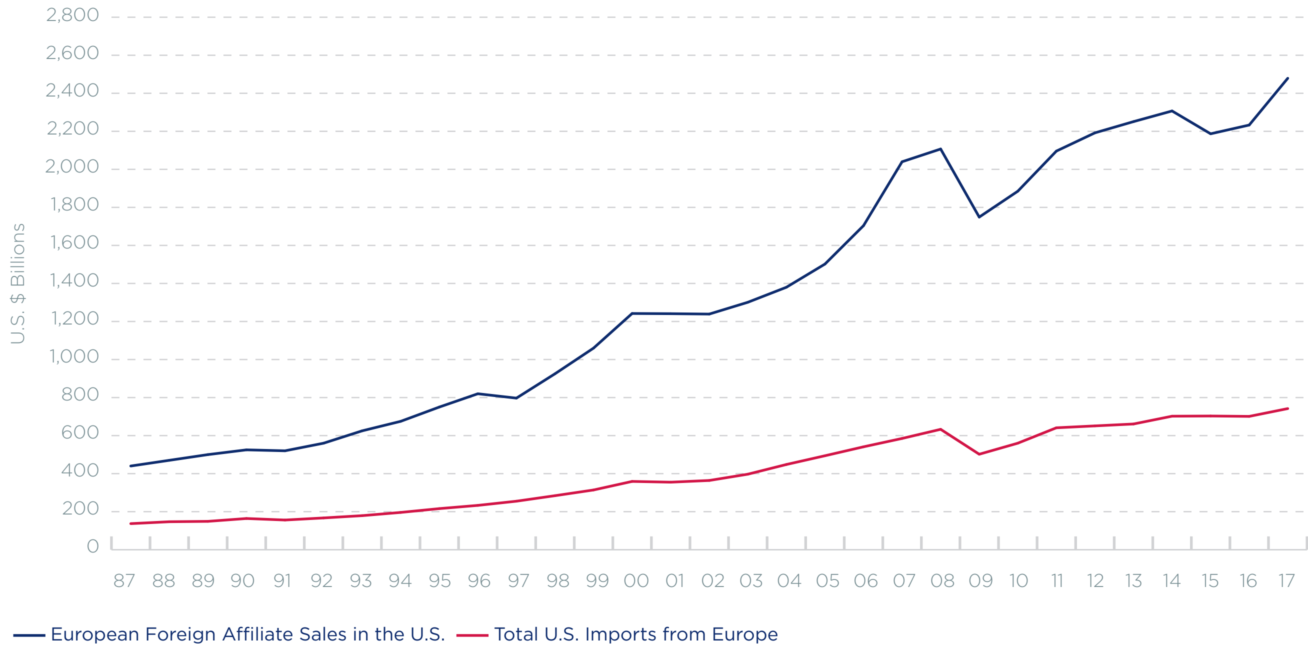
Source: Bureau of Economic Analysis.
Majority-owned non-bank affiliates data: 1987 - 2008. Majority-owned bank and non-bank affiliates: 2009 - 2017.
Foreign Affiliate Sales: Estimates for 2017.

Foreign affiliate sales
(2017 estimate)

$3 trillion
U.S. in Europe

$2.5 trillion
Europe in the U.S.

Table 7 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 - 2017.
Foreign Affiliate Sales: Estimates for 2017.

Europe continues to be a key market for U.S. multinationals' foreign earnings. The region accounted for roughly 55% of U.S. global foreign affiliate income in the first nine months of 2018. 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 comparative basis, U.S. affiliate income from Europe of $211 billion in the first nine months of 2018 was about three times more than the affiliate income of Latin America ($71 billion) and Asia ($69 billion), respectively. It is interesting to note that combined U.S. affiliate income from China and India in 2017 ($18.4 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 2018, U.S. affiliate income in China alone ($9.8 billion) was well in excess of affiliate income in Germany ($5.1 billion), France ($2.2 billion), and Spain ($2.8 billion). U.S. affiliates in India earned $3 billion in the January-September period, well more than that earned in many European countries.

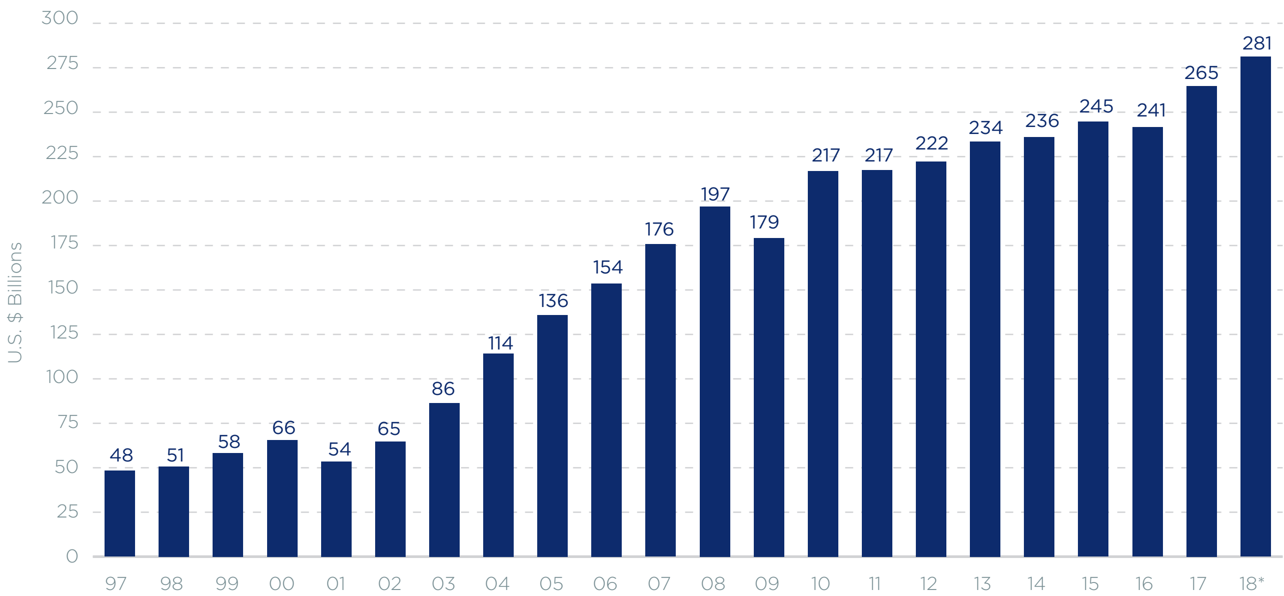
All that said, we see rising U.S. affiliate earnings from the emerging markets as a complement, not a substitute, to earnings from Europe. The latter very much remains a key source of prosperity for Corporate America.

Foreign affiliate profits (2018)

$281 billion
U.S. in Europe

$132 billion
Europe in the U.S.

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



Source: Bureau of Economic Analysis.
**Data for 2018 is estimate.*

Similarly, the United States remains the most important market in the world in terms of earnings for many European firms. In the first nine months of 2018, the income of European affiliates in the United States was up nearly 20% from the same period a year ago, totaling $99 billion. For the year, we estimate income of European affiliates in the U.S. hit a record $132 billion.

8. Transatlantic Services

The United States and Europe are the largest services economies in the world. They are each other's largest services market, and dense transatlantic services linkages mean that the transatlantic services economy is the geo-economic base for the global competitiveness of U.S. and European services companies.

Transatlantic ties in services – both in trade and investment – are quite large and have become even more intertwined over the past decade. Transatlantic linkages continue to deepen in insurance, education, telecommunications, transport, utilities, advertising, computer and business services.

On a regional basis, Europe accounted for 37% of total U.S. services exports and for 43% of total U.S. services imports in 2017. Four out of the top ten export markets for U.S. services in 2017 were in Europe. The United Kingdom ranked first, followed by Ireland (ranked 4th), Switzerland (6th), and Germany (9th). Of the top ten services providers to the United States in 2017, five were European states, with the United Kingdom ranked first, Germany second, Switzerland sixth, Ireland ninth, and France tenth. In 2017, the United States registered a $51 billion trade surplus in services with the EU, versus a $153 billion trade deficit in goods. Using a broader definition of Europe, which includes non-EU countries, the U.S. runs a slightly larger surplus in services ($66 billion) and a larger deficit in goods ($175 billion).

U.S. services exports to Europe reached a record $298 billion in 2017, up more than 40% from the cyclical lows of 2009, when exports to Europe plunged 9%. Services exports (or receipts) have been fueled by a number of services-related activities such as travel, passenger fares, education and financial services. In terms of transport, the top five export markets in 2017, ranking order, were Japan, the UK, Canada, China, and Germany. The United Kingdom ranked as the largest market for exports of telecommunications, computer and information 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, representing 14% of total receipts. As for "other business service exports" or activities like management consulting and R&D, Ireland ranked number one in 2017, followed by Switzerland and the UK.

As for U.S. services imports from Europe, figures for 2017 were at all-time highs. U.S. services imports from Europe totaled $232 billion in 2017, up nearly 40% from the depressed levels of 2009. The United Kingdom, Germany, Switzerland, Ireland, France and Italy all rank as top services exporters to the United States.

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

Trade figures, while significant, do not do full justice to the importance of the transatlantic services economy. Transatlantic foreign affiliate sales of services are 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 falling communication costs and the rise of the digital economy. Affiliate sales of services have not only supplemented trade in services, they 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 2016, exceeding $1 trillion for the first time in 2007. In 2016, the last year of full data, U.S. affiliate services sales ($1.5 trillion) were roughly double the level of U.S. services exports ($798 billion).

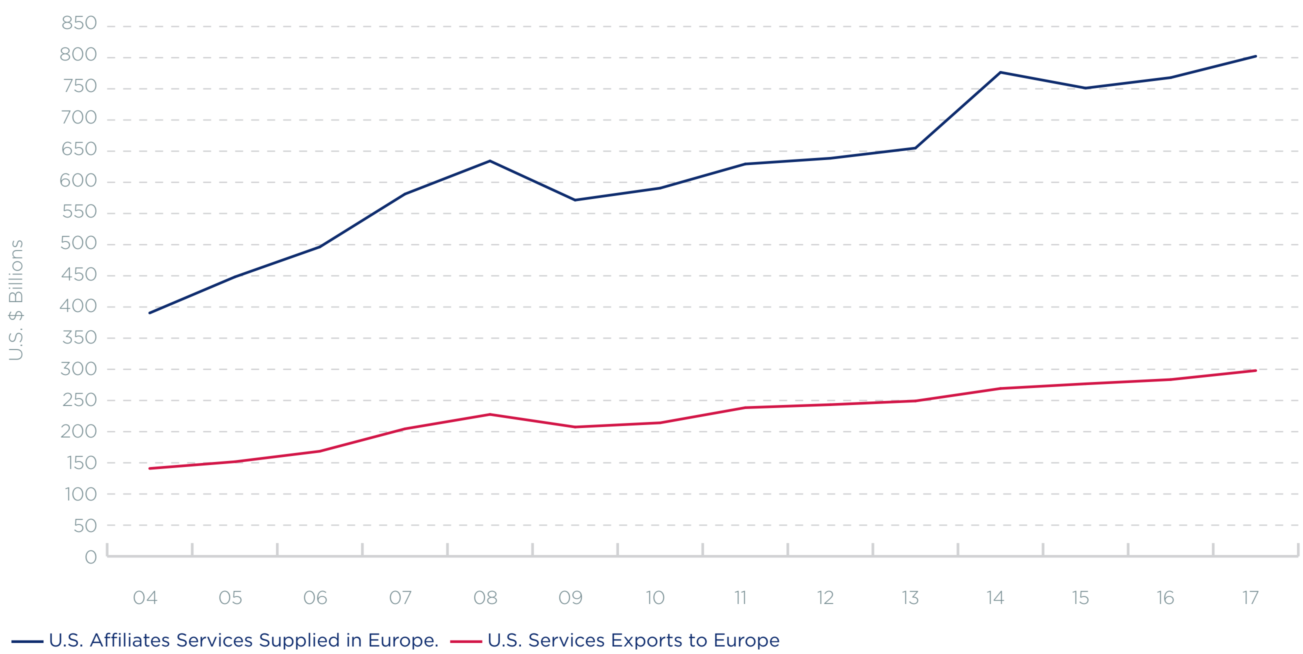
Sales of services of U.S. foreign affiliates in Europe rose modestly (2.2%) in 2016 to $768 billion, and have risen by more than 30% since 2009, when services sales plunged on account of the transatlantic recession. U.S. services exports to Europe in the same year totaled $284 billion, well below sales of services by affiliates. In other words, like goods, U.S. firms primarily deliver services in Europe (and vice versa) via their foreign affiliates rather than by trade.

The UK accounted for roughly 30% of all U.S. affiliate services sales in Europe; affiliate sales totaled $232 billion, a figure greater than total affiliate sales in South and Central America ($118 billion), Africa ($13 billion) and the Middle East ($21 billion). Affiliate sales in Ireland remain quite large – $125 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 roughly 53% of total U.S. affiliate service sales.

We estimate that sales of services of U.S. affiliates in Europe rose by around 4%, to $802 billion in 2017. U.S. services exports to Europe for the same year were $298 billion, well below sales of affiliates.

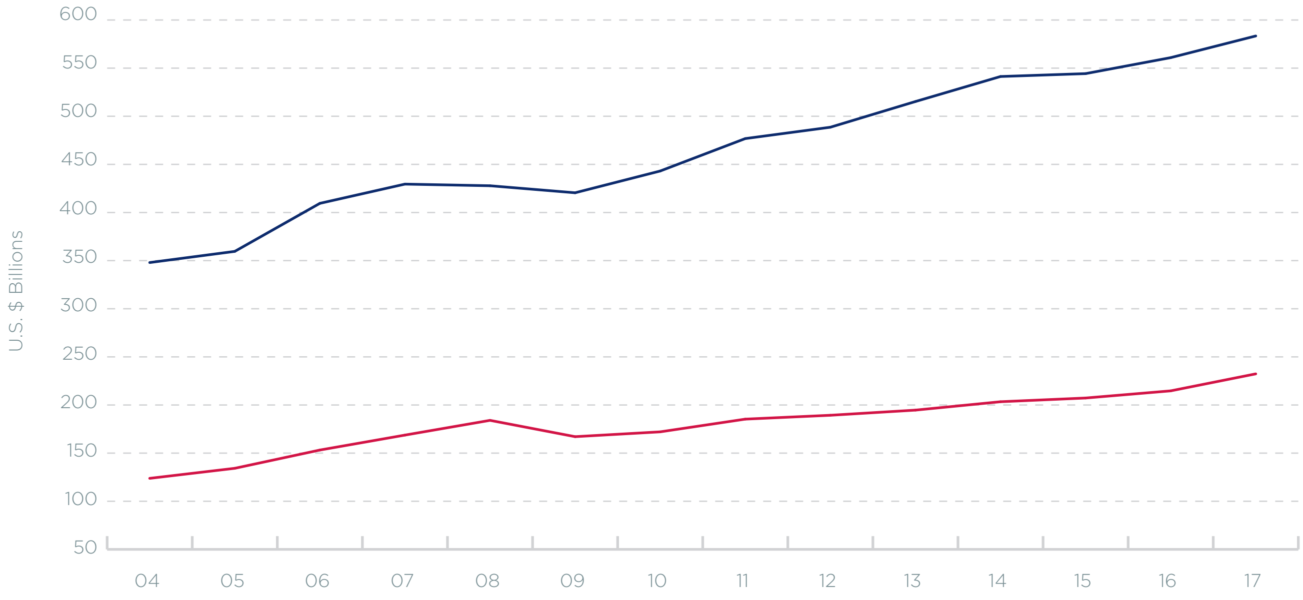
U.S. affiliate sales of services in Europe continue to exceed sales of services by U.S. affiliates of European firms. In 2016, the last year of complete data, European affiliate services sales in the United States totaled $561 billion, about 27% below comparable sales of U.S. affiliates in Europe. That said, European affiliates are the key provider of affiliate services in the United States. Foreign affiliate sales of services in the U.S. totaled $995 billion in 2016, with European firms accounting for 56% of the total. Within Europe, British affiliates lead in terms of affiliate sales of

Table 9 U.S. - Europe Services Linkages



Source: Bureau of Economic Analysis.
Majority-owned bank and non-bank affiliates. Services supplied in Europe estimates for 2017.

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 2017.

services in the United States ($143 billion), followed closely by Germany ($134 billion).

We estimate that European affiliate services sales in the United States totaled $583 billion in 2017, well above U.S. service imports from Europe ($232 billion) in the same year. The difference between affiliate sales and service imports reflects the ever-widening presence of European service 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.

These eight indices convey a more complex and complete picture of U.S.-European engagement than trade figures alone. Transatlantic commerce goes well beyond trade. 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	3,553	59%
Manufacturing	440	51%

Note: Historic-cost basis, 2017.
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	2,731	68%
Manufacturing	1,228	76%

Note: Historic-cost basis, 2017.
Source: Bureau of Economic Analysis..

Endnotes

1 The United States, Mexico, and Canada are in the process of updating the NAFTA agreement via the new United States-Mexico-Canada Agreement.