

Executive Summary

- Despite transatlantic political turbulence and the COVID-19-induced recession, the U.S. and Europe remain each other's most important markets. The transatlantic economy generates \$6.2 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 half of total global personal consumption and close to one-third of world GDP in terms of purchasing power.
- Intra-firm trade also accounted for 39% of U.S. exports to Europe and 56% to the Netherlands, 37% to Germany and 32% to France.

- 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 32% of global imports in 2019. But together they accounted for 64% of the outward stock and 61% 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 57% of the \$395 billion in U.S. exports by U.S.-based foreign affiliates in 2018. German companies exported \$50 billion from the U.S. in 2018.
- U.S. foreign affiliate sales in Europe of \$3.4 trillion in 2019 were greater than total U.S. exports to the world of \$2.5 trillion and roughly half of total U.S. foreign affiliate sales globally.
- Foreign investment and affiliate sales drive transatlantic trade. 63% of U.S. imports from the EU consisted of intra-firm trade in 2019 - much higher than U.S. intra-firm imports from Asia-Pacific nations (around 37%) and well above the global average (49%). Percentages are notably high for Ireland (87%), the Netherlands (70%) and Germany (70%).
- Measured on a historic cost basis, the total stock of U.S. FDI in Europe was \$3.6 trillion in 2019 - 60% of the total U.S. global investment position and almost four times U.S. investment in the Asia-Pacific region.
- The pandemic-induced recession caused U.S. FDI flows to Europe to vanish, from \$344 billion in 2019 to roughly \$0 in 2020. This sharp swing in global FDI to Europe, however, was mainly driven by large divestments and negative intra-company loans in the Netherlands and Switzerland (-\$150 billion and -\$88 billion FDI flows respectively). Given their one-off nature, we expect the recent investment declines to be temporary. FDI inflows to Europe should bounce back to positive territory in 2021.
- 2018 and 2019 were atypical years as U.S. companies repatriated a large amount of foreign earnings that had been accumulating overseas, in large part because of 2017 changes to U.S. tax law. As a result, holding companies in Europe saw negative U.S. outflows of \$47 billion in 2019 while positive FDI of \$56 billion flowed to all other industries in Europe, resulting in net U.S. FDI flows to Europe of \$8 billion in 2019.
- In the first three quarters of 2020, however, U.S. FDI outflows to Europe increased to \$55 billion, once again accounting for roughly half of U.S. global outflows. U.S. outflows to the Asia-Pacific region during the first three quarters of 2020 declined sharply to \$8 billion. Just \$1.2 billion flowed to China and \$2.1 billion to the BRICs (Brazil, Russia, India and China).
- Official figures can be misleading when it comes to the original source and the ultimate destination of FDI. For instance, Germany officially accounted for only 2.5% of U.S. FDI flows since 2010. Yet much U.S. FDI flows into Germany from neighboring countries. Whereas official figures indicate that FDI stock in Germany from the U.S. in 2017 was \$90 billion, "real

The U.S. in Europe

- FDI” stock from the U.S. to Germany was actually \$170 billion. Similarly, “real FDI” links from Germany to the U.S. are considerably higher than official statistics might indicate. The same is true for other important bilateral investment links.
- In 2019 nonbank U.S. holding companies reported negative FDI outflows to Europe of -\$47 billion due to repatriations and/or divestments. Nonbank holding companies accounted for 54% of total U.S. FDI stock in Europe in 2019.
 - Excluding holding companies, total U.S. FDI stock in Europe amounts to \$1.6 trillion – a much smaller figure but still more than 2.5 times larger than total U.S. investment in the Asia-Pacific region (FDI stock of \$635 billion excluding holding companies).
 - From 2000 to 2019, Europe still accounted for over half of total U.S. FDI outflows globally and more than double the share to Asia when flows from holding companies are removed from the overall figures.
 - America’s capital stock in the UK (\$851 billion in 2019) is more than triple combined U.S. investment in South America, the Middle East and Africa (\$261 billion). Total U.S. investment stock in China was just \$116 billion in 2019, only about 14% of U.S. investment stock in the UK. The U.S. investment presence in China and India combined – totaling \$162 billion in 2019 – is just 19% 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 2019 Europe accounted for roughly 60% – \$17.3 trillion – of corporate America’s total foreign assets globally. Largest shares: the UK (20%, \$5.4 trillion) and the Netherlands (10%, \$3.0 trillion).
 - America’s asset base in Germany (\$905 billion in 2018) was about 30% larger than its asset base in all of South America and almost double its assets in China.
 - America’s assets in Ireland (\$2.0 trillion in 2018) and Switzerland (\$1.0 trillion) were each much larger than those in China (\$466 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 \$351 billion in 2018, about 4.5 times more than U.S. affiliate exports from China and about 3.5 times more than affiliate exports from Mexico.
 - Total output of U.S. affiliates in Europe (\$740 billion) and of European affiliates in the U.S. (\$723 billion) in 2019 was greater than the total gross domestic product of such countries as Australia, Spain, Mexico or Indonesia.
 - Aggregate output of U.S. affiliates globally reached \$1.5 trillion in 2019; Europe accounted for 49% of the total.
 - U.S. affiliate output in Europe (\$720 billion) in 2018 was roughly double affiliate output in all of Asia (\$386 billion). U.S. affiliate output in China (\$77 billion) and India (\$35 billion) lag behind U.S. affiliate output in the UK (\$169 billion), Germany (\$85 billion), or Ireland (\$110 billion).
 - Sales of U.S. affiliates in Europe were double those of U.S. affiliates in the entire Asian region in 2019. Affiliate sales in the UK (\$724 billion) were more than double total sales in South America. Sales in Germany (\$385 billion) were more than double combined sales in Africa and the Middle East.
 - The value added of non-financial U.S. businesses in the EU28 (€490 billion in 2017) was more than 6.5 times the output of Japanese affiliates (€75 billion) and 18 times the output of Chinese affiliates (€27 billion) in Europe.
 - In 2020 the pandemic and recession caused U.S. affiliate income in Europe to fall 15% to an estimated \$254 billion – still more than 40% larger than during the 2009 financial crisis. Europe still accounted for roughly 55% of U.S. global foreign affiliate income in the first nine months of 2020.
 - U.S. affiliate income from China and India in 2019 (\$17 billion) was a fraction of what U.S. affiliates earned in the Netherlands (\$84 billion), Ireland (\$63 billion), or the UK (\$57 billion).
 - U.S. affiliate income in China in the first three quarters of 2020 (\$7.1 billion), however, was more than combined affiliate income in Germany (\$2.5 billion), Spain (\$1.7 billion) and France (\$629 million), and income in India (\$3.1 billion) was well more than that earned in many European countries.

Europe in the U.S.

- Europe accounted for over 60% of global FDI that flowed into the U.S. in the first three quarters of 2020. Annualizing data, U.S. FDI inflows from Europe are estimated to come in at \$81 billion in 2020 versus \$120 billion in 2019.

- UK firms were the largest source of greenfield foreign investment projects in 18 U.S. states during the ten-year period from October 2010-September 2020. German companies led in 11 states, followed by Canadian companies in 10 states and Japanese companies in 7.
- Global FDI flows into the U.S. dropped by almost 50% in 2020, due to large declines in investments from German, British and Japanese companies. Despite the turbulence, the U.S. attracted \$134 billion of inflows, ranking second after China (\$163 billion). Prior to 2020, the U.S. ranked number one in the world for FDI inflows for 14 years.
- European FDI flows into the U.S. fell to \$81 billion in 2020 vs. \$120 billion in 2019. Europe accounted for roughly 64% of the \$4.5 trillion invested in the United States in 2019 on a historic cost basis. Total European stock in the U.S. of \$2.9 trillion was more than three times the level of comparable investment from Asia.
- The bulk of the capital was sunk by British firms (with total UK stock amounting to \$505 billion), the Netherlands (\$487 billion), Germany (\$372 billion), Switzerland (\$301 billion).
- In 2018 total assets of European affiliates in the U.S. were an estimated \$8.1 trillion. The UK ranked first, followed by Germany, France, and Switzerland.
- In 2018 European assets accounted for nearly 55% of total foreign assets in the United States.
- We estimate income of European affiliates in the U.S. in 2020 fell 32% to \$91 billion after hitting a near-record levels in 2019.
- The output of British firms in the U.S. in 2019 reached \$178 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 \$135 billion, nearly 19% of the European total.
- European companies operating in the U.S. accounted for nearly 61% of the roughly \$1.1 trillion contributed by all foreign firms to U.S. aggregate production in 2018. European affiliate output (\$670 billion) was four times larger than Japanese affiliate output (\$161 billion), 5.4 times larger than Canadian affiliate output (\$125 billion) and over 39 times greater than Chinese affiliate output (\$16 billion).
- European companies accounted for 74% of total foreign FDI in U.S. manufacturing in 2019. The U.S. chemicals sector was the biggest recipient of European investment (\$592 billion), followed by transportation equipment (\$271 billion).
- Affiliate sales, not trade, are the primary means by which European firms deliver goods and services to U.S. consumers. In 2019 European affiliate sales in the U.S. (\$2.8 trillion) were more than triple U.S. imports from Europe (\$852 billion). By country, sales of British firms were the largest (\$714 billion) in 2019, followed by Germany (\$555 billion), and the Netherlands (\$410 billion),
- Sales by British affiliates in the U.S. totaled \$714 billion in 2019, followed by German affiliate sales (\$555 billion) and those by Dutch affiliates (\$410 billion).

Transatlantic Trade

- U.S. merchandise exports to the EU (including the UK) fell by 13.6% in 2020 to \$291 billion. The most resilient export markets included Hungary (U.S. goods exports up 11% in 2020), Malta (+10%), Lithuania (+9%), the Czech Republic (+7%), Sweden (+7%), Ireland (+6%) and Switzerland (+1%).
- The U.S. annual merchandise trade deficit with the EU (including the UK) fell slightly in 2020 to \$175 billion. The U.S. deficit with China (\$310 billion) is almost double the U.S. deficit with the EU.
- The U.S. and the EU are each other's largest export markets. U.S. goods exports to the EU (including the UK) in 2020 (\$291 billion, down 13%) were more than double U.S. goods exports to China (\$125 billion). Meanwhile, EU (incl. UK) exports to the U.S. represented roughly 22% of the region's extra-EU exports in 2019; EU exports to China represented just 11% of the total.
- U.S. merchandise exports to Europe have almost doubled in value from 2000 to 2020. U.S. exports of goods to Europe were up 3% in 2019 but fell 13% in 2020. Fifteen U.S. states registered double-digit growth in goods exports to Europe from 2018 to 2019. However, all but two U.S. states (New Hampshire and New Jersey) registered negative export growth to Europe in 2020.

- 48 of the 50 U.S. states export more to Europe than to China, in many cases by a wide margin. America's five Pacific coast states exported about 40% more goods to Europe than to China.
- In 2019 New York and Maryland exports to Europe were more than nine times those to China; Florida almost eight times more; Connecticut and New Jersey six times more; Georgia, Indiana Kentucky, Nevada and Texas roughly five times more. Arizona, Kansas, Massachusetts Virginia, Illinois and Missouri each exported roughly four times more to Europe than to China.
- Germany was the top European export market for 20 U.S. states and the UK for 14 in 2019.
- The UK alone accounted for 28% of all U.S. affiliate sales in Europe in 2018 - \$267 billion, greater than combined affiliate sales in South and Central America (\$124 billion), Africa (\$14 billion), or the Middle East (\$22 billion).
- Europe accounted for roughly 55% of total U.S. affiliate services sales globally.
- European affiliate sales of services in the U.S. of \$636 billion in 2018 were about 32% 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 \$1.2 trillion in 2018; European firms accounted for 54% of the total. British affiliates lead in terms of affiliate sales of services (\$161 billion), followed closely by Germany (\$151 billion).
- European companies operating in the U.S. generated an estimated \$664 billion in services sales in 2019, which is 2.8 times more than European services exports to the U.S. of \$245 billion.

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 39% of total U.S. services exports and for 42% of total U.S. services imports in 2019.
- U.S. services exports to Europe reached a record \$345 billion in 2019. The U.S. had a \$100 billion trade surplus in services with Europe in 2018, compared with its \$223 billion trade deficit in goods with Europe.
- U.S. imports of services from Europe also hit an all-time high in 2019 of \$245 billion. 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 3% to \$968 billion in 2019, 2.8 times more than U.S. services exports to Europe of \$345 billion.

The Transatlantic Digital Economy

- The transatlantic theatre is the fulcrum of global digital connectivity. North America and Europe generate about 75% of global digital content.
- U.S. and European cities (Frankfurt, London, Amsterdam, Paris, Stockholm, Miami, Marseille, New York) are the world's foremost hubs for international communication and data exchange.
- 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. Submarine cables in the Atlantic carry 55% more data than transpacific routes, and 40% more data than between the U.S. and Latin America.
- 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 2019, digitally-enabled services accounted for 59% of all U.S. services exports, 50% of all services imports, and 76% of the U.S. global surplus in trade in services.

- In 2019 the U.S. registered a \$219.9 billion trade surplus in digitally-enabled services with the world. Its main commercial partner was Europe, to which it exported over \$245 billion in digitally-enabled services and from which it imported an estimated \$133 billion, generating a trade surplus with Europe in this area of over \$112 billion.
- U.S. exports of digitally-enabled services to Europe were about 2.7 times greater than U.S. digitally-enabled services exports to Latin America, and double U.S. digitally-enabled services exports to the entire Asia-Pacific region.
- The 27 EU member states collectively exported €1.1 trillion in digitally-enabled services to countries both inside and outside the EU in 2019. EU27 imports of digitally-enabled services were also €1.1 trillion in 2019.
- Excluding intra-EU trade, EU member states exported €585 billion and imported €622 billion in digitally-enabled services, resulting in a deficit of €37 billion for these services.
- Digitally-enabled services represented 55% of all EU services exports to non-EU countries and 63% of all EU services imports from non-EU countries.
- In 2019 the United States accounted for 22% of the EU27's digitally-enabled services exports to non-EU countries, and 27% of EU digitally-enabled services imports from non-EU countries.
- European countries with the largest estimated value of digitally-enabled services exports were the UK (€261 billion), Ireland (€177 billion), Germany (€173 billion), and the Netherlands (€160 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.
- EU27 member states imported €1.1 trillion in digitally-enabled services, according to 2019 data from Eurostat. 42% originated from other EU27 member states. Another 16% (€167 billion) came from the United States – making it the largest supplier of these services – and 11% came from the UK.
- 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. U.S. services supplied by affiliates abroad were \$1.7 trillion, roughly double global U.S. services exports of \$875 billion.
- 52% of the \$938 billion in services provided in Europe by U.S. affiliates in 2018 was digitally-enabled.
- In 2018 U.S. affiliates in Europe supplied \$490.51 billion in digitally-enabled services, double U.S. digitally-enabled exports to Europe.
- In 2018 European affiliates in the U.S. supplied \$273.78 billion in digitally-enabled services, double European digitally-enabled exports to the U.S.
- In 2018, Europe accounted for 69% of the \$289.6 billion in total global information services supplied abroad by U.S. multinational corporations through their majority-owned foreign affiliates.
- U.S. overseas direct investment in the “information” industry in the UK alone was more than double such investment in the entire Western Hemisphere outside the United States, and 33 times such investment in China. Equivalent U.S. investment in Germany was four times more than in China.

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 9.9 million workers in 2019. These figures understate the overall job numbers, since they do not include jobs supported by transatlantic trade flows; indirect employment effects of nonequity arrangements such as strategic alliances, joint ventures, and other deals; and indirect employment generated for distributors and suppliers.
- U.S. affiliates directly employed an estimated 4.9 million workers in Europe in 2019 – close to one-third more than in 2000.

- Roughly 33% of the 14.4 million people employed by U.S. majority-owned affiliates around the world in 2018 lived in Europe; that share is down from 38% in 2008.
- U.S. affiliates employed more manufacturing workers in Europe in 2018 (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 2018, rising from 51,000 to over 131,000.
- Manufacturing employment among U.S. affiliates in the UK has declined from 431,000 in 2000 to 293,000 in 2018 and in France from 249,000 to 195,000.
- Manufacturing employment among U.S. affiliates in Germany has remained relatively steady – 362,000 jobs in 2018, 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 38% of total employment by U.S. affiliates in Europe in 2018. U.S. affiliates employed nearly 336,000 European workers in transportation and 283,000 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.
- European majority-owned foreign affiliates directly employed 5 million U.S. workers in 2019. European companies now directly employ more Americans than U.S. companies employ Europeans.
- In 2018 the top five European employers in the U.S. were firms from the United Kingdom (1.3 million), Germany (860,700), France (780,000), the Netherlands (550,000), and Switzerland (478,500).
- European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2018.
- European companies directly supported 301,000 jobs in the U.S. transportation equipment industry in 2018 – 50% of total foreign affiliate employment in this industry.
- Texas gained 25,300 jobs (6.7% more) directly from European investment between 2017 and 2018. Others with significant gains included California – 22,100 jobs added (+4.7%); New York 16,300 (+4.8%); Michigan 15,100 (+8%); Florida 12,600 (+5.8%); and Virginia 10,500 (+7.4%).
- The top five U.S. states in terms of jobs provided directly by European affiliates in 2018 were California (490,700), Texas (401,500), New York (357,400), Illinois (240,300) and Pennsylvania (232,900).
- American companies reshoring jobs to the U.S. in 2020 created more jobs (69,000) than FDI (42,000) for the first time in seven years, due to pandemic-induced disruptions to supply chains, digital innovations, and changes to the U.S. tax code.

The Transatlantic Energy Economy

- Foreign companies have invested roughly \$400 billion into U.S. energy-related industries. In 2018, FDI in the U.S. energy economy directly supported 173,500 U.S. jobs, contributed \$1.2 billion in R&D and generated \$5.7 billion in U.S. exports.
- German companies are by far the leading source of foreign direct investment in the U.S. energy economy in recent years, accounting for 16% of the 830 greenfield investment projects in the U.S. energy sector over the past decade. Other notable European investors include France (9%), the UK (8%), and Spain (7%).
- Europe and the U.S. made up over 80% of all green bonds and 78% of all sustainable debt issued in 2020.
- Monthly liquefied natural gas (LNG) exports from the United States to Europe dipped in 2020, but still averaged 65 billion cubic feet for the year, up from 57 billion cubic feet in 2019. The U.S. is a net energy exporter of crude and petroleum products to Europe.
- U.S. companies in Europe have become a driving force for Europe's green revolution. Since 2007 U.S. companies have been responsible for more than half of the long-term renewable energy agreements in Europe. U.S. companies account for four of the top five purchasers of solar and wind capacity in Europe.

The Transatlantic Innovation Economy

- Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2018 U.S. affiliates spent \$33 billion on R&D in Europe, 56% of total U.S. R&D conducted globally by affiliates.
- R&D expenditures by U.S. affiliates were the greatest in the UK (\$6.7 billion), Germany (\$6.3 billion), Switzerland (\$5.4 billion), Ireland (\$3.4 billion), France (\$2.1 billion), Belgium (\$1.8 billion) and the Netherlands (\$1.6 billion). These seven nations accounted for roughly 83% of U.S. spending on R&D in Europe in 2018.
- In the U.S. R&D expenditures by majority-owned foreign affiliates totaled \$66.9 billion in 2018. R&D spending by European affiliates totaled \$45.1 billion, representing 67% of all R&D performed by majority-owned foreign affiliates in the U.S.
- The largest European sources of R&D in the U.S. in 2018 were firms from Germany (\$10 billion) and Switzerland (\$9.6 billion).