

Jobs, Trade and Investment: Enduring Ties that Bind





The collapse in trade, investment, and jobs due to the coronavirus has been widespread, hitting all regions and many industries. As economies shut down, demand plunged, labor markets weakened, and the cross-border flows of goods, services, people, and investment collapsed. Even before the pandemic, however, global trade growth was decelerating. Foreign investment was also contracting on account of a global slowdown in economic activity, escalating trade tensions, rising protectionism, and recent U.S. tax changes that incentivized American firms to repatriate foreign profits.

After bottoming out in May and June 2020, transatlantic trade in goods quickly rebounded and is now close to pre-pandemic levels. Services trade, an increasingly important avenue for global commerce and for transatlantic commercial ties in particular, will take much longer to recover, and will depend on progress in vaccine distribution and the lifting of travel restrictions.

The economic damage from COVID-19 extends far beyond trade. Foreign affiliate sales, not trade, are the primary means by which U.S. and European firms deliver goods and services to foreign consumers. Multinational sales and investments, which have become essential to U.S. and European jobs and prosperity, witnessed a sharp decline in 2020 due to collapsing profits, heightened business uncertainty and an overall weakening of global demand. According to the United Nations, global FDI flows were down 42% in 2020, with severe declines in Europe and North America driving the downturn.

Yet even with the hit from the coronavirus and much talk of de-globalization, the United States and Europe remain deeply intertwined and embedded in each other's markets. Consumers and producers, workers and companies, citizens, and their governments on both sides of the Atlantic directly benefit from the deep integrative forces that bind the United States and Europe together.

Indeed, despite the 2020 slowdown, the transatlantic economy remains the fulcrum of the global economy. The combined output of the United States and the EU27 plus close partners Switzerland, the UK, Iceland, and Norway accounted for roughly one-third of world GDP in terms of purchasing power parity in 2020 – higher than the combined output of the newly formed Regional Comprehensive Economic Partnership (RCEP) in Asia (30% of world GDP).

The transatlantic economy is not only larger than China and India in terms of GDP, it is significantly wealthier. Consumers in the United States and the EU easily outspend their counterparts in China and India. As mentioned in Chapter One, together the United States and the EU (including the UK) accounted for 50% of global personal consumption in 2019, versus a combined share of just 15% for China and India. Per capita incomes – a key metric of a nation's wealth – are far higher in the United States (\$65,300), the EU27 (\$35,000) and the UK (\$42,300) than either China (\$10,300) or India (\$2,100).

Economic damage from COVID-19



Trade in goods: quickly rebounded after a sharp decline



Trade in services: big fall and long road to recovery



Foreign affiliate sales: collapsing profits



Heightened business uncertainty



Weakening of global demand

60 - 60.5% 63.8% 54.9% 50 - 27.0% - 27.0% - 27.0% - 27.0% - 20 - World GDP¹ World Exports² World Imports² World FDI World FDI World M&A World M&A Purchases Purchases

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

Sources: UN, IMF, figures for 2019. Transatlantic economy measured as U.S., EU, UK., Norway, Switzerland and Iceland. 1. Based on PPP estimates.

2. Excluding intra-EU, UK, Norway, Switzerland and Iceland trade.

In addition, the transatlantic economy is a repository of innovation and technological advancement, and at the forefront of global foreign direct investment (FDI) and global mergers and acquisitions (M&A) activity. Taken together, U.S. and European exports to the world (excluding intra-EU trade) accounted for 27% of global exports in 2019, the last year of complete data; combined imports represented 32% of the world total. Meanwhile, the United States and Europe together accounted for 61% of inward FDI stock and 64% of outward FDI stock. Each partner has built up the great majority of that stock in the other economy.

It is no surprise, therefore, that the largest commercial relationship in the world stretches across the Atlantic. Total transatlantic foreign affiliate sales were estimated at \$6.2 trillion in 2019, easily ranking as the top commercial artery in the world on account of the thick investment ties between the two parties.

That said, the burgeoning middle class of the developing nations represents a new source of supply (labor) and demand (consumers) for U.S. and European firms. American and European firms are building out their presence in the developing nations, and for good reason. Economic growth rates are still above the global average in most of these 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.



34.5%

U.S. and Europe

30%

Regional Comprehensive Economic Partnership (RCEP)

\$6.2 Trillion U.S. \$ Trillions \$3.3 Trillion \$1.9 Trillion \$1.6 Trillion \$1.4 Trillion \$1.4 Trillion \$1.2 Trillion \$1.1 Trillion Asia/Pacific Asia/Pacific South/Central Transatlantic Mexico and Mexico and South/Central Transatlantic Canada Canada America/ America/ Affiliate Sales Total Foreign Caribbean Caribbean Total Foreign

Table 2 America's Major Commercial Arteries

Foreign Affiliate Sales: Estimates for 2019. Total Trade: Data for goods & services, 2019. South/Central America and Caribbean includes Mexico.

Source: Bureau of Economic Analysis.

What is often missing from this either-or picture, however, is the fact that many U.S. and European firms use each other's markets as a launchpad to 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.A. to China and other countries. U.S. services companies, in turn, use the scale offered by their dense investment linkages with Europe to be globally competitive when it comes to offering services in other parts of the world. Many U.S. multinationals also use their presence in stable and secure Europe to supply both goods and services to the burgeoning, but often volatile, markets of North Africa and the Middle East.



The transatlantic economy

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

The Ties That Bind - Quantifying the Transatlantic Economy

As we outline and emphasize each year in this annual survey, it is investment and the activities of foreign affiliates, not trade, that drives U.S.-European commerce. Understanding this dynamic is essential to understanding the enduring strength and importance of the transatlantic economy.

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. affiliates in Europe (an estimated \$740 billion in 2019) and of European affiliates in the U.S. (\$723 billion) was greater than the total gross domestic product of most countries. For example, combined transatlantic affiliate output – over \$1.4 trillion – was larger than the output of such countries as Australia, Spain, Mexico or Indonesia.

Total output of foreign affiliates

(2019 estimate)



\$740 billion U.S. in Europe \$723 billion Europe in the U.S.

U.S. affiliate output

(2018)







Europe

\$720 bn \$386 bn Asia-Pacific

By our estimation, European affiliate output in the United States rose 4.9% in 2019, while U.S. affiliate output in Europe increased 2.8%. We expect U.S. foreign affiliate output to decline in the near term, due to weaker economic conditions caused by the global pandemic. European affiliates operating in the United States also saw their output deteriorate in 2020, as stay-at-home orders and the shutdown of many services industries halted economic activity. We expect this activity to swiftly rebound after the pandemic.

On a global basis, the aggregate output of U.S. foreign affiliates exceeded \$1.5 trillion in 2019, with Europe (broadly defined)¹ accounting for around 49% of the total.

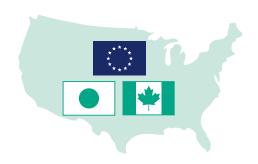
Looking at actual figures for 2018 from the Bureau of Economic Analysis, U.S. affiliate output in Europe (\$720 billion) was roughly double the U.S. affiliate output in the entire Asia-Pacific region (\$386 billion). Additionally, according to the latest figures from Eurostat, the value added of non-financial U.S. businesses in the EU28 (€490 billion in 2017) dwarfs the output of Japanese affiliates (€75 billion), Chinese

affiliates (€27 billion) and other major affiliates based in Europe.2

In the United States, meanwhile, European companies are major economic producers, with British firms of notable importance. The value added of British companies in the United States reached an estimated \$178 billion in 2019, about one-quarter of the European total. For the same year, output from German affiliates operating in the United States totaled \$135 billion, or 19% of the European total.

In 2018, the last year of available data, European affiliates in the United States accounted for 61% of the roughly \$1.1 trillion that U.S. affiliates of foreign multinationals contributed overall to U.S. aggregate production.

Beyond Europe, only Canada and Japan have a significant economic presence in the United States. Japanese affiliate output totaled \$161 billion in 2018, the last year of available data, while Canadian affiliate output was \$125 billion. And for all the hype about Chinese investments in the U.S., Chinese affiliate output in the U.S. amounted to only \$16 billion.



Beyond Europe, only Canada and Japan have a significant economic presence in the United States

U.S. foreign assets in Europe \$17.3 trillion

(2019 estimate)



2. Assets of Foreign Affiliates

Corporate America and Corporate Europe each have significant asset bases around the world, especially in each other's markets. According to the latest figures from the Bureau of Economic Analysis, U.S. foreign assets in Europe totaled \$17.1 trillion in 2018, representing roughly 62% of the global total. For 2019, we estimate that U.S. foreign assets in Europe exceeded \$17.3 trillion, close again to 60% of the global total. The largest share of U.S. assets in Europe was in the UK, which accounted for assets of \$5.4 trillion, around 20% of the global total.

U.S. assets in the Netherlands (around \$3 trillion) were the second largest in Europe in 2018, but were down 6.8% from the prior year. 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 U.S. affiliate sales in the Netherlands are for export, particularly within the EU.

Meanwhile, America's asset base in Germany (\$905 billion in 2018) was about 30% larger than its asset base in all of South America. 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).

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 \$8.1 trillion in 2018. The UK ranked first in Europe, followed by Germany, France, and Switzerland. In 2018, the last year of available data, European assets in the United States accounted for 55% of all assets held by foreign-owned corporations in the United States.

3. Affiliate Employment

U.S. and European foreign affiliates are a major source of employment for the 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.

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 4.8 million workers in 2018 – a 30% increase. We estimate that U.S. affiliates in Europe employed 4.9 million workers in 2019, a 1.6% increase from the year before.

Table 3 The U.S. - European Employment Balance Thousands of employees, 2019*, select countries

Country	U.S. Companies in Europe	European Companies in the U.S.	Employment Balance
Austria	47.6	29.1	-18.5
Belgium	126.9	67.9	-59.0
Czech Republic	79.8	0.1	-79.7
Denmark	45.3	42.0	-3.3
Finland	21.2	36.3	15.1
France	505.9	799.5	293.6
Germany	685.9	882.2	196.3
Greece	15.7	3.8	-12.0
Hungary	69.1	0.2	-68.9
Ireland	136.7	344.8	208.1
Italy	253.9	96.0	-157.9
Luxembourg	29.1	20.0	-9.2
Netherlands	266.8	563.7	296.9
Norway	43.1	8.1	-35.0
Poland	207.2	1.0	-206.2
Portugal	32.4	1.0	-31.4
Romania	77.2	0.0	-77.2
Spain	178.6	92.7	-85.9
Sweden	75.3	234.8	159.6
Switzerland	101.9	490.4	388.6
United Kingdom	1,487.5	1,302.8	-184.6
Europe	4,869.7	5,036.6	166.9

Note: Employment balance "+" favors the United States Source: Bureau of Economic Analysis.

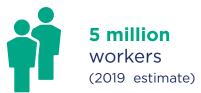
*2019 Estimates. Majority-owned bank and non-bank affiliates.

While aggregate employment levels continue to rise modestly, manufacturing employment has plateaued since 2000. U.S affiliate manufacturing employment in Europe totaled 1.9 million in 2000, on par with the levels of 2018. However, while the overall number has stayed roughly the same, the country composition has changed, with more investment shifting to lower-cost locales like Poland and Hungary versus high-cost economies like the UK and France. The largest employment declines were reported in the UK, with the total manufacturing work force falling from 431,000 in 2000 to 293,000 in 2018. U.S.

U.S. foreign affiliate employment in Europe



European foreign affiliate employment in the U.S.



manufacturing employment in France dropped from 249,000 to 195,000. U.S. manufacturing employment in Germany has registered far less decline – from 388,000 in 2000 to 362,000 in 2018. Poland continues to be a significant winner, with U.S. affiliate manufacturing employment growing more than 2.5 times, from 51,000 in 2000 to over 131,000 in 2018.

On a global basis, U.S. majority-owned affiliates (including banks and non-bank affiliates) employed 14.4 million workers in 2018, with about one-third of these workers living in Europe. Europe's share of U.S. affiliate manufacturing employment is slightly larger at 34%, although this share is down from 40% in 2009. U.S. overseas capacity has been expanding at a faster pace in emerging markets than 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.

Indeed, the latest annual data on U.S. manufacturing employment indicates that American companies reshoring jobs to the U.S. in 2020 created more jobs than FDI for the first time in seven years. According to the Reshoring Initiative, the estimated number of manufacturing jobs created by greenfield investment was roughly 42,000, compared to 69,000 reshored jobs. Digital innovations also mean companies can now do some things from home that they used to do abroad. Additionally, the 2017 overhaul of the U.S. corporate tax code, which lowered America's tax rate below the rates of many European countries, has spurred more investment to come home or stay in the United States – more on that in Chapter Five.

Most employees of U.S. majority-owned firms in Europe work in the UK, Germany or France. These firms are, on balance, hiring more people in services activities than in manufacturing. The latter accounted for just 38% of total U.S. foreign affiliate employment in Europe in 2018. The key industry in terms of manufacturing employment was transportation equipment, with U.S. affiliates employing nearly 336,000 workers, followed by chemicals (283,000).

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 2018 (1.9 million) than in 1990 (1.6 million). This reflects the EU enlargement process, which offered both U.S. and European companies 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 such skilled talent in the world.

Combined, the transatlantic workforce directly employed by U.S. and European foreign affiliates in 2018 was roughly 9.7 million strong, up roughly 2% from the year before. Yet, affiliate employment growth in the United States in 2018 far outpaced growth of U.S. affiliates in Europe. In 2018, the latest year of available data, the U.S.-based workforce of European companies increased by 4.1%. On the other side of the Atlantic, U.S. firms increased their European employment base by just 0.4%. This caused the employment balance to shift to favor the U.S. for the first time in 16 years – meaning that European companies now directly employ more Americans than U.S. companies employ Europeans.

Based on the latest figures, European majority-owned foreign affiliates directly employed 4.9 million U.S. workers in 2018 – some 194,000 more workers than in 2017. In 2018, the top five European employers in the United States were the UK (1.3 million, up 56,400 from 2017), Germany (860,700, up 44,900 from 2017), France (780,000, up 35,600 from 2017), the Netherlands (550,000, down 7,200 from 2017), and Switzerland (478,500, up 21,000 from 2017). European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2018.

In 2019, modest gains in employment were most likely achieved on both sides of the pond, with employment levels in the United States again rising at a faster pace than in Europe, according to estimates. For 2019 we estimate U.S. affiliates based in Europe directly employed about 4.9 million European workers, and European affiliates based in the United States directly employed about 5 million Americans. 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 or local suppliers. Trade-related employment is sizable in many U.S. states and many European nations.

Employment growth rates likely turned negative in 2020 as real growth and demand plummeted in the wake of the coronavirus recession. Employment in Europe was relatively more resilient, due to more frequent use of subsidized furlough programs. Between March and December 2020, the U.S. unemployment rate averaged 9.0%, while in the EU the average was 7.3%.

Despite the setback, direct and indirect employment remain quite large. We estimate that the transatlantic workforce numbers some 14-16 million workers, counting both direct affiliate employees as well as those whose jobs are supported by transatlantic trade. 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 has rapidly advanced its R&D capabilities in areas such as artificial intelligence, quantum computing, space exploration, cybersecurity, life sciences, electric vehicles, supercomputing, semiconductors, and 5G. An important goal of China's 14th Five-Year Plan (2021-2025) is to make China a global leader in innovation and increase self-sufficiency in key technologies.

While governments and domestic corporations are the main drivers of R&D spending, foreign affiliates of multinationals are also significant contributors. In fact, foreign affiliate R&D has become more prominent in recent 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 foreign partners can range from a simple one-way transmission of information to highly interactive and formal arrangements. Developing 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.



R&D spending of foreign affiliates (2018)

\$33 billionU.S. in Europe

\$45 billionEurope in the U.S.

Table 4 The Top 20 R&D Spenders

		R&D Sp	ending		
2019	Company	2019 Change (€ billion) from 2018		Country	Industry
1	Alphabet	23.2	24%	United States	Software & Computer Services
2	Microsoft	17.2	14%	United States	Software & Computer Services
3	Huawei	16.7	31%	China	Technology Hardware & Equipment
4	Samsung	15.5	8%	S. Korea	Electronic & Electrical Equipment
5	Apple	14.4	14%	United States	Technology Hardware & Equipment
6	Volkswagen	14.3	5%	Germany	Automobiles & Parts
7	Facebook	12.1	32%	United States	Software & Computer Services
8	Intel	11.9	-1%	United States	Technology Hardware & Equipment
9	Roche	10.8	6%	Switzerland	Pharmaceuticals & Biotechnology
10	Johnson & Johnson	10.1	5%	United States	Pharmaceuticals & Biotechnology
11	Daimler	9.6	7%	Germany	Automobiles & Parts
12	Toyota Motor	9.1	6%	Japan	Automobiles & Parts
13	Merck U.S.	8.2	-4%	United States	Pharmaceuticals & Biotechnology
14	Novartis	7.7	-5%	Switzerland	Pharmaceuticals & Biotechnology
15	Gilead Sciences	7.4	98%	United States	Pharmaceuticals & Biotechnology
16	Pfizer	7.4	6%	United States	Pharmaceuticals & Biotechnology
17	Honda Motor	6.8	0%	Japan	Automobiles & Parts
18	Ford Motor	6.6	-10%	United States	Automobiles & Parts
19	BMW	6.4	-7%	Germany	Automobiles & Parts
20	Robert Bosch	6.2	1%	Germany	Automobiles & Parts
		221.6	10.3%		

Source: The 2020 EU Industrial R&D Investment Scoreboard. Data as of December 2020.

Note: Only companies that disclose their R&D figures according to the Scoreboard methodology can be included in the ranking. Excluded from the ranking is Amazon which, according to the Scoreboard, would be positioned at #1 in the world R&D ranking if it had separated its R&D and content investments in its annual report.

Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2018, the last year of available data, U.S. affiliates spent \$33 billion on research and development in Europe, relatively unchanged from the prior year. On a global basis, Europe accounted for roughly 56% of total U.S. R&D conducted abroad by affiliates in 2018, down slightly from 2017. 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 United States, meanwhile, expenditures on R&D performed by majority-owned foreign affiliates totaled \$66.9 billion in 2018. As in previous years, a sizable share of this R&D spending - \$45.1 billion,

over two-thirds of the total – emanated from firms in 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 pharmaceuticals & medicine (34% of the total), autos (14% of the total) and professional & scientific services (10% of the total).

On a country basis, German-owned affiliates were the second largest source of R&D in the United States in 2018, spending some \$10.0 billion – just behind Japan affiliate R&D spending of \$10.9 billion. Swiss firms accounted for 21% of total European R&D spending, or \$9.6 billion. British firms accounted for 15% of European R&D spending, or \$6.7 billion. As Table 4 highlights, some of the world's most innovative companies which invest the most in R&D are domiciled in the United States and Europe.

5. Intra-firm Trade of Foreign Affiliates

The two main modes of international commerce – 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. Intrafirm or related party-trade occurs when BMW or Siemens of Germany sends parts to BMW of South Carolina or Siemens of North Carolina; when Lafarge or Michelin sends intermediate components to its Midwest American plants, or when Caterpillar or 3M ships components from Illinois or Minnesota to affiliates in Poland or the UK.

Table 5 Related Party Trade, 2019

Country	U.S. Imports: "Related Party Trade" as % of Total	U.S. Exports: "Related Party Trade" as % of Total
European Union (incl. UK)	62.9	38.7
Germany	69.5	37.1
France	47.7	32.4
Ireland	87.0	37.0
Netherlands	70.3	56.1
UK	54.3	32.4

Source: U.S. Census Bureau. Data as of January 2021.

The tight linkages between European parent companies and their U.S. affiliates are reflected in the fact that roughly 63% of U.S. imports from the European Union consisted of related-party trade in 2019, the last year of available data. That is much higher than related-party imports from the Asia-Pacific region (37%) and well above the global average (49%). The percentage was even higher in the case of Ireland (87%), the Netherlands (70%) and Germany (70%).

Meanwhile, about 39% of U.S. exports to Europe in 2019 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 (56%) were classified as related-party trade. The comparable figure for Germany was 37% and 32% for France.

6. Foreign Affiliate Sales

U.S. majority-owned foreign affiliate sales on a global basis (goods and services) totaled an estimated \$7.0 trillion in 2019. Total U.S. exports, by contrast, were \$2.5 trillion in 2019. This gap underscores the primacy of foreign affiliate sales over U.S. exports.

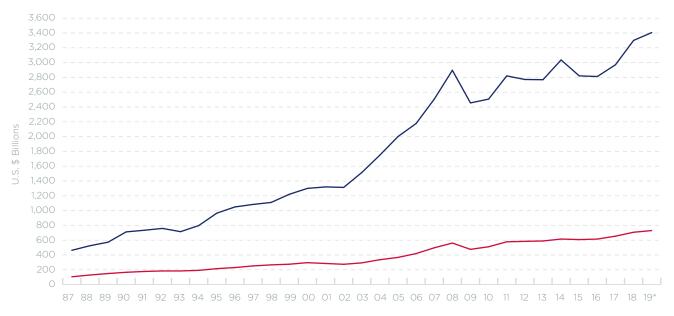
As usual, Europe accounted for the bulk of U.S. affiliate sales in 2019 – about half of the global total. We estimate that U.S. foreign affiliate sales in Europe totaled \$3.4 trillion, up 3.2% from the prior year. By comparison, sales of U.S. affiliates in Asia were just \$1.9 trillion, about half the value of sales conducted in Europe in 2019. Affiliate sales in the UK (an estimated \$724 billion) were more than double total sales in South America. Sales in Germany (\$385 billion) were more than 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 2019, for instance, we estimate that majority-owned European affiliate sales in the United States (\$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), according to estimates. For virtually all countries in Europe, foreign affiliate sales were easily in excess of their exports to the U.S. in 2019.



\$3.4 trillion \$2.8 trillion U.S. in Europe Europe in the U.S.

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



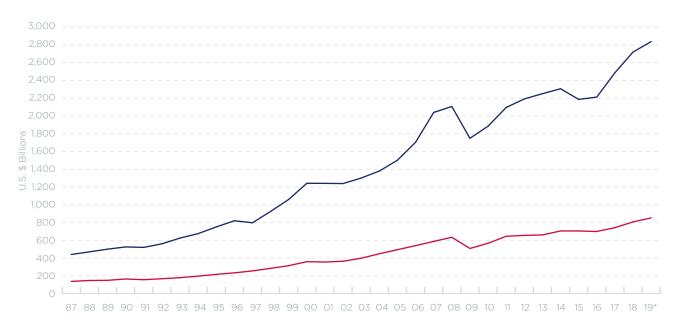
— U.S. Foreign Affiliate Sales in Europe — Total U.S. Exports to Europe

Source: Bureau of Economic Analysis.

Majority-owned non-bank affiliates data: 1987 - 2008. Majority-owned bank and non-bank affiliates: 2009 - 2019.

*Foreign Affiliate Sales: Estimates for 2019.

Table 7 Sales of European Affiliates in the U.S. vs. U.S. Imports from Europe



— European Foreign Affiliate Sales in the U.S. — Total 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 - 2019.

*Foreign Affiliate Sales: Estimates for 2019.

7. Foreign Affiliate Profits

Prior to the coronavirus outbreak and global recession, transatlantic profit growth had been healthy, hitting new highs in 2019. However, as businesses shut down and companies suffered major losses, profits sunk in the second quarter of 2020, dragging down the full year figures. By our estimates, U.S. affiliate income earned in Europe fell 15% in 2020 to \$254 billion. This figure for 2020 was still more than 40% larger than the depressed levels of 2009, when affiliate income earned in Europe plunged to \$179 billion.

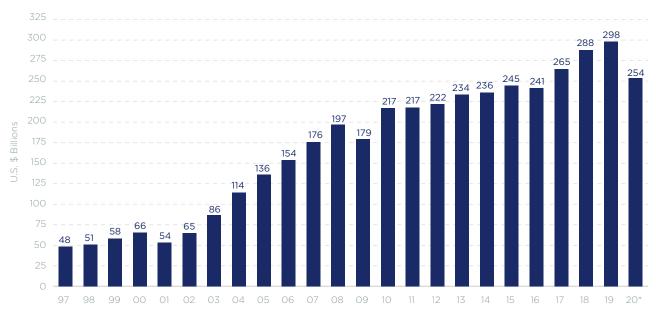
Europe remains an especially important market to U.S. multinationals, accounting for roughly 55% of U.S. global foreign affiliate income in the first nine months of 2020. By comparison, U.S. affiliate income from China and India in 2019 (\$17 billion), the last year of full data, was a fraction of what U.S. affiliates

earned/reported in either the Netherlands (\$84 billion), Ireland (\$63 billion), or the United Kingdom (\$57 billion).

The other side of transatlantic profits – European affiliate income earned in the United States – suffered even greater losses in 2020, based on three quarters of data. After rising to the second highest amount on record in 2019, we estimate that full year affiliate income earned in the United States by European firms dropped by 32% in 2020 to \$91 billion.

The United States remains the most important market in the world in terms of earnings for many European firms. Multinationals based in Germany, the United Kingdom, and Switzerland earned the most profits in the U.S. in 2020, however, profits in these countries were down roughly 40% from the same period a year earlier.

Table 8 U.S. Earnings in Europe Hit New Highs in 2019, Prior to COVID-19 (U.S. foreign affiliate income earned in Europe)



Source: Bureau of Economic Analysis. *Data for 2020 is author's estimate.

Foreign affiliate profits (2020 estimate)



\$254 billion U.S. in Europe

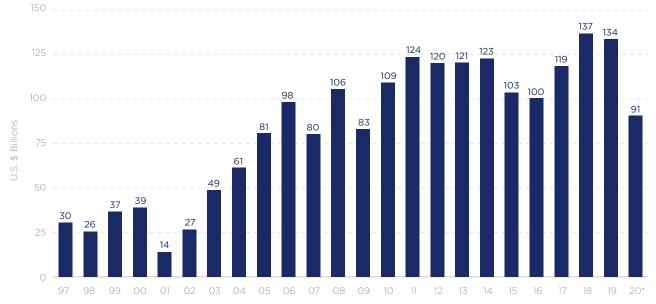
\$91 billionEurope in the U.S.

Dropped by



Table 9 European Affiliate Earnings in the U.S. Slump to Decade-Low Amid COVID-19 Recession

(Foreign affiliate income earned in the U.S.)



Source: Bureau of Economic Analysis. *Data for 2020 is author's estimate.

8. Transatlantic Services

The global economic downturn in 2020 was heavily concentrated in services activities, with consumer expenditures for food services, accommodation, transportation, health services and recreation falling sharply due to COVID-19 restrictions. In the United States, severely weak personal consumption in the services industry was the main driver of the annual 3.5% contraction in U.S. GDP, contributing 3.44 percentage points of the total decline. Last year, demand for personal goods expenditures rose by \$150 billion in the United States, a larger increase than in the prior year; however personal consumption of services sunk by \$545 billion in 2020.

Across the Atlantic, Europe's service-driven economy also suffered from a significant pullback in consumer spending in contact-intensive sectors such as hotels, restaurants, travel, and administrative and support services. These are also key sectors for transatlantic trade in services, which overall witnessed a 20% decline in the first three quarters of 2020, compared with the same period a year ago.³

Excluding the effects from the pandemic, trade in services has become an increasingly important

aspect of the transatlantic economic relationship, with the United States and Europe the two leading services economies in the world. 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. In 2019, Europe made up 39% of total U.S. services exports and 42% of total U.S. services imports.

U.S. services exports to Europe reached a record \$345 billion in 2019. Services exports (or receipts) have been fueled by a number of services-related activities such as travel, education and financial services. In 2019, the United States registered a \$100 billion trade surplus in services with Europe, versus a \$223 billion trade deficit in goods.

U.S. services trade by category is represented in Table 10 below. Four of the top ten export markets for total U.S. services in 2019 were in Europe. The UK ranked first, followed by Ireland (ranked 4th), Switzerland (6th), and Germany (7th). Of the top ten service providers to the United States in 2019, five were European states, with the UK again ranking first, Ireland third, Germany fourth, Switzerland seventh, and France ninth.



The global economic downturn in 2020 was heavily concentrated in **services activities**

Table 10 Top Markets for U.S. Services Trade (Billion of \$), 2019

U.S. Services Exports

Rank	Total Serv	ices	Trave	I	Other Bus	iness	Financia	al	IP Charg	es	Transpo	rt	Telecom/	Info
1	UK	78.3	China	29.0	Ireland	28.6	UK	18.9	Ireland	17.8	Japan	8.5	Canada	6.0
2	Canada	67.7	Canada	16.9	Switzerland	20.0	Canada	8.5	Switzerland	17.2	Canada	8.4	UK	5.3
3	Ireland	57.5	Mexico	15.3	UK	16.8	Japan	5.0	China	8.1	UK	7.8	Japan	4.0
4	China	56.5	India	13.2	Canada	15.2	China	4.8	Canada	7.5	China	5.5	Ireland	3.4
5	Japan	50.1	UK	12.2	Singapore	13.6	Ireland	4.7	Japan	6.9	Germany	5.4	Brazil	3.4
6	Switzerland	46.8	Japan	8.8	Germany	10.8	Luxembourg	4.6	UK	6.3	S. Korea	4.2	Switzerland	3.0
7	Germany	36.6	Brazil	8.3	Japan	10.1	Australia	3.5	Netherlands	5.3	France	3.5	Australia	2.5
8	Mexico	32.9	S. Korea	7.4	Netherlands	5.9	Germany	3.5	Germany	5.2	Mexico	3.2	Germany	2.3
9	Brazil	24.6	Australia	7.0	France	4.6	Mexico	3.2	Hong Kong	4.7	Brazil	2.7	Mexico	2.1
10	India	24.3	Germany	5.8	China	4.1	Brazil	2.9	S. Korea	4.2	Hong Kong	2.4	India	1.8
	Total	875.8	Total	193.3	Total	189.4	Total	135.7	Total	117.4	Total	91.1	Total	55.7

U.S. Services Imports

	ior convicts imports													
Rank	Total Serv	vices	Trave	d .	Other Bus	iness	Financia	al	IP Charg	es	Transpo	rt	Telecom/	Info
1	UK	62.3	Mexico	18.9	UK	15.3	UK	12.3	Japan	9.7	Japan	9.5	India	15.6
2	Canada	38.6	Canada	9.2	India	8.9	Canada	3.0	Germany	7.0	Germany	8.3	Ireland	6.6
3	Japan	35.8	UK	9.1	Canada	8.5	Japan	2.1	Switzerland	5.3	UK	8.1	Canada	4.9
4	Germany	34.9	Italy	7.8	Ireland	8.0	Hong Kong	1.7	UK	4.3	France	6.3	UK	3.3
5	Mexico	29.8	France	5.4	Germany	7.2	France	1.5	France	2.8	Canada	5.9	Philippines	1.4
6	India	29.7	Spain	4.3	China	7.2	Singapore	1.4	Ireland	2.3	China	5.7	Netherlands	0.9
7	Switzerland	25.0	China	3.7	Switzerland	6.8	China	1.1	Canada	2.0	Taiwan	5.1	Mexico	0.9
8	Ireland	23.2	Japan	3.6	Netherlands	6.0	Australia	1.0	Netherlands	1.2	Mexico	4.9	Germany	0.8
9	France	20.4	Germany	3.3	Singapore	4.9	Germany	0.9	India	1.2	Hong Kong	4.6	Switzerland	0.7
10	China	20.1	India	2.6	Japan	3.8	Switzerland	0.7	Mexico	0.8	S. Korea	4.1	Japan	0.5
	Total	588.4	Total	134.6	Total	113.6	Total	40.4	Total	42.7	Total	107.5	Total	43.7

Source: Bureau of Economic Analysis. Data as of January 2021.

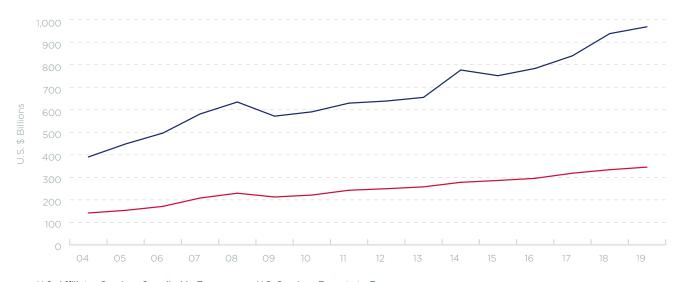
In terms of transport services, the top five export markets in 2018, in ranked order, were Japan, the UK, Canada, China, and Germany. The UK ranked as the largest market for exports of financial services and second in telecommunications, computer and information services, after Canada. Ireland was the top export market for U.S. trade in intellectual property and other business services, representing 15% of total receipts in each category.

As for U.S. services imports from Europe, figures for 2019 were also at all-time highs. U.S. services imports from Europe totaled \$245 billion, up over 40% from

the depressed levels of 2009. The UK, Germany, Switzerland, Ireland, France, and Italy all rank as top services exporters to the United States.

In terms of exports of travel to the United States, countries in Southern Europe have the largest exposure to U.S. residents traveling abroad. In Portugal, travel makes up 72% of the country's total services exports to the United States. The share for Croatia is 71%, Spain 55%, Greece 58%, and Italy 65%. In total, Europe made up 32% of U.S. trade in travel and transport in 2019.

Table 11 U.S. - Europe Services Linkages

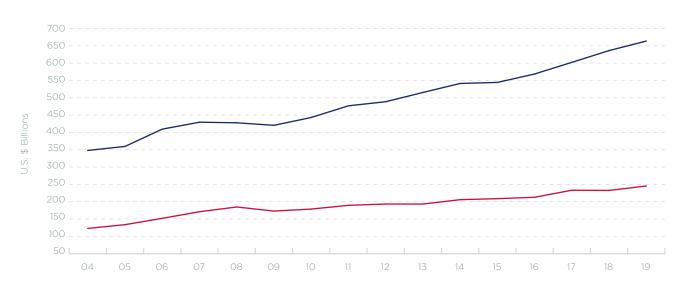


— U.S. Affiliates Services Supplied in Europe. — U.S. Services Exports to Europe

Source: Bureau of Economic Analysis.

Majority-owned bank and non-bank affiliates. Services supplied in Europe estimates for 2019.

Table 12 Europe - U.S. Services Linkages



— European Affiliates Services Supplied in the U.S. — U.S. Services Imports from Europe

Source: Bureau of Economic Analysis.

Majority-owned bank and non-bank affiliates. Services supplied in the U.S. estimates for 2019.

The 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 also become the overwhelming mode of delivery in a rather short period of time.

Worldwide affiliate sales of U.S. services more than doubled in the years from 2005 to 2018.

Sales of services of U.S. foreign affiliates in Europe surged in 2018, rising 12% to \$938 billion. By comparison, U.S. services exports to Europe in 2018 totaled \$334 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 made up 28% of all U.S. affiliate services sales in Europe; affiliate sales totaled \$267 billion in the UK, a figure greater than total affiliate sales in South and Central America (\$124 billion), Africa (\$14 billion), or the Middle East (\$22 billion). Affiliate sales of services in Ireland remain quite large – \$165 billion in 2018 – and reflect strong U.S-Irish foreign investment ties with leading U.S. internet, software, and social media leaders. Europe accounted for roughly 55% of total global U.S. affiliate service sales.

We estimate that sales of services of U.S. affiliates in Europe rose by around 3%, to \$968 billion in 2019. U.S. services exports to Europe for the same year were \$345 billion.

U.S. affiliate sales of services in Europe continue to exceed sales of services by U.S. affiliates of European firms. In 2018, the last year of complete data, European affiliate services sales in the United States totaled \$636 billion, about 32% 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 \$1.2 trillion in 2018, with European firms accounting for 54% of the total. Within Europe, British affiliates lead in terms of affiliate sales of services in the United States (\$161 billion), followed closely by Germany (\$151 billion).

We estimate that European affiliate services sales in the United States totaled \$664 billion in 2019, well above U.S. services imports from Europe (\$245 billion) in the same year. The difference between affiliate sales and services imports reflects the everwidening presence of European service leaders in the U.S. economy.

Table 13 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	3,572	60%
Manufacturing	477	53%

Note: Historic-cost basis, 2019. Source: Bureau of Economic Analysis.

Table 14 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	2,871	64%
Manufacturing	1,318	74%

Note: Historic-cost basis, 2019. Source: Bureau of Economic Analysis.

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.

Endnotes

- 1 See Notes on Terms, Data and Sources in the back of the study for complete definition of broader Europe.
- 2 Data for 2017 is latest available. Value added measured at factor cost. Excludes financial and insurance businesses. Data may differ from U.S. Bureau of Economic Analysis data due to differences in measurement methodology.
- Transatlantic services trade is defined here as total exports of services from the U.S. to the EU (including the UK), and the total imports of services from the EU (including the UK) to the U.S.