

Executive Summary

- Despite transatlantic political turbulence, the U.S. and Europe remain each other's most important markets. The transatlantic economy generates \$5.5 trillion in total commercial sales a year and employs up to 16 million workers in mutually "onshored" jobs on both sides of the Atlantic. It is the largest and wealthiest market in the world, accounting for one-third of world GDP in terms of purchasing power and half of total global personal consumption.
- Ties are particularly thick in foreign direct investment (FDI), portfolio investment, banking claims, trade and affiliate sales in goods and services, mutual R&D investment, patent cooperation, technology flows, and sales of knowledge-intensive services.

Transatlantic Investment: Still Driving the Transatlantic Economy

- Trade alone is a misleading benchmark of international commerce; mutual investment dwarfs trade and is the real backbone of the transatlantic economy. The U.S. and Europe are each other's primary source and destination for foreign direct investment.
- Together the U.S. and Europe accounted for 27% of global exports and over 32% of global imports in 2017. But together they accounted for 65% of the outward stock and 58% of the inward stock of global FDI. Moreover, 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.
- European firms based in the U.S. accounted for 52% of the \$370 billion in U.S. exports by U.S.-based foreign affiliates in 2016.
- U.S. foreign affiliate sales in Europe of \$3 trillion in 2017 were greater than total U.S. exports to the world of \$2.4 trillion and roughly half of total U.S. foreign affiliate sales globally.
- Foreign investment and affiliate sales drive transatlantic trade. 60% of U.S. imports from the EU consisted of intra-firm trade in 2016 – much higher than U.S. intra-firm imports from Asia-Pacific nations (around 40%) and South/Central America (42%) and well above the global average (49%). Percentages are notably high for Ireland (85%) and Germany (69%).
- Intra-firm trade also accounted for 36% of U.S. exports to Europe and 52% to the Netherlands, 35% to Germany and 28% to France.

The U.S. in Europe

- Over many decades no place in the world has attracted more U.S. FDI than Europe. Since the start of this decade Europe has attracted 58.4% of total U.S. global investment – more than in any previous decade.
- The total stock of U.S. FDI in Europe in 2017 was \$3.6 trillion – 59% of the total U.S. global investment position and more than 3.5 times U.S. investment in the Asia-Pacific region.
- In 2018 U.S. FDI flows increased to France (18%), Italy (79%) and Spain (55%).
- However, 2018 was an atypical year for U.S. capital outflows due to a major U.S. tax overhaul that unleashed large-scale repatriations of U.S. companies' accumulated foreign earnings. Overall U.S. FDI outflows to Europe for the first nine months of the year were -\$13 billion. Global U.S. outflows were -\$125 billion during this period. The largest negative outflows in Europe were from the Netherlands (-\$35 billion) and Ireland (-\$20 billion).
- Within Europe, however, U.S. FDI is becoming more concentrated. Germany accounted for only 1.7% and France for just 1.4% of U.S. FDI flows between 2010 and 2017. In 2017, four countries accounted for 87% of total U.S. FDI outflows of \$164 billion to Europe: Ireland (\$45 billion); the Netherlands (\$35 billion); Luxembourg (\$33 billion); and Switzerland (\$30.0 billion). That said, some of these investment flows ultimately make their way to neighboring countries, so they likely misrepresent the ultimate destination of U.S. direct investment.
- In 2017 nonbank holding companies accounted for \$127 billion, or about 42% of global U.S. FDI outflows of \$300 billion, and 51% of total U.S. foreign direct investment to the EU of \$164 billion.
- From 2009-2017 Europe still accounted for over 47% of total U.S. FDI outflows globally when flows from holding companies are removed from the overall figures. Europe's share was still more than double the share to Asia.

- America's capital stock in the UK (\$748 billion in 2017) is almost triple combined U.S. investment in South America, the Middle East and Africa (\$253 billion). Total U.S. investment stock in China was just \$92 billion in 2017, only about 14% of U.S. investment stock in the UK. U.S. investment presence in China and India combined – totaling \$153 billion in 2017 – is just 20% of total U.S. investment in the UK.
- The UK still plays an important role for U.S. companies as an export platform to the rest of Europe. U.S. firms based in the UK export more to the rest of Europe than U.S. firms based in China export to the world.
- In 2017 Europe accounted for roughly 62% – \$15.6 trillion – of Corporate America's total foreign assets globally. Largest shares: the UK (20%, \$5 trillion) and the Netherlands (11%, \$2.9 trillion).
- America's asset base in Germany (\$811 billion in 2016) was roughly one-quarter larger than its asset base in all of South America and double its assets in China.
- America's combined asset base in Poland, the Czech Republic and Hungary (roughly \$144 billion) was on par with its asset base in India (\$141 billion).
- America's assets in Ireland alone (\$1.4 trillion in 2016) were much larger than either those in France (\$376 billion), or Switzerland (\$923 billion), and light years ahead of those in China (\$404 billion).
- Ireland has also become the number one export platform for U.S. affiliates in the entire world. Exports from U.S. affiliates based in Ireland reached \$293 billion in 2016, five times more than U.S. affiliate exports from China and about four times more than from Mexico.
- Total output of U.S. foreign affiliates in Europe (\$695 billion) and of European affiliates in the U.S. (\$586 billion) in 2017 was greater than the output of such countries as the Netherlands, Turkey or Indonesia.
- Aggregate output of U.S. affiliates globally reached \$1.4 trillion in 2017; Europe accounted for 51% of the total.
- U.S. affiliate output in Europe (\$665 billion) in 2016 was roughly double affiliate output in all of Asia (\$329 billion). U.S. affiliate output in China (\$65 billion) and India (\$29 billion) pale in comparison to U.S. affiliate output in the UK (\$166 billion), Germany (\$81 billion), or even Ireland (\$91 billion).
- Sales of U.S. affiliates in Europe were 75% larger than the comparable figures for the entire Asian region in 2016. Affiliate sales in the UK (\$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.
- We estimate that U.S. affiliate income in Europe reached a record \$281 billion in 2018. Europe accounted for roughly 55% of U.S. global foreign affiliate income in the first nine months of 2018.
- 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.
- U.S. affiliate income in China (\$9.8 billion), however, was more than affiliate income in Germany (\$5.1 billion), and income in India (\$3 billion) was more than in Spain (\$2.8 billion) or France (\$2.2 billion).

Europe in the U.S.

- In 2018 Europe accounted for 60% (\$136 billion) of global FDI inflows into the U.S. of \$226 billion.
- UK firms were the largest source of greenfield investment projects in 18 U.S. states during the ten years between October 2008 and October 2018. German companies led in 16 states, followed by Canadian and Japanese companies each in 8 states.
- In the first nine months of 2018, inflows to the U.S. from Europe totaled \$102 billion, about 20% less than a year earlier, largely because of a massive negative investment outflow from Luxembourg of -\$122 billion. French and German flows trended higher, UK and Swiss flows trended lower.
- Europe accounted for roughly 68% of the \$4.0 trillion invested in the United States in 2017 on a historic cost basis. Total European stock in the U.S. of \$2.7 trillion was four times the level of comparable investment from Asia.
- The bulk of the capital was sunk by British firms (with total UK stock amounting to \$541 billion), Luxembourg (\$411 billion), the Netherlands (\$367 billion), Germany (\$310 billion), Switzerland (\$309 billion), and France (\$275 billion).
- In 2016 total assets of European affiliates in the U.S. were an estimated \$7.7 trillion. The UK ranked first, followed by Germany, Switzerland and France.
- In 2016 European assets accounted for nearly 60% of total foreign assets in the United States.

- European affiliate income earned in the United States in 2018 (estimated at \$132 billion) was up 12% from the year before (\$118 billion).
- The output of British firms in the U.S. in 2017 reached \$144 billion – roughly a quarter of the total output of European firms in the U.S. The output of German firms in the U.S. totaled \$109 billion, or about 20% of the total.
- Beyond European affiliates, only Japan and Canada have any real economic presence in the U.S. In 2016, Japanese affiliate output totaled nearly \$135 billion, Canadian \$81 billion.
- European companies operating in the U.S. accounted for nearly two-thirds of the \$911 billion contributed by all foreign firms to U.S. aggregate production in 2016.
- European auto companies produced 25% of total U.S. production in 2017 and generated \$34 billion towards U.S. GDP in 2016. 60% of European cars produced in the U.S. are U.S. exports to the world.
- Affiliate sales, not trade, are the primary means by which European firms deliver goods and services to U.S. consumers. In 2017 European affiliate sales in the U.S. (\$2.5 trillion) rose an estimated 11% and were more than triple U.S. imports from Europe.
- Sales by British affiliates in the U.S. totaled \$534 billion in 2016, followed by German affiliate sales (\$471 billion) and those by Dutch affiliates (\$323 billion).
- 45 of 50 U.S. states export more to Europe than to China, in many cases by a wide margin.
- In 2017 New York exports to Europe were more than 8 times those to China. California, Texas, Michigan, Illinois and Ohio exported more than twice as much to Europe as to China.
- Germany was the top European export market for 18 U.S. states and the UK for 14 in 2017.
- Foreign firms operating in the United States shipped \$370 billion in U.S. goods exports in 2016; 52% of these U.S. exports were generated by European companies.

Transatlantic Services

Transatlantic Trade

- U.S. merchandise exports to the EU rose by an estimated 13% in 2018 to a record \$319 billion. Notably strong export markets included the UK (U.S. exports up 18% in the first eleven months of 2018), Italy (+27%), and the Netherlands (+19%).
- The U.S. and the EU are each other's largest trading partners. In the first eleven months of 2018, U.S. goods exports to the EU (\$293 billion, up 13.2%) were over 2.5 times more than U.S. goods exports to China (\$111 billion).
- The U.S. annual merchandise trade deficit with the EU, estimated at \$168 billion in 2018, was at a record high, up 11% from the year earlier. The U.S. deficit with China (\$417 billion) is 2.5 times larger than the U.S. deficit with the EU.
- The U.S. accounts for 29% of total EU auto exports; the EU accounts for 20% of total U.S. car exports.
- The U.S. and Europe are the two leading services economies in the world. The U.S. is the largest single country trader in services, while the EU is the largest trader in services among all world regions. The U.S. and EU are each other's most important commercial partners and major growth markets when it comes to services trade and investment. Moreover, deep transatlantic connections in services industries, provided by mutual investment flows, are the foundation for the global competitiveness of U.S. and European services companies.
- Four of the top ten export markets for U.S. services are in Europe. Europe accounted for 37% of total U.S. services exports and for 43% of total U.S. services imports in 2017.
- U.S. services exports to Europe reached a record \$298 billion in 2017, up more than 40% from 2009. The U.S. had a \$66 billion trade surplus in services with Europe in 2017, compared with its \$175 billion trade deficit in goods with Europe.
- U.S. imports of services from Europe also hit an all-time high in 2017 of \$232 billion, up nearly 40% from 2009. The UK, Germany, Switzerland, Ireland, France and Italy are top services exporters to the U.S.
- Moreover, foreign affiliate sales of services, or the delivery of transatlantic services by foreign affiliates, have exploded on both sides of the Atlantic over the past few decades and become far more important than exports.
- We estimate that sales of services of U.S. affiliates in Europe rose 4%, to \$802 billion, in 2017, 2.7 times more than U.S. services exports to Europe of \$298 billion.

- The UK alone accounted for 30% of all U.S. affiliate sales in Europe in 2016 – \$232 billion, greater than combined affiliate sales in South and Central America (\$118 billion), Africa (\$13 billion) and the Middle East (\$21 billion).
- On a global basis, Europe accounted for roughly 53% of total U.S. affiliate services sales.
- European affiliate sales of services in the U.S. of \$561 billion in 2016 were about 27% below U.S. affiliate sales of services in Europe.
- Nonetheless, European companies are the key provider of affiliate services in the U.S. Foreign affiliate sales of services in the U.S. totaled \$995 billion in 2016; European firms accounted for 56% of the total. British affiliates lead in terms of affiliate sales of services (\$143 billion), followed closely by Germany (\$134 billion).
- European companies operating in the U.S. generated an estimated \$583 billion in services sales in 2017, 2.5 times more than European services exports to the U.S. of \$232 billion.
- Roughly 33% of the 14.3 million people employed by U.S. majority-owned affiliates around the world in 2016 lived in Europe; that share is down from 38% in 2009.
- U.S. affiliates employed more manufacturing workers in Europe in 2016 (1.9 million) than they did in 1990 (1.6 million), and about the same as in 2000 (1.9 million). Manufacturing employment has declined in some countries but has rebounded in others.
- Poland has been a big winner: U.S. affiliate manufacturing employment grew more than 2.5 times between 2000 and 2016, rising from 51,000 to over 128,000, and continuing upwards.
- In 2016 the UK, France and Germany accounted for less than 50% of U.S. affiliate manufacturing employment in Europe. In 1990 they accounted for 67%. Meanwhile, the combined share of U.S. affiliate manufacturing employment in Poland, the Czech Republic and Hungary jumped from virtually zero in 1990 to nearly 15% in 2016, indicative of the eastern spread of U.S. companies' European operations.

Transatlantic Jobs

- Despite stories about U.S. and European companies decamping for cheap labor markets in Mexico or Asia, most foreigners working for U.S. companies outside the U.S. are European, and most foreigners working for European companies outside the EU are American.
- European companies in the U.S. employ millions of American workers and are the largest source of onshored jobs in America. Similarly, U.S. companies in Europe employ millions of European workers and are the largest source of onshored jobs in Europe.
- U.S. and European foreign affiliates directly employed 9.4 million workers in 2017. Further modest gains in employment were most likely achieved in 2018.
- These figures understate the overall job numbers, since they do not include
 - o jobs supported by transatlantic trade flows;
 - o indirect employment effects of nonequity arrangements such as strategic alliances, joint ventures, and other deals; and
 - o indirect employment generated for distributors and suppliers.
- U.S. affiliates directly employed an estimated 4.8 million workers in Europe in 2017 – over 30% more than in 2000.
- Manufacturing employment among U.S. affiliates in the UK has declined from 431,000 in 2000 to 311,000 in 2016 and in France from 249,000 to 197,000.
- Manufacturing employment among U.S. affiliates in Germany is near levels seen at the start of the century – 382,000 jobs in 2016, compared to 388,000 in 2000.
- U.S. affiliates employ more Europeans in services than in manufacturing and this trend is likely to continue. Manufacturing accounted for 40% of total employment by U.S. affiliates in Europe in 2016. U.S. affiliates employed nearly 378,000 European workers in transportation and 300,000 in chemicals. Wholesale employment was among the largest sources of services-related employment, which includes employment in such areas as logistics, trade, insurance and other related activities.
- The manufacturing workforce of U.S. affiliates in Germany totaled 382,000 workers in 2016 – more than the number of manufactured workers employed by U.S. affiliates in Brazil (310,000) and India (209,000) but well below China (740,000).
- European majority-owned foreign affiliates directly employed 4.6 million U.S. workers in 2017 – some 90,000 more workers than in 2016, although roughly 225,000 workers less than U.S. affiliates employed in Europe.

- Firms from the UK, Germany, Switzerland and the Netherlands largely accounted for the boost in U.S. employment by European companies between 2015 and 2016, with companies from the four countries employing over 157,000 more U.S.-based workers in 2016 than in 2015.
- In 2016 the top five European employers in the U.S. were firms from the United Kingdom (1.2 million), France (729,000), Germany (692,000), the Netherlands (475,000) and Switzerland (471,000).
- European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2016.
- European companies account for 76% of total foreign FDI in U.S. manufacturing.
- European companies directly supported 173,000 jobs in the U.S. motor vehicles and parts industry - 42% of total foreign affiliate employment in this industry.
- Texas gained 132,000 jobs (56% more) directly from European investment between 2006 and 2016. Others with significant gains included California 97,000 (28.1%); New York 66,300 (23.5%); Illinois 58,800 (34.3%); Florida 42,700 (26.6%); Massachusetts 40,200 (33.7%); Pennsylvania 37,900 (20.8%); North Carolina 30,500 (19.8%); New Jersey 27,600 (16.2%); Georgia 26,100 (23.3%); Virginia 24,800 (22.1%); Ohio 23,500 (17.5%); Minnesota 23,300 (46%) and Tennessee 23,300 (31.2%).
- The top five U.S. states in terms of jobs provided directly by European affiliates in 2016 were California (442,500), Texas (367,900), New York (348,400), Illinois (230,100) and Pennsylvania (220,400).
- Transatlantic cable connections are the densest and highest capacity routes, with the highest traffic, in the world, with an estimated 38% compound annual growth rate until 2025.
- The U.S. and Europe are each other's most important commercial partners when it comes to digitally-enabled services. The U.S. and the EU are also the two largest net exporters of digitally-enabled services to the world.
- In 2017, digitally-enabled services accounted for 55% of all U.S. services exports, 49% of all services imports, and 68% of the U.S. global surplus in trade in services.
- In 2017 the U.S. exported \$204.2 billion in digitally-enabled services to Europe and imported \$123.7 billion from Europe, generating a trade surplus with Europe in this area of at least \$80.5 billion, according to figures from the U.S. Bureau of Economic Analysis. U.S. exports of digitally-enabled services to Europe were 2.5 times more than U.S. digitally-enabled exports to Latin America and almost double U.S. digitally-enabled exports to the entire Asia-Pacific region.
- In 2017 EU member states exported \$1.24 trillion and imported \$1.02 trillion digitally-enabled services to countries both inside of and outside of the EU.
- Excluding intra-EU trade, EU member states exported \$579.2 billion and imported \$459.6 billion in digitally-enabled services, resulting in a surplus of \$119.6 billion for these services.
- Digitally-enabled services trade represented 56% of all EU services exports to non-EU countries and 57% of all EU services imports from non-EU countries.

The Transatlantic Digital Economy

- Cross-border data flows between the U.S. and Europe in 2015 were by far the most intense in the world - 50% higher than data flows between the U.S. and Asia in absolute terms, and 400% higher on a per capita basis.
- North America and Europe generate about 75% of digital content for internet users worldwide.
- U.S. and European cities (Frankfurt, London, Amsterdam, Paris, Stockholm, Miami, New York, Marseille, Los Angeles, San Francisco) are the world's foremost hubs for international communication and data exchange.
- The U.S. accounted for 31% of the EU's digitally-enabled services exports to non-EU countries, and 39% of EU digitally-enabled services imports from non-EU countries.
- The U.S. purchased \$179.6 billion of EU digitally-enabled services exports according to OECD data for 2017, making it the largest non-EU consumer these services, and accounting for more EU exports than the rest of non-EU Europe (\$122.5 billion), and more than all digitally-enabled services exports from the EU to Asia and Oceania (\$165.4 billion).
- EU member states with the largest estimated value of digitally-enabled services exports were Germany (\$171.6 billion), the United Kingdom (\$149.3 billion), Ireland (\$142.6 billion), and the Netherlands (\$134.1 billion).

- Digitally-enabled services are not just exported directly, they are used in manufacturing and to produce goods and services for export. Over half of digitally-enabled services imported by the U.S. from the EU is used to produce U.S. products for export, and vice versa.
- In 2017, EU member states imported \$1.02 trillion in digitally-enabled services, according to OECD data. 55% originated from other EU member states. Another 17% came from the U.S. (\$177.0 billion), making it the largest supplier of these services. The EU imported more of these services from the U.S. than from EU member states Germany (\$95.3 billion) and the UK (\$112.7 billion).
- Over half of digitally-enabled services imported by the U.S. from the EU is used to produce U.S. products for export and vice versa – a value-added effect on trade not captured in standard metrics.
- Even more important than both direct and value-added trade in digitally-enabled services, however, is the delivery of digital services by U.S. and European foreign affiliates.
- In 2016 U.S. affiliates in Europe supplied \$401.5 billion in digitally-enabled services; European affiliates in the U.S. supplied \$244.4 billion in digitally-enabled services. Digitally-enabled services supplied by U.S. affiliates in Europe were double U.S. digitally-enabled exports to Europe, and digitally-enabled services supplied by European affiliates in the U.S. were also roughly double European digitally-enabled exports to the U.S.

The Transatlantic Innovation Economy

- Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2016 U.S. affiliates invested \$31.3 billion in research and development in Europe, representing 58% of total global R&D expenditures by U.S. foreign affiliates.
- R&D expenditures by U.S. affiliates were the greatest in Germany (\$9.0 billion), the UK (\$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 U.S, R&D expenditures by majority-owned foreign affiliates totaled \$60.1 billion in 2016. R&D spending by European affiliates totaled \$44 billion, representing 73% of all R&D performed by majority-owned foreign affiliates in the United States.
- Swiss-owned R&D in the U.S. totaled \$10.6 billion in 2016, nearly a quarter of total European affiliate R&D in the United States. British affiliates accounted for 20%, German for 17.7% and French for 12.9%.