

Executive Summary

- Despite transatlantic political turbulence, the U.S. and Europe remain each other's most important markets. Eurozone growth of 2.5% in 2017 exceeded U.S. growth of 2.3%, and both economies are set to maintain robust growth in 2018. Transatlantic trade gaps have narrowed.
- The transatlantic economy generates \$5.5 trillion in total commercial sales a year and employs up to 15 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.
- 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

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 only 28.1% of global exports and nearly 33% of global imports in 2016. But together they accounted for 64% of the outward stock and 56% 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.
- U.S. foreign affiliate sales in Europe of \$3 trillion in 2016 were greater than total U.S. exports to the world of \$2.2 trillion and almost 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 well above the global average (49%). Percentages are notably high for Ireland (85%) and Germany (69%).
- 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 57.9% of total U.S. global investment – more than in any previous decade.
- Aggregate US investment in Europe totaled more than €2 trillion in 2017, directly supports more than 4.7 million services and manufacturing jobs in Europe, and generates billions of euros annually in income, trade and research and development.
- 64% of U.S. global FDI outflows went to Europe and only 16% to the Asia-Pacific region in 2017.
- Within Europe, however, U.S. FDI is becoming more concentrated. In the first nine months of 2017, five nations accounted for over 90% of total U.S. FDI outflows of \$165 billion to Europe: the Netherlands, attracting \$48.8 billion and 29.5% of total flows to Europe; Ireland (\$41.9 billion and 25.3%); Switzerland (\$26.4 billion and 16.0%); the UK (\$16.8 billion and 10.2%); and Luxembourg (\$16.4 billion and 9.9%). 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 2016 nonbank holding companies accounted for \$142 billion, or over half of global U.S. FDI outflows of \$281 billion, and 54% of total U.S. foreign direct investment to the EU of \$183 billion.
- From 2009-2016 Europe still accounted for 48% 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.
- U.S. FDI outflows to Europe in 2017 were an estimated \$204 billion, a 12% increase from 2016 (\$183 billion). After hitting a post-crisis peak of \$235 billion in 2011, U.S. FDI outflows to Europe retreated, but since 2014 have increased every year.
- 2018 is the Brexit crunch year when it comes to UK-EU negotiations, and there is little to expect in the way of upside surprises. U.S. FDI flows to the UK

- plunged by over 50% in the first three quarters of 2017, and U.S. affiliate income earned in the UK was flat, whereas for the EU as a whole it was up 6%.
- Nonetheless, America's capital stock in the UK (\$682 billion in 2016) is more than double combined U.S. investment in South America, the Middle East and Africa (\$235 billion). Total U.S. investment stock in China was just \$92 billion in 2016, only about 14% of U.S. investment stock in the UK. U.S. investment presence in China and India combined – totaling \$125 billion in 2016 – is just 18% 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.
 - U.S. FDI flows of over \$10 billion to Germany and France in the first three quarters of 2017 were higher than during the entire year in 2016, but still weak compared to U.S. FDI flows to China (including Hong Kong) and India, which totaled \$14 billion over the same period.
 - In 2016 Europe accounted for roughly 60% – \$15.7 trillion – of corporate America's total foreign assets globally. Largest shares: the UK (19%, \$5 trillion) and the Netherlands (11%, \$2.8 trillion).
 - America's asset base in Germany (\$794 billion in 2015) 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 \$164 billion) was larger than its asset base in India (\$131 billion).
 - America's assets in Ireland alone (\$1.4 trillion in 2015) were much larger than either those in France (\$387 billion), or Switzerland (\$835 billion), and light years ahead of those in China (\$392 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 \$298 billion in 2015, almost 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 (\$720 billion) and of European affiliates in the U.S. (\$584 billion) in 2016 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 2016; Europe accounted for 50% of the total.
 - U.S. affiliate output in Europe (\$686 billion) in 2015 was roughly double affiliate output in all of Asia (\$335 billion). U.S. affiliate output in China (\$66 billion) and India (\$26 billion) pale in comparison to U.S. affiliate output in the UK (\$173 billion), Germany (\$87 billion), or even Ireland (\$87 billion).
 - Sales of U.S. affiliates in Europe were two-thirds larger than the comparable figures for the entire Asian region in 2015. Affiliate sales in the UK (\$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.
 - We estimate that U.S. affiliate income in Europe reached a record \$255 billion in 2017. Europe accounted for roughly 56% of U.S. global foreign affiliate income in the first nine months of 2017.
 - U.S. affiliate income from Europe of \$191 billion in the first nine months of 2017 was 1.5 times more than U.S. affiliate income in Latin America (\$62 billion) and Asia (\$63 billion) combined.
 - U.S. affiliate income in China (\$10 billion), however, was more than affiliate income in Germany (\$4.5 billion), and income in India (\$4.3 billion) was more than in Spain (\$2.7 billion) or France (\$2 billion).

Europe in the U.S.

- In 2017 Europe accounted for 54% (\$168 billion) of global FDI inflows into the U.S. of \$311 billion.
- In the first nine months of the year, inflows to the U.S. from Europe totaled \$126 billion, less than half of the comparable figure from a year earlier, largely because of lower investment from four key markets: Ireland, Luxembourg, the Netherlands, and Switzerland.
- Europe accounted for roughly 70% of the \$3.7 trillion invested in the United States in 2016 on a historic cost basis. Total European stock in the U.S. of \$2.6 trillion was more than 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 \$556 billion), Luxembourg (\$417 billion), the Netherlands (\$355 billion), Switzerland (\$311 billion), Germany (\$292 billion), and France (\$253 billion).

- In 2016 total assets of European affiliates in the U.S. were an estimated \$8.2 trillion. The UK ranked first, followed by Germany, Switzerland and France.
- In 2015 European assets accounted for nearly 60% of total foreign assets in the United States.
- European affiliate income earned in the United States in 2017 (estimated at \$113 billion) was relatively flat from the year before (\$115 billion).
- The output of British firms in the U.S. in 2015 reached \$136 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 2015, Japanese affiliate output totaled nearly \$123 billion, Canadian \$74 billion.
- European companies operating in the U.S. accounted for nearly two-thirds of the \$895 billion contributed by all foreign firms to U.S. aggregate production in 2015.
- Affiliate sales, not trade, are the primary means by which European firms deliver goods and services to U.S. consumers. In 2016 European affiliate sales in the U.S. (\$2.4 trillion) were more than triple U.S. imports from Europe. Affiliate sales rose an estimated 9% in 2016.
- Sales by British affiliates in the U.S. totaled \$514 billion in 2015, followed by German affiliate sales (\$465 billion) and those by Dutch affiliates (\$292 billion).
- 45 of 50 U.S. states export more to Europe than to China, in many cases by a wide margin.
- In 2016 New York exports to Europe were more than 9 times those to China, those from Connecticut and Florida 8 times more, Indiana and Kentucky 5 times more, and Texas and Georgia 3 times more. California exported more than twice as much to Europe as to China.
- Germany was the top European export market for 17 U.S. states and the UK for 15 in 2016.
- Foreign firms operating in the United States generated one-fifth of America's goods exports in 2015; 52% of these U.S. exports were generated by European companies.

Transatlantic Services

- 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 42% of total U.S. services imports in 2016.
- U.S. services exports to Europe reached a record \$279 billion in 2016, up more than one third from 2009. The U.S. had a \$67 billion trade surplus in services with Europe in 2016, compared with its \$167 billion trade deficit in goods with Europe.
- European services exports to the U.S. also hit an all-time high in 2016 of \$212 billion, up 27% 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 by around 5%, to \$790 billion, in 2016, almost 3 times more than U.S. services exports to Europe of \$279 billion.

Transatlantic Trade

- U.S. merchandise exports to the EU rose by an estimated 5% in 2017 to a record \$284 billion. Notably strong export markets included Germany (U.S. exports up 8% in the first eleven months of 2017), France (+10%), and Ireland (+9%).
- The U.S. annual merchandise trade deficit with the EU, estimated at \$146 billion in 2017, was down 6% from the peak deficit of 2015. The U.S. deficit with China is more than double the U.S. deficit with the EU.
- The U.S. and the EU are each other's largest trading partners. In the first eleven months of 2017, U.S. goods exports to the EU (\$259 billion) were more than double U.S. goods exports to China (\$117 billion).

- The UK alone accounted for 31% of all U.S. affiliate sales in Europe in 2015 – \$231 billion, greater than combined affiliate sales in South and Central America (\$127 billion), Africa (\$14 billion) and the Middle East (\$21 billion).
- On a global basis, Europe accounted for over half of total U.S. affiliate services sales.
- European affiliate sales of services in the U.S. of \$538 billion in 2015 were about 30% 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 \$952 billion in 2015; European firms accounted for 56% of the total. British affiliates lead in terms of affiliate sales of services (\$135 billion), followed closely by Germany (\$132 billion).
- European companies operating in the U.S. generated an estimated \$559 billion in services sales in 2016, 2.6 times more than European services exports to the U.S. of \$212 billion.
- Excluding intra-EU trade, EU member states exported \$569.6 billion and imported \$418.0 billion in digitally-enabled services, resulting in a surplus of \$151.6 billion for these services.
- Digitally-enabled services trade represented 56% of all services exports to non-EU countries and 52% of all services imports from non-EU countries.
- The U.S. accounted for 32% of the EU's digitally-enabled business services exports to non-EU countries, and 47% of EU research and development services exports.
- The U.S. purchased 15%, or \$179.9 billion, making it the largest non-EU consumer of EU digitally-enabled services exports, accounting for more EU exports than the rest of non-EU Europe (\$141.7 billion), and more than all digitally-enabled services exports from the EU to Asia and Oceania (\$138.8 billion).
- EU member states with the largest estimated value of digitally-enabled services exports were the United Kingdom (\$159.0 billion), Germany (\$149.2 billion), France (\$128.0 billion), and the Netherlands (\$115.3 billion).

The Transatlantic Digital Economy

- Cross-border data flows between the U.S. and Europe are 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.
- 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 2016, digitally-enabled services accounted for 54% of all U.S. services exports, 48% of all services imports, and 64% of the U.S. global surplus in trade in services.
- In 2016 the U.S. exported over \$185 billion in digitally-enabled services to Europe and imported \$111 billion from Europe, generating a trade surplus with Europe in this area of at least \$74 billion. U.S. exports of digitally-enabled services to Europe were more than double U.S. exports to Latin America and almost double U.S. exports to the entire Asia-Pacific region.
- In 2014 EU member states exported \$1.2 trillion and imported \$935.1 billion in digitally-enabled services to countries both inside of and outside of the EU.
- 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 2014, the EU imported \$935.1 billion in digitally-enabled services, 49% of all EU services imports that year. 55% of the digitally-enabled services imports originated from other EU member states. Another 18% (\$167.6 billion) came from the U.S., 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 (\$74.8 billion) and the UK (\$56.6 billion) combined.
- 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 2015 U.S. affiliates in Europe supplied \$391 billion in digitally-enabled services; European affiliates in the U.S. supplied \$233 billion in digitally-enabled services. Digitally-enabled services supplied by U.S. affiliates in Europe were 2.1 times greater than U.S. digitally-enabled exports to Europe, and digitally-enabled services supplied by European affiliates

in the U.S. were 2.1 times greater than European digitally-enabled exports to the U.S.

- The U.S. is the number one e-customer for German and UK-based companies, and is among the top five for companies based in Sweden, Italy, France and Denmark. U.S. companies are the number one e-suppliers for customers in the UK and Turkey and among the top five for customers in Germany, France, Italy, the Netherlands, Poland and Spain.
- The UK is the top foreign e-market in the world for U.S. companies, accounting for almost a quarter of all U.S. e-commerce exports. Germany is the 4th largest e-supplier to the U.S.
- The U.S. and UK are each other's most important cross-border B2C e-commerce markets. In 2016 49% of all U.S. digital shoppers buying across borders purchased from UK-based companies. U.S. companies are the most important foreign online sellers to UK and German consumers. 70% of all UK digital shoppers, and 48% of all German digital shoppers, buying across borders purchased from U.S.-based companies.

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 million workers in 2015, up 2% from the year before. Further modest gains in employment were most likely achieved in 2016 and 2017.
- 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 2016 – over 25% more than in 2000.
- Roughly 33% of the 14.1 million people employed by U.S. majority-owned affiliates around the world in 2015 lived in Europe; that share is down from 41% in 2008.
- U.S. affiliates employed more manufacturing workers in Europe in 2015 (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 more than doubled between 2000 and 2015, rising from 51,000 to over 122,000, and continuing upwards.
- In 2015 the UK, France and Germany accounted for 48% 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 12% in 2015, indicative of the eastern spread of U.S. European operations.
- Manufacturing employment among U.S. affiliates in the UK has declined from 431,000 in 2000 to 312,000 in 2015 and in France from 249,000 to 195,000.
- Manufacturing employment among U.S. affiliates in Germany is near levels seen at the start of the century – 385,000 jobs in 2015, 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 2015. U.S. affiliates employed nearly 376,000 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 385,000 workers in 2015 – more than the number of manufactured workers employed by U.S. affiliates in Brazil (313,000) and India (219,000) but well below China (756,000).
- 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.

- French, Irish and UK firms largely accounted for the boost in U.S. employment by European companies between 2014 and 2015, with companies from the three countries employing over 115,000 more U.S.-based workers in 2015 than in 2014.
- 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).
- European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2015.
- Texas gained 119,600 jobs (50.7% more) directly from European investment between 2006 and 2015. Others with significant gains included California – 61,400 (17.8%); New York 45,800 (16.2%); Illinois 43,700 (25.5%); Massachusetts 40,800 (34.2%); Pennsylvania 38,100 (20.9%) Florida 30,800 (19.2%); North Carolina 24,600 (16.0%); New Jersey 24,000 (14.1%) Virginia 20,200 (18.0%) Georgia 19,100 (17.0%) Minnesota 17,800 (35.1%) and Tennessee 17,100 (22.9%).
- The top five U.S. states in terms of jobs provided directly by European affiliates in 2015 were California (406,900), Texas (355,500), New York (327,900), Pennsylvania (220,600) and Illinois (215,000).

The Transatlantic Innovation Economy

- Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2015 U.S. affiliates invested \$31.3 billion in research and development in Europe, representing 57% of total global R&D expenditures by U.S. foreign affiliates.
- R&D expenditures by U.S. affiliates were the greatest in Germany (\$8.0 billion), the UK (\$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 U.S, R&D expenditures by majority-owned foreign affiliates totaled \$57 billion in 2015. R&D spending by European affiliates totaled \$41 billion, representing 72% of all R&D performed by majority-owned foreign affiliates in the United States.
- Swiss-owned R&D in the U.S. totaled \$9.7 billion in 2015, nearly a quarter of total European affiliate R&D in the United States. British affiliates accounted for 19.5%, German for 17.6% and French for 13.1%.