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The 50 U.S. States: European-Related Jobs, Trade and Investment





U.S. unemployment rate

(February 2020)

3.5%

Despite various potential trade headwinds and other uncertainties surrounding the global growth outlook, many factors point to a continued benign environment for multinational companies operating in the United States in 2020. First, the consumer backdrop in the U.S. remains relatively strong and is supported by a strong labor market, accommodative monetary policy, and healthy consumer debt dynamics compared to the rest of the world. With the national unemployment rate at 3.6% in early 2020, a healthy jobs market and sustained rise in disposable incomes should continue to support consumer spending in the near term.

In addition, the 2017 corporate tax reform in the United States has shifted the international investment landscape. The reduced tax rate for repatriations of foreign earnings caused firms to bring home large quantities of cash that had been accumulating overseas. Since the end of 2017, firms have brought home a total of \$1.1 trillion, using the cash in a number of ways, from share buybacks and dividends to mergers and acquisitions (M&A), paying down debt, and investing in new capital equipment. Due to high levels of economic policy uncertainty, however, business investment started to decline last year. Additionally, the U.S. manufacturing sector contracted last summer, with production weakness lasting until December of 2019, according to the Institute for Supply Management (ISM) Purchasing Manager's Index. That said, the services economy continued to expand, propelling the U.S. economy to another year of solid growth.

Services account for over 75% of U.S. GDP, but for just 50% of Europe's foreign direct investment stock in the United States. The outsized importance of the manufacturing industry in Europe's FDI base in the United States means that a pickup in manufacturing activity over 2020, driven by a U.S.-China trade truce and refreshed global growth, would benefit many of the European companies that invest and create jobs in the United States.

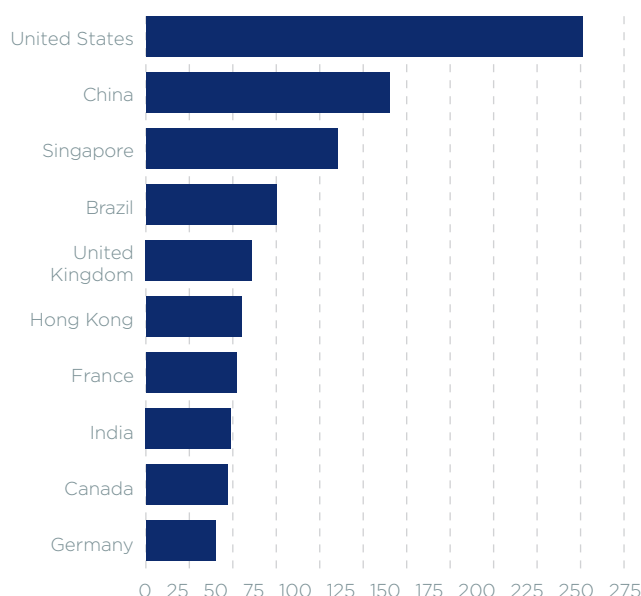
In 2019, the U.S. economy expanded by 2.3% in real terms, a slower pace of growth than the near 3% rate posted in 2018, but stronger than the rate of growth in many other developed countries. Risks to the economic outlook are abundant, however, and include the severity and economic impact of COVID-19, uncertainty about trade, and U.S.

elections in November. Most economists anticipate a COVID-19 induced recession and then generally stagnant economic conditions for a few quarters before growth rebounds, perhaps sharply.

Risks to the economic outlook are abundant, however, and include uncertainty around trade, U.S. elections in November, and the severity and economic impact of the coronavirus, among others. According to forecasts from the IMF, U.S. growth should continue to slow to 2.0% in 2020 and just 1.7% by 2021.

Despite this turbulence, the United States remains one of the most attractive countries in the world for foreign direct investment (FDI). For the past thirteen years, the United States has ranked number one in the world for FDI inflows, attracting over \$250 billion in 2019 (Table 1).

Table 1 FDI Inflows: Top 10 Host Economies, 2019
(\$Billions)



Source: United Nations Conference on Trade and Development (UNCTAD).
Data for 2019 are preliminary estimates as of January 2020.



The U.S. economy expanded by

2.3%

in 2019

Risks to the economic outlook



Uncertainty around trade



U.S. elections



Coronavirus

As Table 2 depicts, no country has attracted more FDI this century than the United States, taking in over \$4 trillion cumulatively since 2000, more than the total for the next two countries (China and the UK) combined. The table also underscores that, in general, most global FDI flows have been directed at mature, rich developed nations rather than poorer, underdeveloped nations. The United States has attracted 17.1% of total global foreign investment flows this century, and of the top ten recipient countries for investment flows, six are developed nations.

Table 2 Cumulative Investment Inflows 2000-2018
Rankings

Rank	Country	Cumulative Flows (Billions of U.S. \$)	Percent of World Total
1	United States	4,243.3	17.1%
2	China	1,841.1	7.4%
3	United Kingdom	1,571.0	6.3%
4	Hong Kong	1,325.1	5.3%
5	Netherlands	894.4	3.6%
6	Brazil	850.8	3.4%
7	Germany	825.0	3.3%
8	Canada	794.5	3.2%
9	Singapore	778.6	3.1%
10	Belgium	718.4	2.9%

Source: United Nations Conference on Trade and Development (UNCTAD).
Data as of January 2020.

Multiple factors underpin America's dominance in foreign investment flows. First, the U.S. market is a critical destination for multinational companies looking to access a large and wealthy consumer base. European companies investing overseas routinely look to the United States, with a population of roughly 330 million and per capita income of almost \$63,000. With less than 5% of the global population, the United States still accounts for around 30% of global personal consumption expenditures, a testament to the purchasing power of American consumers and healthy consumer sentiment in the world's largest economy.

Second, the United States boasts a hyper-competitive economy, ranking second place in the World Economic Forum's latest Global Competitiveness rankings. This competitiveness is driven by an innovative, risk-taking corporate culture and is underpinned by strong institutions, technological readiness, world-class universities, a strong capacity and culture of entrepreneurship, and a dense web of university-industry collaboration in R&D. The ability to attract R&D from companies abroad is important to the innovative health of the U.S. economy. R&D performed by U.S. affiliates of foreign multinationals accounts for about 16% of the total R&D conducted by all businesses in the United States. Most of that comes from Europe.

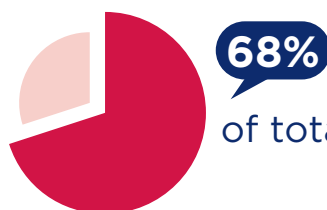
Additionally, European companies investing in the United States gain access to a desired pool of skilled, flexible and productive labor. We estimate that U.S. jobs supported directly by European companies totaled 4.7 million in 2018.

Meanwhile, the United States is a friendly locale to do business, ranking 6th place in the World Bank's 2020 Ease of Doing Business ranking. A transparent rule of law, sophisticated accounting, auditing and reporting standards, secure access to credit, ease of entrepreneurship, and respect for intellectual property rights – all of these factors have contributed to the stable and supportive business environment in the United States. Another competitive U.S. endowment: relatively cheap energy costs thanks to the U.S. energy renaissance that has seen oil production more than double since 2008, in addition to soaring natural gas production.



**Jobs directly supported
by European companies
in the U.S. (2018)**
4.7 million

**Total European FDI
stock in the U.S.
\$3 trillion
(2018)**



of total FDI in the U.S.

With a lowered corporate tax rate and strong economic growth projected for the United States relative to the rest of the developed markets, we anticipate that FDI flows to the U.S. will strengthen in the near term. Additionally, the rising risks of U.S. protectionism under the current U.S. administration could spur more foreign firms to be inside the U.S., endeavoring to avoid new tariffs. Thus, we expect European firms to continue to deepen and spread their footprint in the United States in the years ahead.

Europe's Stakes in the United States

European firms maintained their dominant foreign investment position in the United States in 2019. Based on our preliminary estimates, we anticipate that about half of the total \$251 billion worth of U.S. FDI inflows in 2019 were from Europe, reflecting European firms' strategy to be "inside" the world's largest and most dynamic market.

U.S. FDI inflows from Europe and the rest of the world are expected to come in lower in 2019 than the prior year, and remain significantly below the peak level of inflows achieved in 2015 (\$339 billion from Europe). The UN estimates that investment in the United States from the EU declined by 6% in 2019. Part of the retreat in foreign investment flows can be attributed to weaker-than-usual cross-border M&A activity conducted in the United States in 2019. Global cross-border M&A decreased by about 40% last year, with deals targeting United States companies accounting for about 31% of total M&A.

Data from the Bureau of Economic Analysis similarly suggests a retreat in U.S. FDI inflows in 2019. Annualizing data for the first nine months of last year, U.S. FDI inflows from Europe are estimated to come in at \$125 billion in 2019 versus 2018 inflows of \$154 billion.

Throughout Europe, the net change in investment flows to the United States in 2019 was mixed, with some countries posting strong growth in FDI flows, while others saw a pullback. German investment flows to the United States grew 53% in the first three quarters of the year, while flows from Spain and Sweden were almost triple the amount of flows received during the first three quarters of last year. Part of that large increase was due to considerable

negative net inflows to the U.S. recorded in Q1 2018 and a rebound to positive investment flows in 2019. Meanwhile, U.S. inflows from France, Ireland, Italy, the Netherlands, Switzerland and the UK were all lower in the first three quarters of 2019 than the same period a year ago.

In terms of greenfield investment, or new projects by foreign companies, the value of announced greenfield projects globally is estimated to have declined 22% in 2019. Project announcements are a leading indicator for FDI trends, and suggest that global FDI in 2020 should continue to moderate. That said, despite a slowdown in global greenfield investment, the U.S. continues to see strong growth in investment. According to data from FDI markets, business investments into China, Asia and Europe decreased by about 30% in the first half of 2019 from the prior year, but the number of direct investments into the U.S. over the same time period was up 14%.¹

UK firms were the largest source of greenfield foreign investment projects in 19 U.S. states during the ten-year period from October 2009-September 2019. German companies led in 15 states, followed by Canadian companies in 8 states and Japanese companies in 7.

Despite the overall year-over-year decline in investment flows, Europe continues to have an outsized investment presence in the United States, as reflected by its foreign direct investment position, a more stable metric of foreign investment in the United States. In terms of foreign capital stock in the United States, Europe again leads the way. The region accounted for 68% of the total \$4.3 trillion of foreign capital sunk in the United States as of 2018. Total European stock in the United States of \$3.0 trillion was four times the level of comparable investment from Asia.

The United Kingdom remains by far the largest foreign investor, based on FDI on a historic cost basis, with total FDI stock in the United States totaling \$561 billion in 2018. The Netherlands ranked second in Europe (\$479 billion), followed by Luxembourg (\$356 billion), Germany (\$324 billion), Switzerland (\$310 billion), and France (\$292 billion). Many firms from these countries are just as embedded in the U.S. economy as in their own home markets.

Box 1. Chinese Investment in North America and Europe

While both U.S. and European stakes in China are on the rise, and vice versa, the ties that bind the United States and Europe are much thicker and far deeper than comparable ties with China. The United States and Europe represent large, wealthy markets, with respect for the rule of law and transparent rules and regulations. China, on the other hand, remains relatively poor, with many barriers to entry in various sectors, all wrapped in an opaque regulatory environment that favors local firms or large state-owned enterprises.

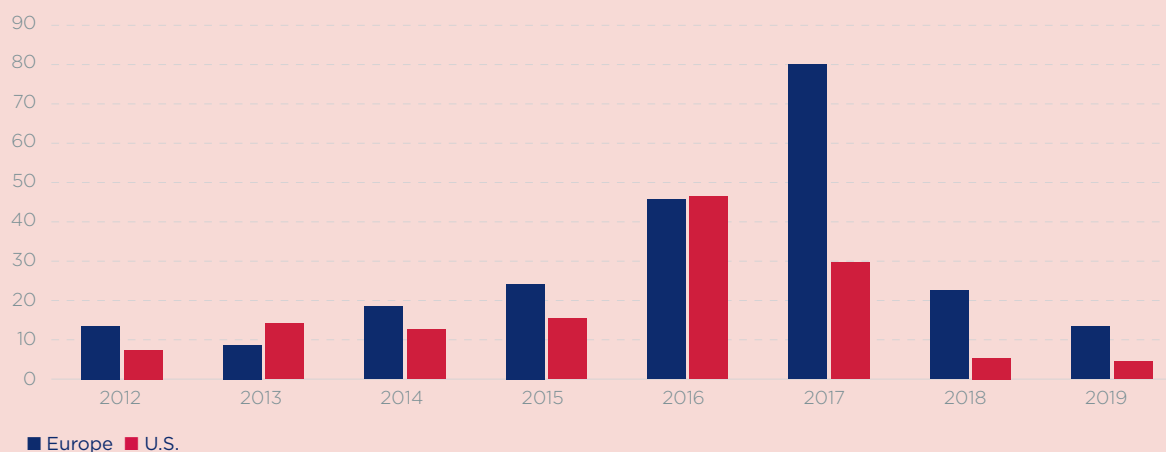
Table 3 highlights that Chinese investments in both the United States and Europe had grown since the start of the decade, but have recently been on a downward trajectory. Chinese investment flows to the U.S. peaked in 2016, and have since declined each year to approximately \$4.5 billion in 2019, as more restrictive Chinese policies on outbound investment, significant Chinese disinvestment of U.S. real estate, hospitality and entertainment assets, and a more protectionist tilt and tighter inward investment screening from the U.S. administration has led to a reduction in Chinese outflows. For instance, according to data from Real Capital Analytics, Chinese were net sellers of commercial property in the U.S. last year in the amount of \$20 billion.

Kansas was the largest recipient of Chinese investment in 2019, with investment flows totaling \$1.6 billion, followed by California (\$0.7 billion). Chinese FDI flows in North America by industry in 2019 were highly concentrated in the consumer products and services industry, representing 37% of the total investment, with mega deals driving the industry concentration. The automotive industry and basic materials followed in second and third place, representing 17% and 15% of the total inflows, respectively.

Chinese investment in Europe also fell dramatically in 2019 but continued to be more robust than Chinese investment in the United States. According to the Rhodium Group, Chinese FDI in Europe fell by 40% in 2019 to \$13.4 billion. These FDI flows were also driven by a concentrated number of mega deals, notably in Finland, the UK, and Sweden, which were the largest recipients of FDI inflows. Ireland saw a large increase in investment from China (up 50%), mostly due to greenfield investments in the biotechnology space. Throughout Europe, the consumer sector attracted the largest amount of FDI inflows from China to Europe, receiving about half of the total \$13.4 billion in investment. Information and communications technology was the second largest sector for Chinese FDI inflows to Europe.

Looking ahead, the pipeline of announced deals in North America and Europe (\$10 billion) suggests a weak start to 2020.³ A de-escalation of U.S.-China trade tensions and more liberal Chinese investment policy could cause outward FDI to rebound this year, although there remains a large degree of economic uncertainty when it comes to the potential impact of the coronavirus which could dampen investments.

Table 3 Value of Completed Chinese FDI Transactions in Europe vs. U.S. (Billions of U.S. \$)



Data represents greenfield investments and acquisitions in the U.S. and Europe, excludes divestitures. Europe includes EU28 plus Norway, Switzerland, Iceland, Liechtenstein.

Source: Rhodium Group, Baker McKenzie.

Data as of January 2020.



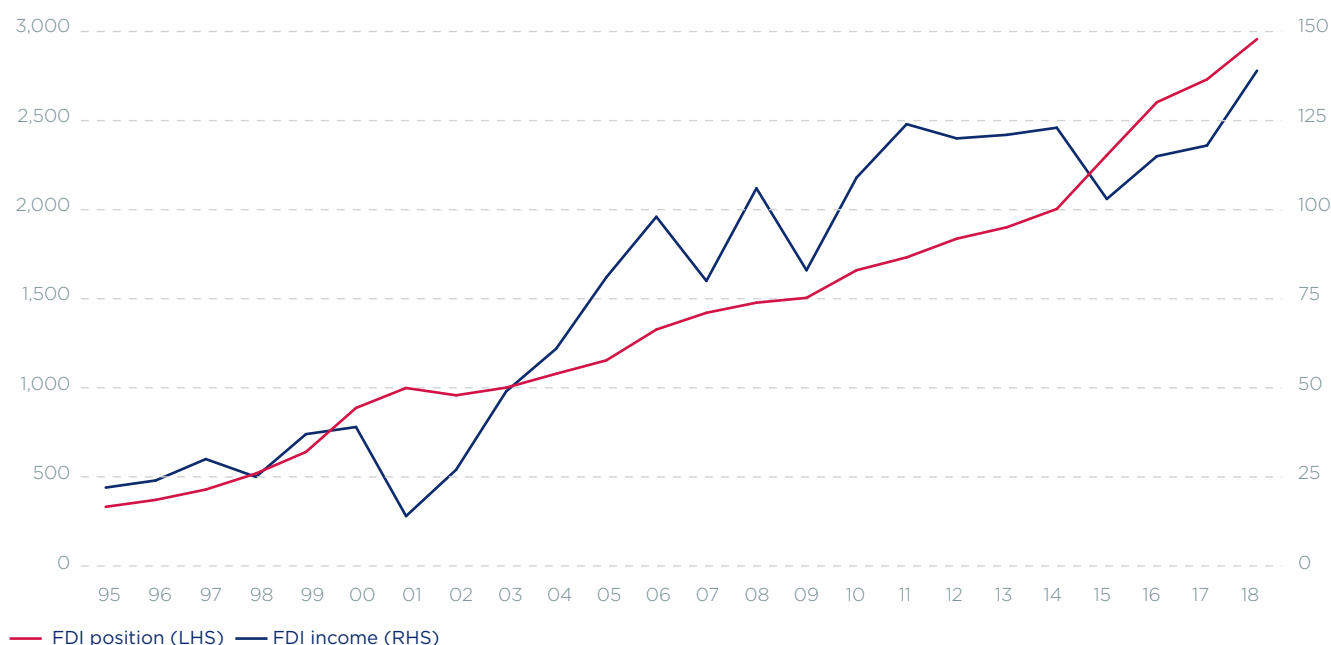
European affiliate earnings in the U.S.

\$140 billion
(estimate 2019)

Whether Swiss pharmaceutical corporations, German auto manufacturers or British services providers, European firms' commercial links to America have driven corporate sales and profits higher in recent decades. In 2019, European firms earned an estimated \$140 billion in the United States – a new record, even if just slightly higher than in 2018. Through the first nine months of 2019, European affiliate income earned in the U.S. totaled \$101 billion. Affiliates of British multinationals are the top earners and saw a strong increase in income of 43% in the first nine months of 2019, compared to the same period in 2018. Taking the long view, affiliate earning levels for most European firms are significantly higher today than they were at the start of the century. As European firms have built out their U.S. operations, the payoff has been rising affiliate earnings in one of the largest markets in the world.

Table 4 highlights this connection between European investment in the United States and European affiliate earnings. The two metrics are highly correlated – the greater the earnings, the greater the likelihood of more capital investment, and the more investment, the greater the upside for potential earnings and affiliate income. The bottom line is that Europe's investment stakes in the United States have paid handsome dividends over the years, notably since the Great Recession, given the growth differential between the United States and Europe. That said, while European investment in the United States has paid off rather well, the benefits have not been one-sided. The United States has benefitted as well in terms of increased jobs and wages for U.S. workers, and rising exports via European affiliates operating in the United States.

Table 4 European Foreign Direct Investment and Income Earned in the United States (Billions of U.S. \$)



Sources: Bureau of Economic Analysis.
Data as of January 2020.

Europe's Stakes in America's 50 States

European firms can be found in all 50 states, and in all economic sectors – manufacturing and services alike. The employment impact of European firms in the United States is quite significant. Table 5 provides a snapshot of state employment provided directly by European affiliates across the United States. It is important to note that the chart represents only those jobs that have been directly created by European investment, thus underestimating the true impact on U.S. jobs of America's commercial ties to Europe. Jobs tied to exports and imports of goods and services are not included, nor are many other jobs created indirectly through suppliers or distribution networks and related activities. Given mounting labor shortages in the United States and growing interest in many U.S. states and regions in European experiences with aligning educational training with the needs of the economy, many European affiliates have taken the lead in job training in the U.S., and have emerged as strong advocates and funders of vocational training.

As mentioned above, European employment is relatively diverse and spread across many U.S. states. Not surprisingly, California, Texas and New York – the three most populous states in the nation – are home to the largest share of European affiliate jobs. Over 1.1 million U.S. workers were on the payrolls of European affiliates in these three states combined in 2017. As the economy has recovered from the 2008/2009 recession, so have the payrolls of European affiliates, with an increase in hiring across many states and industries. In 2017, 17 of the top 20 states measured by European affiliate employment increased hiring. The workforce employed by European companies in Maryland was unchanged from the prior year, and in New York and Florida European affiliate employment declined by about 1%. European companies in states such as Michigan, Missouri and Minnesota registered double-digit growth in employment.

UK firms were the largest sources of onshored jobs in 23 U.S. states. Japanese companies led in 10 states, Canadian companies in 9, Dutch companies in 5, and German companies were the leading onshored jobs suppliers in 2 states.

Table 5 Ranking of Top 20 States by Jobs Supported Directly by European Investment
(Thousands of employees)

U.S. State	2015	2016	2017
California	423.1	430.7	447.2
Texas	361.4	366	371.6
New York	332.1	345.1	341.6
Illinois	212.1	234.2	235.7
Pennsylvania	213.3	222.5	225.9
Florida	196.4	217.2	215.2
North Carolina	181.9	187.5	195.8
New Jersey	190.4	193.3	195.6
Michigan	155.6	159.3	175.4
Ohio	152.8	155.7	162.2
Massachusetts	152.6	159.6	160.4
Georgia	131.8	141.3	151.4
Virginia	131.6	134.7	141.5
Indiana	112.2	115.6	117.3
Tennessee	93.3	100.3	104.5
South Carolina	98.2	98.3	102.6
Maryland	90.7	91.6	91.6
Missouri	74.8	78.1	87.0
Connecticut	81.3	81.6	84.4
Minnesota	70.6	75.4	83.9

Source: Bureau of Economic Analysis.

Top 3 states with
the largest share of
European affiliate jobs



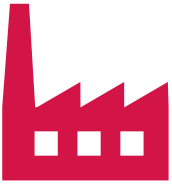
California



Texas



New York



Europe accounts for **77% of total FDI in the U.S. manufacturing industry**

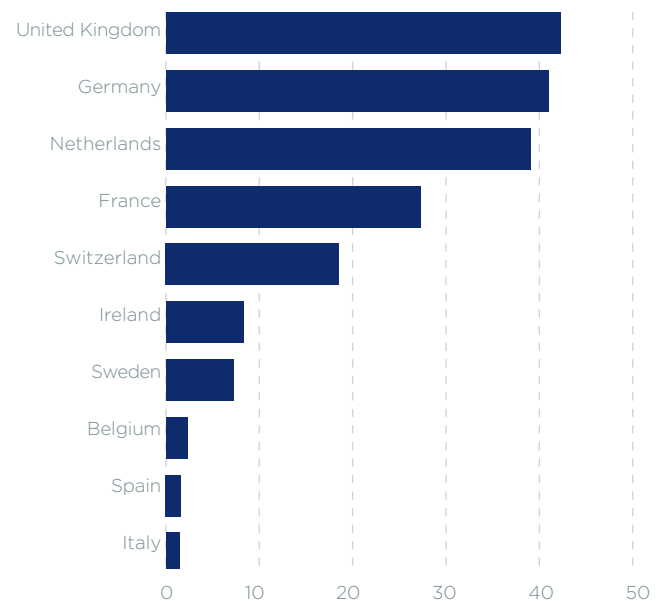
By industry, Europe is by far the largest source of FDI in the manufacturing industry, with European companies representing 77% of the total inward investment position in the United States. Within the manufacturing industry, the U.S. chemicals sector was the biggest recipient of European investment (\$664 billion), followed by transportation equipment (\$89 billion). In terms of European affiliate employment, the retail trade industry employed the most workers (538,000 jobs in 2017) while European companies in chemicals manufacturing, transportation equipment manufacturing, and professional, scientific and technical services were also important contributors to U.S. jobs.

In general, the presence of European affiliates in many states and communities across the United States has helped to improve America's job picture. The more European firms embed in local communities around the nation, the more they tend to generate jobs and income for U.S. workers, greater sales for local suppliers and businesses, extra revenues for local communities, and more capital investment and R&D expenditures for the United States.

Deep investment ties with Europe have also generated U.S. trade. Table 6 illustrates the export potential of European affiliates operating in the United States. As a point of reference, in any given year, foreign affiliates based in the United States and exporting from there typically account for one-fourth of total U.S. merchandise exports. The bulk of these exports are intra-firm trade, or trade between the affiliate and its parent company. In 2017, the last year of available data, U.S. exports shipped by all majority owned foreign affiliates totaled \$383 billion, with European affiliates accounting for 51% of the total.

The UK, Germany and the Netherlands dominate European affiliate exports from the United States, with the three countries combined representing 63% of European affiliate exports in 2017. By commodity, transportation equipment accounted for about one-quarter of German-owned affiliate exports from the United States. In the end, the more European affiliates export from the United States, the higher the number of jobs for U.S. workers and the greater the U.S. export figures.

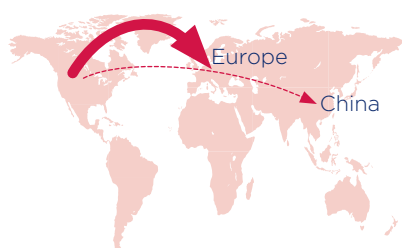
Table 6 U.S. Exports of Goods Shipped by Affiliates of European Multinational Corporations (\$Billions)



Source: Bureau of Economic Analysis.
Data for 2017.



The presence of European affiliates in many states and communities across the United States has helped to **improve America's job picture**



48/50

states **export more to Europe**
than China
(2018)

Every U.S. state maintains cross-border ties with Europe, with various European countries key export markets for many U.S. states, a dynamic that creates and generates growth in the United States. Table 7 ranks the top 20 state goods exporters to Europe in 2018, with Texas ranked number one, followed by California, New York and Washington. Overall exports were up sharply in 2018, up 11% from the prior year, and have almost doubled in value since 2000. Twenty-two U.S. states registered double-digit growth in goods exports from 2017 to 2018.

Table 8 shows the importance of the European market to U.S. state exports. Even as an emerging middle class in China demands more foreign imports, U.S. merchandise exports to Europe are still more than triple U.S. exports to China. America's five Pacific coast states exported about 50% more goods to Europe than to China. Forty-eight of the fifty U.S. states exported more to Europe than China; only New Mexico and Oregon exported more goods to China than Europe in 2018. New York's exports to Europe were more than eight times those to China. California, Texas, Michigan, Illinois and Ohio

Table 7 Ranking of Top 20 U.S. States Total Goods Exports to Europe, by Value (\$Billions)

U.S. State	2000	2018	% Change from 2017	% Change from 2000
Texas	12.3	45.0	34%	267%
California	27.9	36.8	3%	32%
New York	15.3	29.6	12%	93%
Washington	13.1	16.2	7%	24%
Illinois	7.3	13.0	1%	78%
Louisiana	3.3	12.6	33%	282%
Kentucky	3.1	11.2	11%	265%
Florida	3.9	11.2	5%	187%
Pennsylvania	4.7	11.2	11%	139%
New Jersey	6.4	10.9	5%	71%
Georgia	4.0	10.3	19%	159%
South Carolina	2.8	9.9	9%	256%
Ohio	5.0	9.7	12%	93%
Massachusetts	8.0	9.6	-9%	20%
Indiana	3.1	9.5	0%	204%
Connecticut	3.5	9.4	29%	168%
North Carolina	4.6	9.0	-1%	95%
Michigan	5.0	8.1	7%	61%
Utah	1.3	7.0	71%	424%
Tennessee	2.7	7.0	5%	158%
U.S. Total	187.4	370.1	11%	97%

Source: Foreign Trade Division, U.S. Census Bureau.

each exported more than twice as many goods to Europe as to China. Louisiana, Kentucky, Florida and Pennsylvania (the 6th-10th largest exporters to Europe) each sent more than four times the amount of goods to Europe than China.

In addition, while these figures are significant, they actually underestimate Europe's importance as an export destination for U.S. states because they do not include U.S. state exports of services. This is an additional source of jobs and incomes for U.S. workers, with most U.S. jobs tied to services. Europe is by far the most important market in the world for U.S. services, and the United States consistently records a service trade surplus with Europe. Suffice it to say that if services exports were added to goods exports by state, the European market becomes even more important for individual U.S. states.

Appendix A highlights European-related jobs, trade and investment for each of the 50 states.

Table 8 U.S. State Exports of Goods to Europe and China, 2018 (\$Millions)

U.S. State	Europe	China
Alabama	5,540	3,017
Alaska	1,039	1,018
Arizona	4,492	1,193
Arkansas	1,467	307
California	36,807	16,339
Colorado	1,764	577
Connecticut	9,353	942
Delaware	1,318	381
Florida	11,187	2,075
Georgia	10,257	2,978
Hawaii	42	35
Idaho	519	418
Illinois	13,003	3,458
Indiana	9,541	1,967
Iowa	2,571	627
Kansas	2,361	657
Kentucky	11,199	2,233
Louisiana	12,550	3,015
Maine	432	205
Maryland	4,084	592
Massachusetts	9,604	2,639
Michigan	8,082	3,556
Minnesota	5,089	2,260
Mississippi	2,034	638
Missouri	2,443	780
Montana	241	115
Nebraska	1,011	424
Nevada	4,588	917
New Hampshire	2,175	368
New Jersey	10,887	1,573
New Mexico	335	1,102
New York	29,612	3,436
North Carolina	8,976	2,317
North Dakota	270	22
Ohio	9,710	3,635
Oklahoma	1,478	203
Oregon	2,678	4,742
Pennsylvania	11,180	2,565
Rhode Island	662	144
South Carolina	9,946	5,638
South Dakota	184	48
Tennessee	6,968	2,504
Texas	45,028	16,627
Utah	7,032	576
Vermont	401	168
Virginia	5,802	1,213
Washington	16,195	15,918
West Virginia	3,192	484
Wisconsin	4,555	1,633
Wyoming	66	53

Source: U.S. Census Bureau, Foreign Trade Division.

Box 2. The Transatlantic Energy Economy

Media reports and political rhetoric highlight vastly different perspectives on energy and environmental issues between the two sides of the North Atlantic. Some of those differences are profound. Yet the headlines often ignore an equally profound reality: U.S. and European firms are deeply embedded in each other's traditional and renewable energy markets – through trade, foreign investment, cross-border deal financing, and collaboration in research and development.

Over the years, foreign companies have ploughed almost \$400 billion into U.S. energy-related industries.⁴ In 2017, FDI in the U.S. energy economy directly supported 154,500 U.S. jobs, contributed \$1.1 billion in R&D and generated \$5.1 billion in U.S. exports.⁵ European companies have been among the largest investors, and German companies by far are the leading source of foreign direct investment in the U.S. energy economy.⁶ In 2018, German firms accounted for 17.6%, and European companies for just over half, of all foreign direct investment in 779 greenfield project investments in the U.S. energy economy. Over the past decade, German firms were behind about one in five greenfield investment projects in the U.S. energy sector (Table 9). Other notable European investors include France (9%), Spain (8%), and the UK (8%).

Domestic and foreign investments in the U.S. energy economy, as well as a liberalization of energy trade policy, have helped propel the U.S. to become a top producer and exporter of energy. The Permian Basin in Texas now produces more oil than most OPEC nations. Between July 2018 and November 2019, U.S. Liquefied Natural Gas (LNG) exports to Europe surged by almost 600%,⁷ making the U.S. by far the largest LNG exporter to Europe. Europe also imports more U.S. coal than any other world region.⁸ The United States is a net energy exporter of crude and petroleum products to Europe (Table 10).

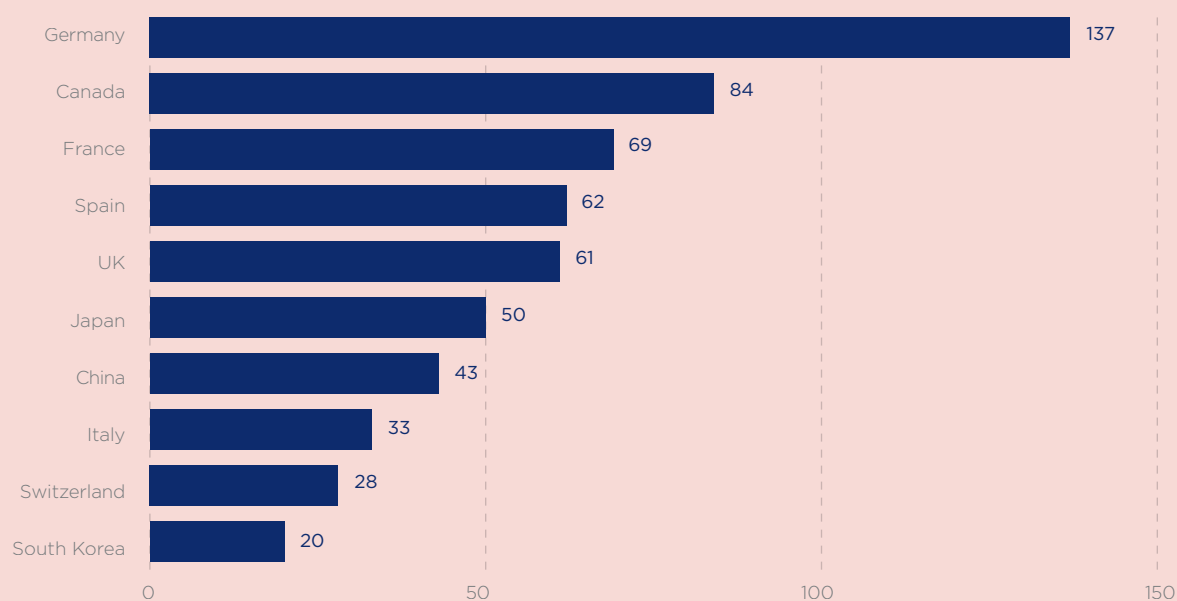
U.S. and European companies will be critical to the development of a cleaner energy future. The EU's ambitious new European Green Deal calls for at least €1 trillion in investments over 10 years, with the ambitious target of making the continent climate neutral by 2050. The plan outlines a wide set of initiatives ranging from the de-carbonization of the energy sector, development of cleaner modes of transport, renovation of buildings to reduce energy use, and investments in the circular economy.

Largely unnoticed by media and politicians, U.S. companies in Europe have become a driving force for Europe's green revolution, especially through the addition of wind and solar capacity on the continent. Since 2007, U.S. companies have been responsible for more than half of the long-term renewable energy agreements in Europe.⁹ As shown by Table 11, U.S. companies account for four of the top five purchasers of solar and wind capacity in Europe.

Combined, government spending on energy research, development and demonstration (RD&D) in the U.S. and Europe was \$15 billion in 2018, according to the International Energy Agency – about double the amount spent in China. Business-funded R&D has also become an increasingly important source of R&D in the U.S. and Europe. A dynamic and innovative private sector should continue to drive investments and innovations in renewable energy R&D over the coming decade.

Table 9 Top Sources of Inward FDI in U.S. Energy

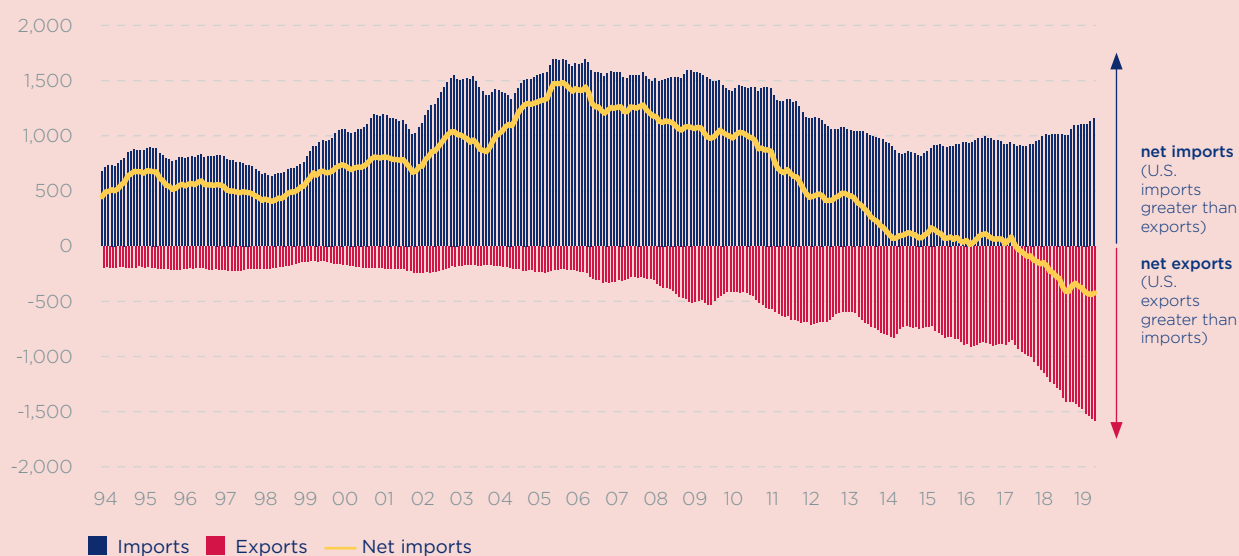
(779 Total Announced Greenfield Projects, October 2009 - September 2019)



Source: SelectUSA, U.S. Department of Commerce.
Data as of November 2019.

Table 10 U.S. Net Imports from Europe of Crude Oil and Petroleum Products

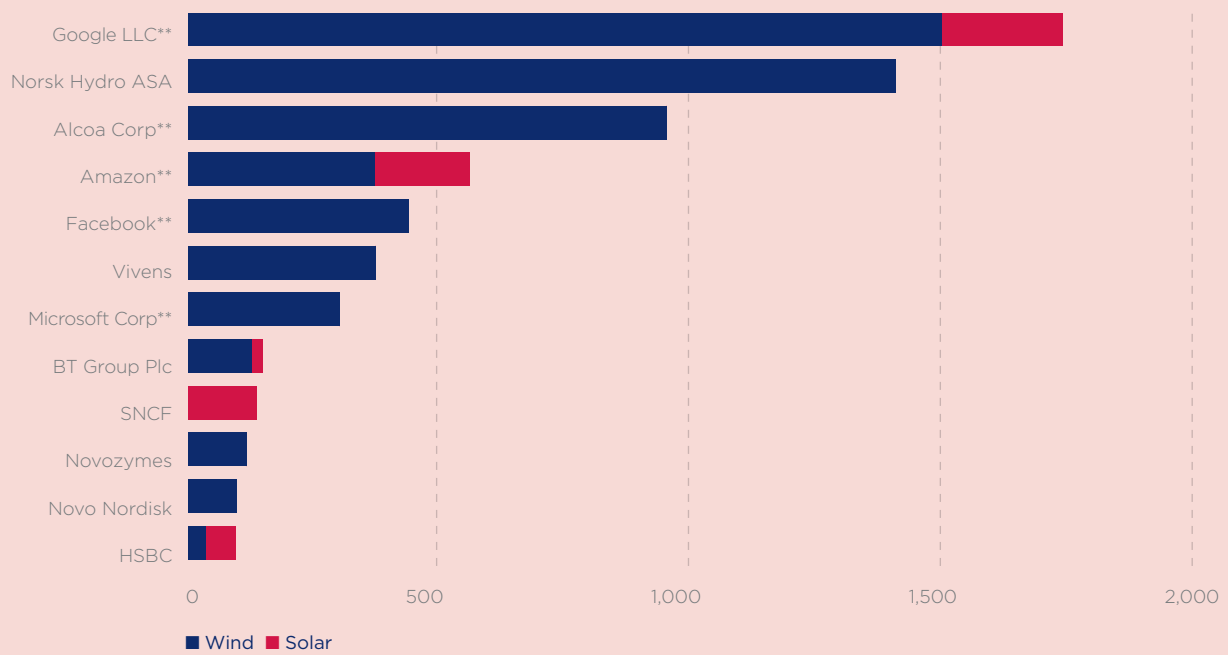
(Thousand Barrels per Day)



Includes other liquids such as natural gas liquids. Data shown is 12 month moving average.

Source: U.S. Energy Information Administration.

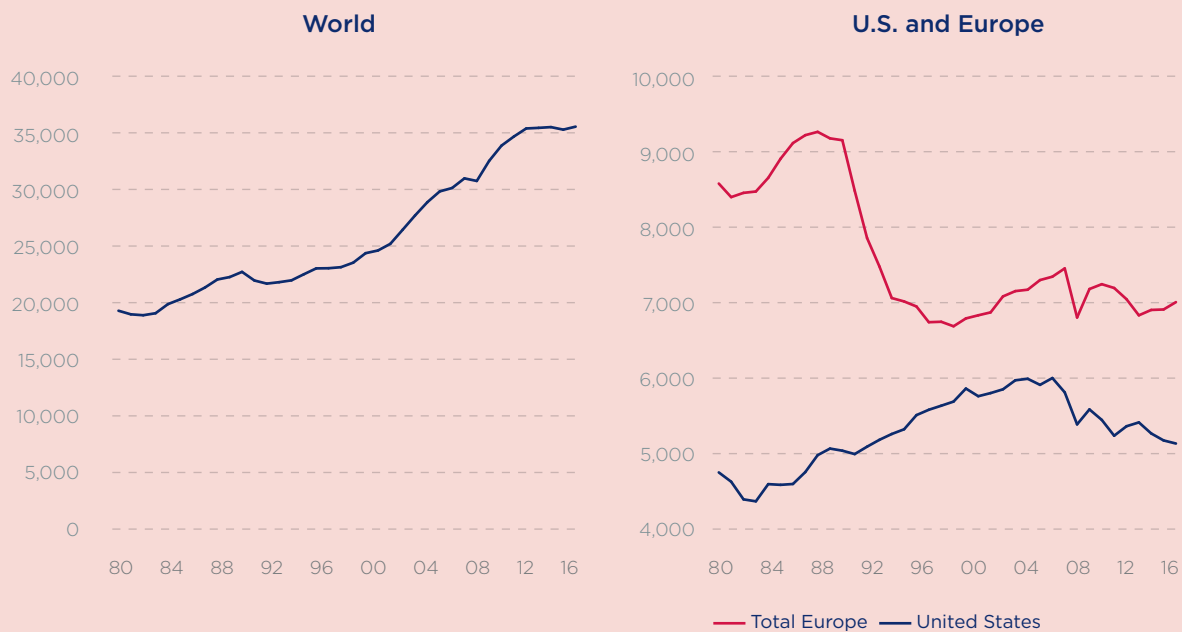
Data as of January 2020.

Table 11 Top Purchasers of Renewable Energy in Europe, 2007-2019 (Megawatts)

**Companies with asterisks are U.S. companies.

Source: Bloomberg New Energy Finance, Wall Street Journal.

Data as of January 2020.

Table 12 Total CO₂ emissions (MMtons CO₂): Transatlantic Economy vs. the World

Endnotes

- 1 See "Trade War Hammers Foreign Investment in China and Southeast Asia," *Nikkei Asian Review*, August 25, 2019.
- 2 "Chinese Lead Foreign Selling of U.S. Commercial Property," *Wall Street Journal*, February 4, 2020.
- 3 Baker McKenzie, "Chinese Investment in Europe and North America Hits 9-Year Low; Signs of Recovery for 2020," January 8, 2020.
- 4 Bureau of Economic Analysis, total inward foreign direct investment position on a historic cost basis in 2018 in petroleum and related industries, and electric power generation transmission and distribution.
- 5 SelectUSA, <https://www.selectusa.gov/servlet/servlet.FileDownload?file=015t000000001nSg>
- 6 Ibid; The "Bureau of Economic Analysis"
- 7 European Commission, "EU-U.S. LNG Trade," Data through November 2019.
- 8 Energy Information Administration, U.S. coal exports through September 2019, <https://www.eia.gov/coal/production/quarterly/pdf/t7p01p1.pdf>.
- 9 "U.S. Companies Fuel Europe's Green-Energy Push," *Wall Street Journal*, January 19, 2020.