

Annual Survey of Jobs, Trade and Investment between the United States and Europe

Daniel S. Hamilton and Joseph P. Quinlan







Hamilton, Daniel S., and Quinlan, Joseph P., *The Transatlantic Economy 2019: Annual Survey of Jobs, Trade and Investment between the United States and Europe*Washington, DC: Foreign Policy Institute, Johns Hopkins University SAIS, 2019.
© Foreign Policy Institute, Johns Hopkins University SAIS, 2019

#### **Foreign Policy Institute**

The Paul H. Nitze School of Advanced International Studies The Johns Hopkins University

1717 Massachusetts Ave., NW, 8th floor Washington, DC 20036

Tel: +1 202-663-5880 Fax: +1 202-663-5879 Email: dhamilton@jhu.edu http://transatlanticrelations.org

Twitter: @DanSHamilton ISBN: 978-1-7337339-0-8

#### American Chamber of Commerce to the European Union (AmCham EU)

Avenue des Arts/Kunstlaan 53 1000 Brussels, Belgium

Tel: +32 2 513 68 92 Fax: +32 2 513 79 28 Email: info@amchameu.eu www.amchameu.eu Twitter: @AmChamEU

#### U.S. Chamber of Commerce

1615 H Street NW

Washington, DC 20062, USA

Tel: +1 202-659-6000

Email: europe@uschamber.com

www.uschamber.com Twitter: @USCC\_Europe

## TRANSATLANTIC ECONOMY 2019

Annual Survey of Jobs, Trade and Investment between the United States and Europe

Daniel S. Hamilton and Joseph P. Quinlan Johns Hopkins University Paul H. Nitze School of Advanced International Studies

### Table of Contents

- ii Key Findings
- iv Preface and Acknowledgements
- v Executive Summary

#### 1 Chapter 1:

The Transatlantic Economy: Fraught Politics, Fragile Economics

#### 9 Chapter 2:

Jobs, Trade and Investment: Enduring Ties that Bind

#### 23 Chapter 3:

From Pipes to Platforms: The Transatlantic Digital Economy

#### 41 Chapter 4:

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

#### 53 Chapter 5:

European Countries: U.S.-Related Jobs, Trade and Investment

#### 67 Appendix A:

European Commerce and the 50 U.S. States: A State-by-State Comparison

#### 119 Appendix B:

U.S. Commerce and Europe: A Country-by-Country Comparison

- 149 Notes on Terms, Data and Sources
- **151** About the Authors

# TRANSATLANTIC ECONOMY 2019











Data flows between the U.S. and Europe

than data flows between the U.S.

higher and Asia

of digital content globally is 75%

produced in North America

and Europe

#### **R&D** spending

Innovation

\$31.3 billion **U.S.** companies

**in Europe** (2016)

\$43.8 billion **European companies** 

in the U.S. (2016)

### **Investment**



of global investment into the U.S. comes from Europe (2017)



of U.S. global investment goes to Europe (2017)

#### **Workers**

4.8 million U.S. companies in Europe

(Direct jobs due to investment, 2017)

4.6 million European companies in

the U.S. (Direct jobs due to investment, 2017)

#### Trade in goods





**U.S. and Europe's** share of global goods exports (2017)

\$285 billion

**U.S.** goods exports to the EU (2017)

#### **Trade in services**



**U.S.-European services** exports at record levels

\$298 billion U.S. to Europe

(2017)

\$232 billion Europe to the U.S.

(2017)

## **Thriving Together**

No two other regions in the world are as deeply integrated as the U.S. and Europe





## Preface and Acknowledgements







Joseph P. Quinlan

This annual survey offers the most up-to-date picture of the dense economic relationship binding European countries to America's 50 states. The survey consists of five chapters. Chapter One underscores how the transatlantic economy today is structurally sound yet facing significant political turbulence. Chapter Two updates our basic framework for understanding the deeply integrated transatlantic economy via 'eight ties that bind.' Chapter Three explores the transatlantic digital economy, which in many ways has become the backbone of commercial connections across the Atlantic. Chapter Four offers an overview of European commercial ties with the United States, and Chapter Five an

overview of U.S. commercial relations with Europe. The appended charts provide the most up-to-date information on European-sourced jobs, trade and investment with the 50 U.S. states, and U.S.-sourced jobs, trade and investment with the 28 member states of the European Union, as well as Norway, Switzerland and Turkey.

This annual survey complements our other writings in which we use both geographic and sectoral lenses to examine the deep integration of the transatlantic economy, and the role of the U.S. and Europe in the global economy, with particular focus on how globalization affects American and European consumers, workers, companies, and governments.

In another new publication, *Turkey in the North Atlantic Marketplace*, leading experts develop possible ways forward to anchor Turkey in the West by further deepening economic ties between Turkey and its transatlantic partners. In *The Transatlantic Digital Economy*, we expand on chapter 3 in this volume to look at how digital links across the Atlantic are becoming so critical to both U.S. and European economic health.

We would like to thank Jason Moyer, Thibaut L'Ortye, Wendy Lopes and Garrett Workman for their assistance in producing this study.

We are grateful for generous support of our annual survey from the American Chamber of Commerce to the European Union, the U.S. Chamber of Commerce and their member companies, as well as the American Chambers of Commerce in Denmark, Finland, Ireland, Slovenia and Sweden.

The views expressed here are our own, and do not necessarily represent those of any sponsor or institution. Other views and data sources have been cited, and are appreciated.

## **Executive Summary**

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

## Transatlantic Investment: Still Driving the Transatlantic Economy

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

• Intra-firm trade also accounted for 36% of U.S. exports to Europe and 52% to the Netherlands, 35% to Germany and 28% to France.

#### The U.S. in Europe

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

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

- region in 2016. Affiliate sales in the UK (\$607 billion) were double total sales in South America. Sales in Germany (\$341 billion) were over double the combined sales in Africa and the Middle East.
- We estimate that U.S. affiliate income in Europe reached a record \$281 billion in 2018. Europe accounted for roughly 55% of U.S. global foreign affiliate income in the first nine months of 2018.
- U.S. affiliate income from Europe of \$211 billion in the first nine months of 2018 was about three times more than the affiliate income of Latin America (\$71 billion) and Asia (\$69 billion), respectively.
- U.S. affiliate income in China (\$9.8 billion), however, was more than affiliate income in Germany (\$5.1 billion), and income in India (\$3 billion) was more than in Spain (\$2.8 billion) or France (\$2.2 billion).

#### **Europe in the U.S.**

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

- European affiliate income earned in the United States in 2018 (estimated at \$132 billion) was up 12% from the year before (\$118 billion).
- The output of British firms in the U.S. in 2017 reached \$144 billion roughly a quarter of the total output of European firms in the U.S. The output of German firms in the U.S. totaled \$109 billion, or about 20% of the total.
- Beyond European affiliates, only Japan and Canada have any real economic presence in the U.S. In 2016, Japanese affiliate output totaled nearly \$135 billion, Canadian \$81 billion.
- European companies operating in the U.S. accounted for nearly two-thirds of the \$911 billion contributed by all foreign firms to U.S. aggregate production in 2016.
- European auto companies produced 25% of total U.S. production in 2017 and generated \$34 billion towards U.S. GDP in 2016. 60% of European cars produced in the U.S. are U.S. exports to the world.
- Affiliate sales, not trade, are the primary means by which European firms deliver goods and services to U.S. consumers. In 2017 European affiliate sales in the U.S. (\$2.5 trillion) rose an estimated 11% and were more than triple U.S. imports from Europe.
- Sales by British affiliates in the U.S. totaled \$534 billion in 2016, followed by German affiliate sales (\$471 billion) and those by Dutch affiliates (\$323 billion).

#### **Transatlantic Trade**

- U.S. merchandise exports to the EU rose by an estimated 13% in 2018 to a record \$319 billion. Notably strong export markets included the UK (U.S. exports up 18% in the first eleven months of 2018), Italy (+27%), and the Netherlands (+19%).
- The U.S. and the EU are each other's largest trading partners. In the first eleven months of 2018, U.S. goods exports to the EU (\$293 billion, up 13.2%) were over 2.5 times more than U.S. goods exports to China (\$111 billion).
- The U.S. annual merchandise trade deficit with the EU, estimated at \$168 billion in 2018, was at a record high, up 11% from the year earlier. The U.S. deficit with China (\$417 billion) is 2.5 times larger than the U.S. deficit with the EU.
- The U.S. accounts for 29% of total EU auto exports; the EU accounts for 20% of total U.S. car exports.

- 45 of 50 U.S. states export more to Europe than to China, in many cases by a wide margin.
- In 2017 New York exports to Europe were more than 8 times those to China. California, Texas, Michigan, Illinois and Ohio exported more than twice as much to Europe as to China.
- Germany was the top European export market for 18 U.S. states and the UK for 14 in 2017.
- Foreign firms operating in the United States shipped \$370 billion in U.S. goods exports in 2016;
   52% of these U.S. exports were generated by European companies.

#### **Transatlantic Services**

- The U.S. and Europe are the two leading services economies in the world. The U.S. is the largest single country trader in services, while the EU is the largest trader in services among all world regions. The U.S. and EU are each other's most important commercial partners and major growth markets when it comes to services trade and investment. Moreover, deep transatlantic connections in services industries, provided by mutual investment flows, are the foundation for the global competitiveness of U.S. and European services companies.
- Four of the top ten export markets for U.S. services are in Europe. Europe accounted for 37% of total U.S. services exports and for 43% of total U.S. services imports in 2017.
- U.S. services exports to Europe reached a record \$298 billion in 2017, up more than 40% from 2009. The U.S. had a \$66 billion trade surplus in services with Europe in 2017, compared with its \$175 billion trade deficit in goods with Europe.
- U.S. imports of services from Europe also hit an alltime high in 2017 of \$232 billion, up nearly 40% from 2009. The UK, Germany, Switzerland, Ireland, France and Italy are top services exporters to the U.S.
- Moreover, foreign affiliate sales of services, or the delivery of transatlantic services by foreign affiliates, have exploded on both sides of the Atlantic over the past few decades and become far more important than exports.
- We estimate that sales of services of U.S. affiliates in Europe rose 4%, to \$802 billion, in 2017, 2.7 times more than U.S. services exports to Europe of \$298 billion.

- The UK alone accounted for 30% of all U.S. affiliate sales in Europe in 2016 \$232 billion, greater than combined affiliate sales in South and Central America (\$118 billion), Africa (\$13 billion) and the Middle East (\$21 billion).
- On a global basis, Europe accounted for roughly 53% of total U.S. affiliate services sales.
- European affiliate sales of services in the U.S. of \$561 billion in 2016 were about 27% below U.S. affiliate sales of services in Europe.
- Nonetheless, European companies are the key provider of affiliate services in the U.S. Foreign affiliate sales of services in the U.S. totaled \$995 billion in 2016; European firms accounted for 56% of the total. British affiliates lead in terms of affiliate sales of services (\$143 billion), followed closely by Germany (\$134 billion).
- European companies operating in the U.S. generated an estimated \$583 billion in services sales in 2017,
  2.5 times more than European services exports to the U.S. of \$232 billion.

#### **Transatlantic Jobs**

- Despite stories about U.S. and European companies decamping for cheap labor markets in Mexico or Asia, most foreigners working for U.S. companies outside the U.S. are European, and most foreigners working for European companies outside the EU are American.
- European companies in the U.S. employ millions of American workers and are the largest source of onshored jobs in America. Similarly, U.S. companies in Europe employ millions of European workers and are the largest source of onshored jobs in Europe.
- U.S. and European foreign affiliates directly employed 9.4 million workers in 2017. Further modest gains in employment were most likely achieved in 2018.
- These figures understate the overall job numbers, since they do not include
- o jobs supported by transatlantic trade flows;
- o indirect employment effects of nonequity arrangements such as strategic alliances, joint ventures, and other deals; and
- o indirect employment generated for distributors and suppliers.
- U.S. affiliates directly employed an estimated 4.8 million workers in Europe in 2017 over 30% more than in 2000.

- Roughly 33% of the 14.3 million people employed by U.S. majority-owned affiliates around the world in 2016 lived in Europe; that share is down from 38% in 2009.
- U.S. affiliates employed more manufacturing workers in Europe in 2016 (1.9 million) than they did in 1990 (1.6 million), and about the same as in 2000 (1.9 million). Manufacturing employment has declined in some countries but has rebounded in others.
- Poland has been a big winner: U.S. affiliate manufacturing employment grew more than 2.5 times between 2000 and 2016, rising from 51,000 to over 128,000, and continuing upwards.
- In 2016 the UK, France and Germany accounted for less than 50% of U.S. affiliate manufacturing employment in Europe. In 1990 they accounted for 67%. Meanwhile, the combined share of U.S. affiliate manufacturing employment in Poland, the Czech Republic and Hungary jumped from virtually zero in 1990 to nearly 15% in 2016, indicative of the eastern spread of U.S. companies' European operations.
- Manufacturing employment among U.S. affiliates in the UK has declined from 431,000 in 2000 to 311,000 in 2016 and in France from 249,000 to 197,000.
- Manufacturing employment among U.S. affiliates in Germany is near levels seen at the start of the century - 382,000 jobs in 2016, compared to 388,000 in 2000.
- U.S. affiliates employ more Europeans in services than in manufacturing and this trend is likely to continue. Manufacturing accounted for 40% of total employment by U.S. affiliates in Europe in 2016. U.S. affiliates employed nearly 378,000 European workers in transportation and 300,000 in chemicals. Wholesale employment was among the largest sources of services-related employment, which includes employment in such areas as logistics, trade, insurance and other related activities.
- The manufacturing workforce of U.S. affiliates in Germany totaled 382,000 workers in 2016 more than the number of manufactured workers employed by U.S. affiliates in Brazil (310,000) and India (209,000) but well below China (740,000).
- European majority-owned foreign affiliates directly employed 4.6 million U.S. workers in 2017 some 90,000 more workers than in 2016, although roughly 225,000 workers less than U.S. affiliates employed in Europe.

- Firms from the UK, Germany, Switzerland and the Netherlands largely accounted for the boost in U.S. employment by European companies between 2015 and 2016, with companies from the four countries employing over 157,000 more U.S.-based workers in 2016 than in 2015.
- In 2016 the top five European employers in the U.S. were firms from the United Kingdom (1.2 million), France (729,000), Germany (692,000), the Netherlands (475,000) and Switzerland (471,000).
- European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2016.
- European companies account for 76% of total foreign FDI in U.S. manufacturing.
- European companies directly supported 173,000 jobs in the U.S. motor vehicles and parts industry
  42% of total foreign affiliate employment in this industry.
- Texas gained 132,000 jobs (56% more) directly from European investment between 2006 and 2016. Others with significant gains included California 97,000 (28.1%); New York 66,300 (23.5%); Illinois 58,800 (34.3%); Florida 42,700 (26.6%); Massachusetts 40,200 (33.7%); Pennsylvania 37,900 (20.8%); North Carolina 30,500 (19.8%); New Jersey 27,600 (16.2%); Georgia 26,100 (23.3%); Virginia 24,800 (22.1%); Ohio 23,500 (17.5%); Minnesota 23,300 (46%) and Tennessee 23,300 (31.2%).
- The top five U.S. states in terms of jobs provided directly by European affiliates in 2016 were California (442,500), Texas (367,900), New York (348,400), Illinois (230,100) and Pennsylvania (220,400).

#### The Transatlantic Digital Economy

- Cross-border data flows between the U.S. and Europe in 2015 were by far the most intense in the world 50% higher than data flows between the U.S. and Asia in absolute terms, and 400% higher on a per capita basis.
- North America and Europe generate about 75% of digital content for internet users worldwide.
- U.S. and European cities (Frankfurt, London, Amsterdam, Paris, Stockholm, Miami, New York, Marseille, Los Angeles, San Francisco) are the world's foremost hubs for international communication and data exchange.

- Transatlantic cable connections are the densest and highest capacity routes, with the highest traffic, in the world, with an estimated 38% compound annual growth rate until 2025.
- The U.S. and Europe are each other's most important commercial partners when it comes to digitally-enabled services. The U.S. and the EU are also the two largest net exporters of digitally-enabled services to the world.
- In 2017, digitally-enabled services accounted for 55% of all U.S. services exports, 49% of all services imports, and 68% of the U.S. global surplus in trade in services.
- In 2017 the U.S exported \$204.2 billion in digitally-enabled services to Europe and imported \$123.7 billion from Europe, generating a trade surplus with Europe in this area of at least \$80.5 billion, according to figures from the U.S. Bureau of Economic Analysis. U.S. exports of digitally-enabled services to Europe were 2.5 times more than U.S. digitally-enabled exports to Latin America and almost double U.S. digitally-enabled exports to the entire Asia-Pacific region.
- In 2017 EU member states exported \$1.24 trillion and imported \$1.02 trillion digitally-enabled services to countries both inside of and outside of the EU.
- Excluding intra-EU trade, EU member states exported \$579.2 billion and imported \$459.6 billion in digitally-enabled services, resulting in a surplus of \$119.6 billion for these services.
- Digitally-enabled services trade represented 56% of all EU services exports to non-EU countries and 57% of all EU services imports from non-EU countries.
- The U.S. accounted for 31% of the EU's digitally-enabled services exports to non-EU countries, and 39% of EU digitally-enabled services imports from non-EU countries.
- The U.S. purchased \$179.6 billion of EU digitally-enabled services exports according to OECD data for 2017, making it the largest non-EU consumer these services, and accounting for more EU exports than the rest of non-EU Europe (\$122.5 billion), and more than all digitally-enabled services exports from the EU to Asia and Oceania (\$165.4 billion).
- EU member states with the largest estimated value of digitally-enabled services exports were Germany (\$171.6 billion), the United Kingdom (\$149.3 billion), Ireland (\$142.6 billion), and the Netherlands (\$134.1 billion).

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

#### The Transatlantic Innovation Economy

- Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2016 U.S. affiliates invested \$31.3 billion in research and development in Europe, representing 58% of total global R&D expenditures by U.S. foreign affiliates.
- R&D expenditures by U.S. affiliates were the greatest in Germany (\$9.0 billion), the UK (\$6.0 billion), Switzerland (\$3.0 billion), Ireland (\$2.9 billion), France (\$2.3 billion) and and Belgium (\$1.7 billion). These six nations accounted for 83% of U.S. spending on R&D in Europe in 2016.
- In the U.S, R&D expenditures by majority-owned foreign affiliates totaled \$60.1 billion in 2016. R&D spending by European affiliates totaled \$44 billion, representing 73% of all R&D performed by majorityowned foreign affiliates in the United States.
- Swiss-owned R&D in the U.S. totaled \$10.6 billion in 2016, nearly a quarter of total European affiliate R&D in the United States. British affiliates accounted for 20%, German for 17.7% and French for 12.9%.

## 1

## The Transatlantic Economy: Fraught Politics, Fragile Economics





Politics trumped economics in 2018 and threatens to do so again in 2019. Transatlantic trade and investment flows have been buffeted and unsettled by the Trump Administration's "America First" mantle and its attendant assertive trade and investment policies. Uncertainties over the United Kingdom's decision to leave the European Union (EU), known as Brexit, loom large in 2019. Political fissures have wrought economic damage across a number of continental European countries. All of these issues, in the context of a cyclical slowdown in global growth, are testing the resilience and strength of the transatlantic economy – still the most significant commercial artery for both sides of the North Atlantic.

The Trump team's primary target is China, not Europe. Yet Europe has not been able to escape the negative shocks from simmering U.S.-China trade disputes. One consequence of U.S. imposition of steel tariffs, for instance, was to divert steel from China and other countries to Europe, forcing the EU to impose its own set of restrictions.

The EU shares many of the Trump team's frustrations with Chinese cybertheft, its assaults on intellectual property, forced technology transfers, poor implementation of its World Trade Organization (WTO) obligations, and its state-subsidized overcapacity in steel and potentially autos, robotics and other sectors of the economy. Severe Chinese restrictions on investment by U.S., European and other non-Chinese companies in modern services, energy, agriculture and high-tech sectors are a further shared concern. Both are wary of growing investments by state-owned Chinese firms in Europe and the United States. Brussels has joined Washington and Tokyo in trilateral talks focused on the commercial challenges posed by China.

The International Monetary Fund (IMF) estimates that a full-blown trade war could shave 1.6% off of Chinese gross domestic product (GDP) and 1% off U.S. GDP. And while the United Nations Conference on Trade and Development (UNCTAD) estimates that in such a situation the EU theoretically stands to capture about \$70 billion of the U.S.-China bilateral trade that would be diverted elsewhere, the shock waves generated by a U.S.-China trade war on other trade flows, investment decisions and currencies would likely also overwhelm European economies. Even absent a full-scale trade war, tit-for-tat protectionist measures between the U.S. and China, the world's two largest economies, have rattled global business confidence, raised uncertainty

about the effectiveness of global supply chains, and contributed to slower growth in global trade. It has also undercut real growth and momentum in China and the United States and dampened economic activity around the world, including in trade-dependent Europe.

A second area of friction, less significant economically but equally fraught politically, is related to Iran. Furious after President Trump pulled out of the Iran nuclear deal and reimposed punitive banking sanctions last year, European leaders first set up a "blocking statute" to forbid European companies from complying with sanctions and then introduced a special purpose vehicle called Instex to prop up European business with Iran as one means to keep Iran in the deal. The move has heightened transatlantic tensions even though it is unlikely that any European companies would risk their substantial commercial engagement with the United States for far smaller opportunities with Iran.

Additional transatlantic economic challenges have been generated by political frictions over climate change, European levels of defense spending, and European energy dependencies on Russia.

These issues offer a negative political backdrop for efforts by Washington and Brussels to kickstart U.S.-EU trade talks. Trade tensions between the United States and the EU were coming to a boil until President Trump and European Commission President Jean-Claude Junker declared a "truce" in July 2018. The two sides are now re-launching bilateral trade negotiations, but with very different goals in mind.

The Trump Administration is adamant about including agriculture in the negotiations, which the EU resists. It still holds open the possibility of invoking section 232 of the Trade Expansion Act of 1962 to move ahead with tariffs on EU cars and auto parts – the same national-security grounds the White House used to impose levies on foreign steel and aluminum, which prompted the EU to retaliate with duties on U.S. goods. U.S. auto-related tariffs would further inflame tensions, given that EU automotive exports to the United States are about 10 times greater in value than EU steel and aluminum exports combined. German producers would be the biggest losers: Germany alone accounts for 60% of Europe's €40 billion in annual exports of cars and parts to the United States.

The EU, in turn, is keen to eliminate transatlantic tariffs on industrial goods and automobiles that Trump is

#### Why auto-related tariffs would further inflame EU-U.S. trade tensions

#### 1. EU exports to the U.S.: a comparison



Steel and aluminum combined



Cars and parts

**X10** 

#### 2. Annual EU exports of cars and parts to the U.S.



fighting to protect. Trump has pledged not to impose auto duties as long as talks continue in good faith. But prospects of a quick agreement are slim. If the U.S. administration imposes Section 232 tariffs on European cars, the EU will end the negotiations and impose tariffs in response, as it did with steel and aluminum, by identifying products that are politically sensitive in the United States, but which are readily substituted in the EU, in order to minimize any negative effects for European firms and consumers. Not only would the economic scale of such a dispute be significantly greater than the irritation caused by the tariffs currently in place, a transatlantic trade dispute could easily spill over into national security issues, possibly damaging NATO and the broader transatlantic relationship.

These tensions are unfolding in the context of a slowdown in global growth. Prospects of a global recession remain minimal: the Big Three - the United States, China and the European Union - are all expected to post positive real GDP growth this year, although growth rates will be down from the prior year. The key

worry, then, is not the economics associated with what could be a modest cyclical slowdown, but political instabilities that could confound efforts to manage a downturn.

#### **Transatlantic Economic Outlook**

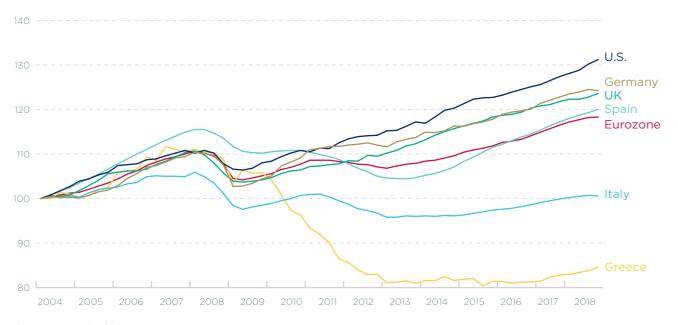
In short, the transatlantic economy enters 2019 on unsettled ground, beset by political volatility and economic uncertainty. Transatlantic economic growth is set to slow. The United States is expected to outperform relative to the European Union and most countries in Europe.

A year ago, the situation was different; the transatlantic economy was in sync - the United States and Europe were expanding in tandem owing to a number of variables, including rising consumption levels, investment outlays and trade volumes. By mid-year, however, the paths of the two economies had diverged; growth noticeably slowed across Europe in the second half of 2018, while the U.S. economy powered ahead.



**Growth slowed in Europe** in the second half of 2018, while the **U.S. economy is** powering ahead

Table 1 Most Developed Economies Back Above Pre-Recession Output Levels (Real GDP level, Q1 2004 = 100)



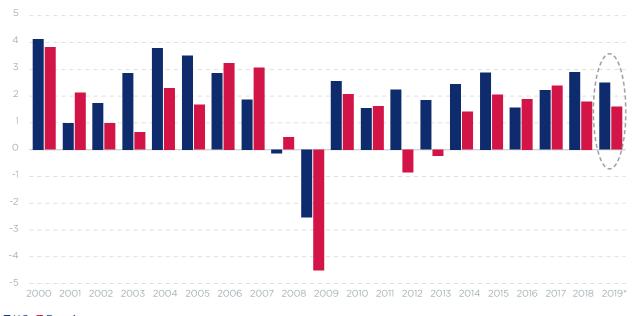
Source: Haver Analytics. Data through Q3 2018.

According to the latest figures from the IMF, the eurozone is expected to expand by just 1.6% this year, down from 1.8% in 2018. Growth momentum has been sapped by a number of political variables, ranging from street protests in France, political uncertainty over Brexit, and financial stress in heavily-indebted Italy. Overlaid with U.S.-China trade tensions, consumer and business confidence has declined across Europe, and is not likely to rebound anytime soon, as Brexit drags on

and Europe braces for May elections to the European Parliament, which could usher in more Euroskeptic, anti-immigration policies, triggering additional economic and market volatility.

In the United States, meanwhile, one of the longest economic expansions in modern history continues. In 2018, the U.S. economy grew by 2.9%. Economic momentum will downshift in 2019, with growth

Table 2 U.S. vs. Euro Area Real GDP, Real GDP, Annual Percent Change



■ U.S. ■ Euro Area \*2019 forecast.

Data as of January 2019.

Source: International Monetary Fund; Bureau of Economic Analysis; Eurostat.

#### **Global personal consumption** (2017)

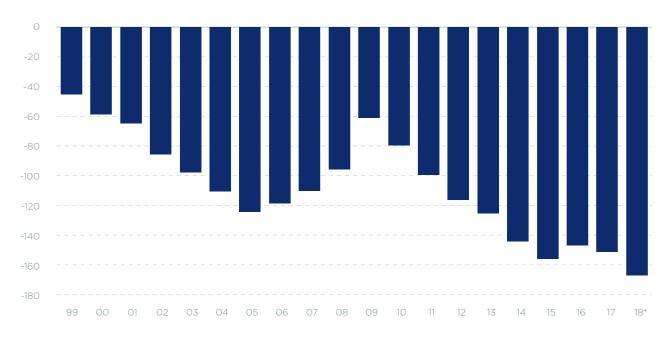


slowing on the account of the lagged effects of monetary tightening, the waning fiscal stimulus (including tax reform) and downdraft in capital investment. However, prospects of a recession in the United States are slim thanks to healthy levels of personal consumption.

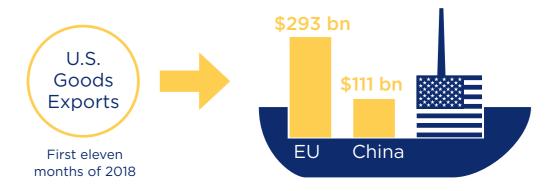
A key bright spot for both U.S. and European firms is the U.S. consumer, who remains one of the most potent economic forces in the world, accounting for roughly 29% of global personal consumption in 2017, the last year of available data. Totaling over \$13 trillion, U.S. consumer spending is greater than the combined spending of the next five largest consuming markets in the world: China, Japan, Germany, the United Kingdom, and India.

The one-two combination of solid employment gains and higher wages has underpinned consumer confidence and spending, with U.S. consumer spending accounting for nearly 70% of U.S. gross domestic product. And since many European firms sell more goods and services in the United States than in their home markets, buoyant U.S. consumer spending positively spills over to Europe via enhanced sales of European affiliates in the United States and higher European exports. Fully half of the world's personal consumption in 2017 was accounted for by the United States (29%) and the European Union (21%) – a reflection of the overarching attractiveness of the transatlantic market.

Table 3 U.S. Merchandise Trade Balance with the EU (Billions of \$)



\*2018 estimate. Source: United States Census Bureau.



This wealth underpins bilateral trade. Indeed, transatlantic trade still stands as the largest such relationship in the world, even when compared to America's trade ties with China. In the first eleven months of 2018, for instance, U.S. goods exports to the European Union totaled \$293 billion, up 13.2% from the same period earlier and over 2.5 more than U.S. exports to China (\$111 billion). U.S. goods imports from the EU totaled \$447 billion, leaving a sizable trade gap of \$154 billion, up 14% from the prior year. America's merchandise trade deficit with the EU reached an estimated \$168 billion in 2018, a record high and a thorn in the side of a Trump Administration fixated on bilateral trade deficits. America's deficit with China was larger (estimated at \$417 billion), although that will provide little ballast to U.S.-Europe trade negotiations. America's expanding trade deficit with Europe will remain a constant source of tension between the two parties again this year.

Meanwhile, unemployment levels on both sides of the Atlantic have improved over the past year, notably in the United States. Heading into 2019, the job market in America is one the tightest in decades. The national unemployment rate for December 2018 clocked in at 3.9%; among workers with a four-year degree or more, the unemployment rate was 2.1% in December, which is basically full employment. Job openings were a staggering 7.3 million in December 2018. Moreover, roughly 428,000 manufacturing jobs remained unfilled, a fact largely overlooked by pundits and politicians tuned into the false narrative that America is not in the business of "making stuff", or manufacturing. Nothing could be further from the truth.

Among the skilled labor pool in the United States, the unemployment rate hovered around 2% for the balance of 2018. Most new jobs, however, have not tended to be in high-paying services jobs, where the

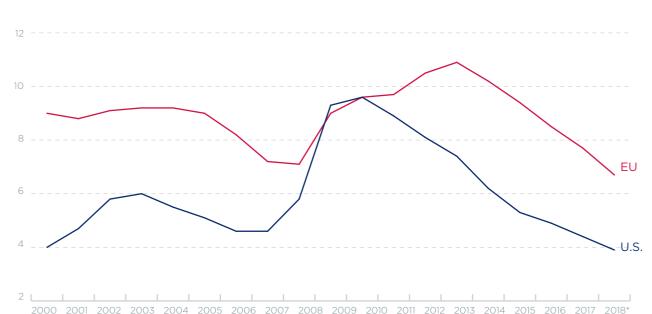


Table 4 U.S. vs. EU Unemployment Rate Harmonized Unemployment Rate (%)

\*2018 EU data is for November 2018, U.S. data is for December 2018. Source: OECD.

U.S. traditionally has excelled, but in workaday services positions, where pay is mediocre. Automation is changing the very nature of work in many areas, less in terms of replacing workers than displacing them from higher-wage, higher-productivity sectors to lower-wage, lower-productivity sectors of the economy. The U.S. economy continues to evolve, unevenly, but still on a positive trajectory for jobs and growth.

The eurozone unemployment rate fell to a decaderecord low of 7.9% in December 2018 - a positive sign, although that figure was nearly double the same rate in the United States. Regional divergences persist: Germany's unemployment rate (3.3% in December 2018) was well below comparable rates in France (9.1%), Italy (10.3%), Spain (14.3%), and Greece (18.6%).

In sum, fraught transatlantic politics threaten to exacerbate an economic situation that, while still positive overall, is more fragile than a year ago.

#### **Box 1. Brexit Update: As Clear as Mud**

The decision by the United Kingdom in 2016 to quit the European Union ("Brexit") and the subsequent negotiations to settle terms of divorce have generated deep fissures through British society and rattled markets throughout Europe. The negotiations have become sloppy, torturous and fraught with downside risks for the United Kingdom, the European Union and the United States.

By some measures, the UK economy is in a relatively strong position to weather the Brexit storm. UK employment reached its highest level on record at the end of 2018 and total pay grew at its fastest in over a decade. Nonetheless, potentially gale-force winds can be felt. The UK economy slowed markedly in 2017 and again in 2018, weighed down by flagging private consumption owing in part to the pound's depreciation and the attendant rise in inflation and loss of real disposable income. Real estate prices have weakened. Ernst and Young expects a trillion euros in bank assets to flee the UK. More than one in seven European companies with UK suppliers have moved part or all of their business out of Britain. UK-based EU institutions are decamping for other parts of Europe. U.S. foreign direct investment flows to the UK plunged by 31% in 2017 and by another 9.8% in the first nine months of 2018. The UK government itself estimated that under the terms of the 2018 UK-EU draft agreement – rejected by the British Parliament yet deemed the best deal the UK could expect by the EU – the British economy would shrink by 3.9% (a loss of £100 billion) by 2030. And without a deal, the Confederation of British Industry concluded that every part of the United Kingdom would pay an "unacceptable economic price." No matter what the Brexit terms may be, the process is likely to unsettle markets and cast a cloud over the UK's relations with key partners for many years.

2019 is crunch time. The UK must not only define the nature of its exit from the EU, it will also have to do three other things that will affect U.S. and wider European economic interests. First, it will have to replace the EU's common external tariff with its own customs tariff, and submit new tariff commitments for goods and services at the World Trade Organization. Second, it must negotiate new trade arrangements between the UK and the EU27. Third, it will want to negotiate new trade arrangements with the United States and many other non-EU states. Yet Britain has failed to finalize most trade deals needed to replace the EU's 40 existing agreements with leading global economies and will not be close to doing so when Brexit occurs on March 29. Without a formal Brussels divorce agreement, most of the deals would lapse, putting more than £150 billion of UK trade at risk.<sup>3</sup> And even with an agreement in hand, the UK is likely to remain under the EU umbrella for at least two additional years, pending a UK-EU trade agreement – but as a rule taker, not a rule maker.

Moreover, a future UK-EU trade framework is unlikely to simply replicate UK access to the Single Market. The terms are likely to be less advantageous and more burdensome. While tariff-free access for goods is a possibility, firms based in the UK are likely to face some local content requirements within the EU. Tariff-free access to services is unlikely as well, which represents a blow to the UK's services-based economy. At risk: UK financial, transportation, logistics and insurance companies as well as UK-based U.S. and EU affiliates in those sectors.

Meanwhile, EU rules mean that London cannot legally begin negotiating a trade deal with Washington before the UK leaves the EU. With U.S.-UK relations notably strained under the Trump administration, no deal is likely anytime soon, which portends more U.S. disinvestment from the one-time prime location for U.S. multinationals doing business in the EU.

After the Netherlands, America's corporate stakes in the United Kingdom are among the deepest in the world. Totaling \$748 billion in 2017, the last year of available data, America's capital stock in the UK is more than double the combined investment in South America, the Middle East and Africa (\$253 billion). Total U.S. investment stock in China was just \$108 billion in 2017. Even when the U.S. investment presence in China and India are combined – totaling \$152 billion in 2017 – the figure is just 20% of total U.S. investment in the UK.

Wealthy consumers, respect for the rule of law, the ease of doing business, credible institutions, membership in the European Union—all of these factors, and more, have long made the UK a more attractive place to do business for American firms. Whatever the metric – total assets, R&D expenditures, foreign affiliate sales, employment, trade, etc. – the United Kingdom has been a long-time pillar of America's global economic infrastructure and a key hub for the global competitiveness of U.S. firms. Since 2000, the UK has accounted for nearly 9% of the cumulative global income of U.S. affiliates, a proxy for global earnings. In the first nine months of 2018, U.S. affiliate income earned in the UK was a robust \$34.2 billion, a 21% increase from the same period a year ago. For all of Europe, it was up 10%.

In the end, Brexit is likely to prove costly for the United Kingdom and dampen the business climate in the EU. Many indicators suggest that the impending separation will weigh on real economic growth, subdue consumer and business confidence, spur disinvestment from foreign investors, and trigger bouts of political instability. That said, the cost to U.S. multinationals remains unclear. Firms are hedging their positions in the UK by exploring alternative locations in the European Union, with Germany, France, the Netherlands, and Ireland among the favored locations for ex-UK investment. A deeper issue for Corporate America is the future contours of the transatlantic economy and the future path of the transatlantic partnership. On both sides of the ocean, the political bonds are fraying, portending tougher times in terms of promoting deeper transatlantic investment and trade ties.

#### Endnotes

<sup>1</sup> C. Daron Acamoglu and Pascual Restrepo, "Automation and New Tasks: The Implications of the Task Content of Production for Labor Demand," working paper for *Journal of Economic Perspectives*, November 6, 2018, https://economics.mit.edu/files/16338.

Journal of Economic Perspectives, November 6, 2018, https://economics.mit.edu/files/16338. 2 Seema Malhotra, "Brexit trade uncertainty threatens to set UK back by 46 years," Financial Times, December 9, 2018.

<sup>3</sup> James Blitz, Jim Pickard and George Parker, "UK fails to close global trade deals ahead of Brexit deadline," Financial Times, January 17, 2019.

## Jobs, Trade and Investment: Enduring Ties that Bind



Notwithstanding the rise of the middle class in many emerging markets and the robust growth rates of countries such as China and India, the United States and the European Union remain each other's most important foreign market in the world. This is not likely to change any time soon given the deep and entangled commercial ties that link the transatlantic economy, and given that the United States and the European Union are each embroiled in increasingly contentious trade and investment tensions with China.

Thanks to the dense interlinkages of investment, trade, technology, innovation and jobs that bind the two sides of the North Atlantic together, the transatlantic economy remains a key pillar of the global economy. The combined output of the United States and the European Union (plus Switzerland, Norway and Iceland) accounted for roughly one-third of world GDP in terms of purchasing power parity in 2018. Even if one excludes the United Kingdom, which has signaled its intent to leave the EU, the U.S. and the EU account for a substantial 30% of world GDP – higher than the combined output of China and India (26% of world GDP).

The transatlantic economy is not only larger than the twin giants of Asia but also significantly wealthier. And because wealth matters, it's little wonder that consumers in the U.S. and the EU easily outspend their counterparts in China and India. As mentioned in Chapter One, the U.S. and EU combined accounted for 50% of global personal consumption in 2017, versus a combined share of just 14% for China and India.

In addition to the above, the transatlantic economy is a repository of innovation and technological

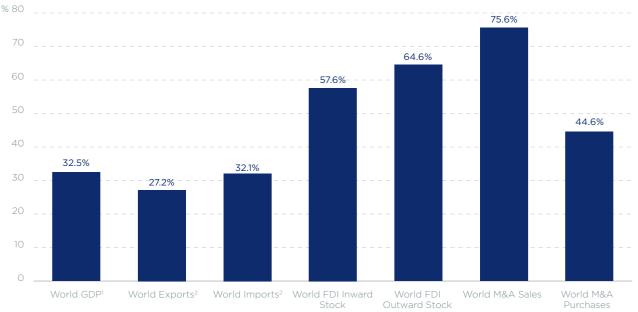






advancement, and at the forefront of global foreign direct investment and global mergers and acquisitions activity. Taken together, U.S. and European exports to the world accounted for 27% of global exports in 2017, the last year of complete data; combined imports represented over 32% of the world total. Meanwhile, the U.S. and Europe together accounted for 58% of inward stock of foreign direct investment (FDI) and 65% of outward stock of FDI. 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.

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



Sources: UN, IMF, figures for 2017. Transatlantic economy measured as U.S., EU, Norway, Switzerland and Iceland. 1. Based on PPP estimates.

<sup>2.</sup> Excluding intra-EU, Norway, Switzerland and Iceland trade.

\$5.5 Trillion U.S. \$ Trillions \$2.9 Trillion \$1.9 Trillion \$1.4 Trillion \$1.3 Trillion \$1.2 Trillion \$1.1 Trillion \$1.1 Trillion Transatlantic Asia/Pacific Asia/Pacific Transatlantic NAFTA NAFTA South/Central South/Central Total Foreign Total Foreign America/ Total Trade America/ Total Trade Affiliate Affiliate Caribbean Caribbean

Table 2 America's Major Commercial Arteries

Foreign Affiliate Sales: Estimates for 2017. Total Trade: Data for goods & services, 2017. NAFTA represents U.S. trade and sales linkages with NAFTA member countries, excluding trade and affiliate sales ties between Mexico and Canada. Source: Bureau of Economic Analysis.

In the end, it is the U.S.-EU partnership that continues to drive and dictate global trade, investment and capital flows. No commercial artery in the world is as large as the investment artery forged between the United States and Europe. Total transatlantic foreign affiliate sales were estimated at \$5.5 trillion in 2017, easily ranking as the top artery in the world on account of the thick investment ties between the two parties. Total transatlantic foreign affiliate sales are roughly double total sales between the U.S. and Asia-Pacific region, over four times those with NAFTA partners Canada and Mexico,¹ and five times more than with South America, Central America and the Caribbean.

That said, the burgeoning middle class of the developing nations represents new sources of supply (labor) and demand (consumers) for U.S. and European firms. American and European firms are building out their in-country presence in the developing nations, and for good reason. Economic growth rates are still above the global average in most 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. It all makes perfect sense for U.S. and European firms to invest outside the transatlantic economy. What is often missing from this either-or picture, however, is the fact that for many U.S. and European companies, the transatlantic economy is the geo-economic base from which they can engage successfully in 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. to China and other countries. U.S. services companies, in turn, use the scale offered by their dense investment linkages across the transatlantic economy to be globally competitive when it comes to offering services in other parts of the world. Many U.S. multinationals – for both goods and services – also use their presence in Europe to serve the markets of North Africa and the Middle East, with operations preferable in stable and secure Europe versus the volatility of the Middle East/Africa.

In all of these ways, the transatlantic partnership remains important not only to the United States and Europe, but also to the world. The U.S.-European partnership is too big and too important to fail, as made all too clear when dissecting the activities of foreign affiliates on both sides of the pond.



economy

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

A launchpad

#### **Box 1. Not by Trade Alone**

There is a widespread tendency in political circles, by the media, among the broader public, and even by some in the business community to equate international commerce with trade in goods. By this reckoning, surpluses in goods trade are "good" and deficits are "bad." Yet trade deficits can arise due to factors other than trade, such as differing domestic growth, consumption or savings rates among countries. Equally important is a simple fact: trade in goods, as even trade itself, is a misleading benchmark of international commerce. This is especially true when it comes to the transatlantic economy.

As we document in this study, the broad-based nature of U.S.-European commercial ties cannot be understood by looking at merchandise trade figures alone. While some may associate the EU's large trade surplus in goods with the United States as a key competitive advantage for Europe, there are several other modes through which global companies reach consumers. These include services trade broadly, as well as digitally-deliverable services in particular – both key U.S. strengths. U.S. companies also deliver goods and services to Europeans through U.S. affiliates operating in Europe. They also generate so-called "primary income" from their foreign affiliate earnings as well as from investment income earned in Europe. These are all factors underscoring why investment, not trade, is the engine of the transatlantic economy. Of course, European companies do the same in the United States.

Taking all of these factors into consideration leads to a more balanced view of transatlantic commerce. While the United States does run a large deficit in goods with the EU (-\$153 billion in 2017), the U.S. surplus in services trade (+\$51 billion) and primary income (+\$108 billion) with the EU more than offsets the goods imbalance. U.S. primary income receipts from the EU were almost \$400 billion in 2017, versus EU-based companies' profits and investment income of just \$288 billion in the United States.

In short, we believe the eight indices we set forth in this chapter offer a more accurate view of the nature and significance of the transatlantic economy than a narrow focus on goods trade alone.

## The Ties That Bind - Quantifying the Transatlantic Economy

An essential key to understanding the enduring strength and importance of the transatlantic economy is to recognize that investment, not trade, drives U.S.-EU commercial relations. It is the activities of foreign affiliates – the foot soldiers of the transatlantic partnership – that bind the United States and Europe together. They have constructed a formidable foundation on both sides of the Atlantic over the past half century.

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. foreign affiliates in Europe (an estimated \$695 billion in 2017) and of European foreign affiliates in the U.S. (estimated at \$586 billion) was greater than the total gross domestic product of most countries. Combined, transatlantic affiliate output – nearly \$1.3 trillion – was larger than the output of such countries as the Netherlands, Turkey or Indonesia.

#### Total output of foreign affiliates

(2017)



\$695 billion U.S. in Europe

\$586 billion Europe in the U.S.

By our estimation, European affiliate output in the United States rose by around 4% in 2017, while U.S. affiliate output in Europe rose by a slightly faster pace of 4.5%. We expect modest gains in U.S. foreign affiliate output in the near term, reflecting weaker economic conditions across Europe. In the United States, European affiliates are operating in one of the most dynamic economies in the world and are expected to boost their near-term output again this year.

On a global basis, the aggregate output of U.S. foreign affiliates was an estimated \$1.4 trillion in 2017, with Europe (broadly defined) accounting for around 51% of the total.

Looking at actual figures for 2016 from the Bureau of Economic Analysis, U.S. affiliate output in Europe (\$665 billion) was more than double affiliate output in the entire Asia-Pacific region (\$329 billion). While affiliate output in places like China (\$65 billion in 2016) and India (\$29 billion) has increased over the past decade, what U.S. affiliates produce in these two emerging Asian giants pales in comparison to affiliate output in Germany (\$81 billion), Ireland (\$91 billion), and the United Kingdom (\$166 billion).

In the United States, meanwhile, European affiliates are major economic producers in their own right, with British firms of notable importance. The U.S. output of British companies reached an estimated \$144 billion in 2017, about one-quarter of the European total. For the same year, output from German affiliates operating in the United States totaled \$109 billion, or nearly 20% of the European total.

In 2016, the last year of available data, European affiliates in the United States accounted for nearly two-thirds of the roughly \$911 billion that U.S. affiliates of foreign multinationals contributed overall to U.S. aggregate production.

Beyond Europe, only Canada and Japan have any real economic presence in the United States. Japanese affiliate output totaled nearly \$135 billion in 2016, the last year of actual data, while Canadian affiliate output totaled \$81 billion.

#### U.S. affiliate output

(2016)







Europe

Asia

#### 2. Assets of Foreign Affiliates

The global footprint of Corporate America and Corporate Europe is second to none, with each party each other's largest foreign investor. According to the latest figures from the Bureau of Economic Analysis, U.S. foreign assets in Europe totaled \$15.6 trillion in 2016, representing roughly 62% of the global total. For 2017, we estimate that U.S. foreign assets in Europe reached \$16 trillion, close again to the 60% of the global total. Within the region, the bulk of U.S. assets were in the United Kingdom, with U.S. assets in excess of \$5 trillion, or around 20% of the global total.

U.S. assets in the Netherlands (around \$2.9 trillion) were the second largest in Europe in 2016. 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 affiliate sales in the Netherlands are for export, particularly within the EU.

Meanwhile, America's asset base in Germany (\$811 billion in 2016) was more than a quarter larger than its asset base in all of South America. America's asset base in Poland, the Czech Republic and Hungary (roughly \$144 billion) was on par with Corporate America's assets in India (\$141 billion). America's assets in Ireland (\$1.4 trillion) were much larger than those in either France (\$376 billion) or Switzerland (\$923 billion) and light years ahead of those in China (\$404 billion).

#### U.S. foreign assets in Europe \$15.6 trillion

(2016)



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 \$7.7 trillion in 2016. The United Kingdom ranked first, followed by Germany, Switzerland and French firms. In 2016, the last year of available data, European assets in the United States accounted for nearly 60% of all foreign-owned assets in the United States.

#### 3. Affiliate Employment

U.S. and European foreign affiliates are a major source of employment for the general 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. Most foreign workers on the payrolls of U.S. foreign affiliates are employed in the developed nations, notably Europe.

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 4.7 million workers in 2016, the last year of available data. That represents a 27% increase. We estimate that U.S. foreign affiliates in Europe employed 4.8 million workers in 2017, a slight increase from the year before.

While aggregate employment levels continue to rise modestly, manufacturing employment has plateaued since 2000. U.S affiliate manufacturing employment totaled 1.9 million in 2000, on par with the levels of 2016. However, while the overall number has stayed roughly the same, the country composition has changed. In general, the shift has been towards low-cost locations like the Czech Republic, Poland and Hungary, at the expense of the UK, Germany and France. The largest employment declines were reported in the United Kingdom, with the total

manufacturing work force falling from 431,000 in 2000 to 311,000 in 2016. U.S. manufacturing employment in France dropped from 249,000 to 197,000, while a slight decline from 388,000 to 382,000 was reported in Germany between 2000 and 2016.

Combined, the UK, Germany and France accounted for 67% of total U.S. affiliate manufacturing employment in Europe in 1990. By 2016, however, their collective share had dropped below 50%. Meanwhile, the combined share of U.S. affiliate manufacturing employment in Poland, the Czech Republic and Hungary jumped from virtually zero to nearly 15% in 2016, indicative of the eastern spread of U.S. European operations. In terms of net gains, not losses in manufacturing jobs, Poland has been a significant winner, with U.S. affiliate manufacturing employment growing more than 2.5 times, from 51,000 in 2000 to 128,000 in 2016, and continuing on an upward trend.

Even given these changes, the manufacturing workforce of U.S. affiliates in Germany (382,000) in 2016 was greater than the number of manufactured workers employed in Brazil (310,000) and India (209,000) – although well below China (740,000).

Roughly 35% of all manufacturing workers employed by U.S. foreign affiliates outside the United States in 2016 were based in Europe.

On a global basis, U.S. majority-owned affiliates (including banks and non-bank affiliates) employed 14.3 million workers in 2016, with the bulk of these workers – roughly 33% – toiling in Europe. That share is down from 38% in 2009. That decline is in part a consequence of Europe's cyclical slowdown for some years, and in part due to the fact that U.S. overseas capacity is expanding at a faster pace in faster-growing emerging markets than slow-growth

## European foreign affiliate employment in the U.S.



**4.6 million** workers in 2018 (estimate)



2/3

of all U.S. workers on the payrolls of foreign affiliates in 2015

## U.S. foreign affiliate employment in Europe



**4.9 million** workers in 2018 (estimate)



**3.7 million** workers in 2000

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. The sweeping overhaul of the U.S. corporate tax code in 2017, which significantly lowered America's tax rate relative to many in Europe, has spurred more investment to come home or stay in the United States – more on that in Chapter 5. That said, however, with the U.S. labor market the tightest in decades, U.S. firms are even more dependent on European workers to drive production and sales.

Most employees of U.S. affiliates in Europe live in the United Kingdom, Germany and France. Meanwhile, U.S. majority-owned firms are on balance hiring more people in services activities than in manufacturing. The latter accounted for just 40% of total U.S. foreign affiliate employment in Europe in 2016. The key industry in terms of manufacturing employment was transportation, with U.S. affiliates employing nearly 378,000 workers, followed by chemicals (300,000). 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 2016 (1.9 million) than in 1990 (1.6 million). This reflects the EU enlargement process, and hence 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 skilled talent in the world.

When it comes to affiliate employment, trends in the United States are similar to those in Europe. Despite stories on the continent about local European companies relocating to lower cost locales in eastern Europe and Asia, most foreign workers of European firms are employed in the United States. Based on the latest figures, European majority-owned foreign affiliates directly employed 4.5 million U.S. workers in 2016 - some 155,000 more workers than in 2015, although roughly 225,000 workers less than U.S. affiliates employed in Europe. In 2016, the top five European employers in the United States were firms from the United Kingdom (1.2 million, up 113,000 from 2015), France (729,000, down 10,000 from 2015), Germany (692,000, up 11,000 from 2015), Switzerland (471,000, up 13,000 from 2015) and the Netherlands (475,000, up 21,000 from 2015). European firms employed roughly two-thirds of all U.S. workers on the payrolls of majority-owned foreign affiliates in 2016.

**Table 3 The U.S. - European Employment Balance** Thousands of employees, 2017\*

Country	European Affiliates of U.S. Companies	U.S. Affiliates of European Companies	Employment Balance
Austria	49.0	16.7	-32.2
Belgium	128.2	148.3	+20.1
Czech Republic	84.9	0.0	-84.9
Denmark	41.1	39.4	-1.7
Finland	20.8	23.9	+3.1
France	491.0	743.1	+252.0
Germany	715.3	706.0	-9.3
Greece	16.0	2.8	-13.3
Hungary	68.7	0.1	-68.6
Ireland	123.4	268.6	+145.1
Italy	228.1	79.8	-148.3
Luxembourg	23.0	6.5	-16.4
Netherlands	255.8	484.7	+228.9
Norway	42.8	7.0	-35.8
Poland	196.2	0.9	-195.3
Portugal	31.2	0.7	-30.5
Romania	74.3	0.0	-74.3
Spain	179.2	81.9	-97.3
Sweden	73.1	216.1	+143.0
Switzerland	104.8	480.4	+375.7
United Kingdom	1,502.9	1,262.3	-240.6
Europe	4,809.9	4,585.1	-224.8

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

\*2017 Estimates. Majority-owned bank and non-bank affiliates.

In the aggregate, the transatlantic workforce directly employed by U.S. and European foreign affiliates in 2016 was roughly 9.2 million strong, up roughly 3% from the year before. In 2017, modest gains in employment were most likely achieved on both sides of the pond. We estimate that U.S. affiliates based in Europe directly employed about 4.81 million European workers, and European affiliates based in the United States directly employed about 4.59 million Americans.

That said, as we have stressed in the past, 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.

Trade-related employment is sizable in many U.S. states and many European nations.

In sum, direct and indirect employment remains quite large. We estimate that the transatlantic workforce numbers some 14-16 million workers. 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 is unrelentingly focused on being a global leader in artificial intelligence, quantum computing, space exploration, cyber security, life sciences, electric vehicles, supercomputing, semiconductors and 5G wireless devices. The goal of Beijing's 13th Five-Year Plan (2016-2020) is to make China an "innovative nation" by 2020; an "international innovation leader" by 2030; and a "world powerhouse of scientific and technological innovation" by 2050.

While governments and corporations are the main drivers of R&D spending, foreign affiliates of multinationals are also in the thick of things. In fact, foreign affiliate R&D has become more prominent over the past 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 with foreign partners can range from a simple one-way transmission of information to highly



**\$31.3 billion** U.S. in Europe

**\$44 billion** Europe in the U.S.

interactive and formal arrangements. Developing new 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.

Bilateral U.S.-EU flows in R&D are the most intense between any two international partners. In 2016, the last year of available data, U.S. affiliates spent \$31.3 billion on research and development in Europe, down slightly from the prior year. On a global basis, Europe accounted for roughly 58% of total U.S. R&D in 2016, up slightly from 2015. R&D expenditures by U.S. affiliates were the greatest in Germany (\$9.0 billion), the United Kingdom (\$6.0 billion), Switzerland (\$3.0 billion), Ireland (\$2.9 billion), France (\$2.3 billion) and Belgium (\$1.7 billion). These six nations accounted for 83% of U.S. spending on R&D in Europe in 2016.

In the United States, meanwhile, expenditures on R&D performed by majority-owned foreign affiliates totaled \$60.1 billion in 2016, over \$3 billion more than in 2015. As in previous years, a sizable share of this R&D spending emanated from world-class leaders from 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 autos, energy, chemicals, and telecommunications. In 2016, R&D spending by European affiliates increased by almost \$3 billion over 2015 to total \$44 billion, accounting for 73% of total foreign R&D spending in the United States.

On a country basis, Swiss-owned affiliates were the largest foreign source of R&D in the United States in 2016, spending some \$10.6 billion. Swiss firms accounted for nearly a quarter of the European total. British firms accounted for the second largest percentage of affiliate expenditures, with a 20% share in 2016. Germany's share was close, at 17.7%, followed by France, 12.9%. As Table 4 highlights, some of the world's most innovative companies are domiciled in the U.S. and Europe.

#### 5. Intra-firm Trade of Foreign Affiliates

While cross-border trade is a secondary means of delivery for goods and services across the Atlantic, the modes of delivery – 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. Intra-firm or related party-trade occurs when BMW or

Table 4 The Top 20 R&D Spenders

**R&D Spending** 2018, \$U.S. Change 2018 Company Billions from 2017 Country Industry 1 Amazon 22.6 40.6% **United States** Retailing 2 Alphabet 16.2 16.3% United States Software and Services 3 Volkswagen 15.8 14.1% Germany Auto 4 15.3 6.8% South Korea Technology Hardware Samsung 5 Intel 13.1 2.8% United States Semiconductors 6 Microsoft 12.3 -5.7% **United States** Software and Services 7 Apple 11.6 15.3% United States Technology Hardware 10.8 8 Roche Holding -8 7% Switzerland Healthcare 9 Johnson & Johnson 10.6 16.0% United States Healthcare 10 Merck & Co. 10.2 0.8% United States Healthcare 11 Toyota 10.0 2.6% Japan Auto 12 Novartis 8.5 -11.1% Switzerland Healthcare Ford 9.6% United States Auto 1.3 80 Facebook 14 78 31.0% **United States** Software and Services 15 Pfizer 7.7 -2.7% United States Healthcare 16 General Motors 7.3 -9.9% **United States** Auto 17 Daimler 7.1 -9.2% Germany Auto Honda Motor 7.1 8.7% 18 Japan Auto France 19 Sanofi 66 5.8% Healthcare 20 Siemens 6.1 4.9% Germany Capital Goods 214.5 7.3%

Source: Bloomberg data, Capital IQ data, Strategy& analysis.

Siemens of Germany sends parts to BMW of South Carolina or Siemens of North Carolina; when Lafarge or Michelin send intermediate components to their Midwest plants, or when General Motors or 3M ships components from Detroit, Michigan or St. Paul, Minnesota to affiliates in Germany or the UK.

The tight linkages between European parent companies and their U.S. affiliates are reflected in the fact that roughly 60% of U.S. imports from the European Union consisted of related-party trade in 2016, the last year of available data. That is much higher than the related party imports from the Pacific Rim nations (around 40%) and South/Central America (42%) and well above the global average (49%). The percentage was even higher in the case of Ireland (85%) and Germany (69%).

Table 5 Related Party Trade, 2016

Country	U.S. Imports: "Related Party Trade," as % of Total	U.S. Exports: "Related Party Trade," as % of Total
European Union	59.9	35.9
Germany	68.7	35.4
France	46.6	28.0
Ireland	85.4	30.0
Netherlands	51.7	51.9
United Kingdom	52.3	30.0

Source: U.S. Census Bureau.

Meanwhile, nearly 36% of U.S. exports to Europe in 2016 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 (52%) were classified as related-party trade. The comparable figure for Germany was 35% and 28% for France.

#### 6. Foreign Affiliate Sales

U.S. majority-owned foreign affiliate sales on a global basis (goods and services) totaled an estimated \$6.2 trillion in 2017. Total U.S. exports, in contrast, were \$2.4 trillion in 2017, or roughly 38% of foreign affiliate sales. This gap underscores the primacy of foreign affiliate sales over U.S. exports. As we have noted many times before, one of the best kept secrets in Washington is how U.S. firms actually deliver goods and services to foreign customers.

As usual, Europe accounted for the bulk of U.S. affiliate sales in 2017. We estimate that U.S. foreign affiliate sales in Europe totaled \$3 trillion, up roughly 7% from the prior year. U.S. affiliate sales in Europe, by our estimates, amounted for roughly half of the global total.

Reflecting the primacy of Europe when it comes to U.S. foreign affiliate sales, sales of U.S. affiliates in Europe were roughly 75% larger than the comparable figures for the entire Asian region in 2016, the last year of available data. Affiliate sales in the United Kingdom (\$607 billion) were double total sales in South America.

Sales in Germany (\$341 billion) were over double the combined sales in Africa and the Middle East.

Affiliate sales are also the primary means by which European firms deliver goods and services to customers in the United States. In 2017, for instance, we estimate that majority-owned European affiliate sales in the United States (\$2.5 trillion) were more than triple U.S. imports from Europe. Affiliate sales in the U.S. rose 11% by our estimates. By country, sales of British firms were the largest (\$534 billion) in 2016, followed by Germany (\$471 billion), and the Netherlands (\$323 billion). For virtually all countries in Europe, foreign affiliate sales were easily in excess of their U.S. imports in 2016.

#### 7. Foreign Affiliate Profits

Transatlantic profits have rebounded from the depressed levels of 2009, when the global financial crisis and ensuing recession triggered a sharp downturn in affiliate income/earnings on both sides of the pond. In 2017, U.S. affiliate income in Europe rose to a record \$265 billion, and by another 6% in 2018 by our estimate, to a record \$281 billion. The figure for 2018 was more than 50% larger than the depressed levels of 2009, when affiliate income earned in Europe plunged to \$179 billion. Meanwhile, European affiliate income earned in the United States in 2018 was also at record levels; by our estimate, affiliate income totaled \$132 billion, up roughly 12% from the prior year.

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 - 2017.

Foreign Affiliate Sales: Estimates for 2017.



## **\$3 trillion**U.S. in Europe

#### Foreign affiliate sales

(2017 estimate)

**\$2.5 trillion** Europe in the U.S.

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 - 2017. Foreign Affiliate Sales: Estimates for 2017.

Europe continues to be a key market for U.S. multinationals' foreign earnings. The region accounted for roughly 55% of U.S. global foreign affiliate income in the first nine months of 2018. As a footnote, we define Europe here in very broad terms, including not only the EU28 but also Norway, Switzerland, Russia and smaller markets in central and eastern Europe.

On comparative basis, U.S. affiliate income from Europe of \$211 billion in the first nine months of 2018 was about three times more than the affiliate income of Latin America (\$71 billion) and Asia (\$69 billion), respectively. It is interesting to note that combined U.S. affiliate income from China and India in 2017 (\$18.4 billion), the last year of full data, was a fraction of what U.S. affiliates earned/reported in the Netherlands, the United Kingdom and Ireland.

Still, there is little doubt that the likes of China, India and Brazil are becoming more important earnings engines for U.S. firms. To this point, in the first nine months of 2018, U.S. affiliate income in China alone (\$9.8 billion) was well in excess of affiliate income in Germany (\$5.1 billion), France (\$2.2 billion), and

Spain (\$2.8 billion). U.S. affiliates in India earned \$3 billion in the January-September period, well more than that earned in many European countries.

All that said, we see rising U.S. affiliate earnings from the emerging markets as a complement, not a substitute, to earnings from Europe. The latter very much remains a key source of prosperity for Corporate America.



Foreign affiliate profits (2018)

**\$281 billion** U.S. in Europe

**\$132 billion**Europe in the U.S.

241 236 234 217 -217 179 176 U.S. \$ Billions 154 136 86 58 48 04 06 08 09 11 13 14

Table 8 U.S. Earnings from Europe Hitting New Highs (U.S. foreign affiliate income from Europe)

Source: Bureau of Economic Analysis. \*Data for 2018 is estimate.

Similarly, the United States remains the most important market in the world in terms of earnings for many European firms. In the first nine months of 2018, the income of European affiliates in the United States was up nearly 20% from the same period a year ago, totaling \$99 billion. For the year, we estimate income of European affiliates in the U.S. hit a record \$132 billion.

#### 8. Transatlantic Services

The United States and Europe are the largest services economies in the world. They are each other's largest services market, and dense transatlantic services linkages mean that the transatlantic services economy is the geo-economic base for the global competitiveness of U.S. and European services companies.

Transatlantic ties in services - both in trade and investment - are quite large and have become even more intertwined over the past decade. Transatlantic linkages continue to deepen in insurance, education, telecommunications, transport, utilities, advertising, computer and business services.

On a regional basis, Europe accounted for 37% of total U.S. services exports and for 43% of total U.S. services imports in 2017. Four out of the top ten export markets for U.S. services in 2017 were in Europe. The United Kingdom ranked first, followed by Ireland (ranked 4<sup>th</sup>), Switzerland (6<sup>th</sup>), and Germany (9<sup>th</sup>). Of the top ten services providers to the United States in 2017, five were European states, with the United Kingdom ranked first, Germany second,

Switzerland sixth, Ireland ninth, and France tenth. In 2017, the United States registered a \$51 billion trade surplus in services with the EU, versus a \$153 billion trade deficit in goods. Using a broader definition of Europe, which includes non-EU countries, the U.S. runs a slightly larger surplus in services (\$66 billion) and a larger deficit in goods (\$175 billion).

U.S. services exports to Europe reached a record \$298 billion in 2017, up more than 40% from the cyclical lows of 2009, when exports to Europe plunged 9%. Services exports (or receipts) have been fueled by a number of services-related activities such as travel. passenger fares, education and financial services. In terms of transport, the top five export markets in 2017, ranking order, were Japan, the UK, Canada, China, and Germany. The United Kingdom ranked as the largest market for exports of telecommunications, computer and information services; the UK and Luxembourg also ranked in the top five in financial services. Ireland was the top export market for U.S. trade in intellectual property - or charges or fees for the use of intellectual property rights, representing 14% of total receipts. As for "other business service exports" or activities like management consulting and R&D, Ireland ranked number one in 2017, followed by Switzerland and the UK.

As for U.S. services imports from Europe, figures for 2017 were at all-time highs. U.S. services imports from Europe totaled \$232 billion in 2017, up nearly 40% from the depressed levels of 2009. The United Kingdom, Germany, Switzerland, Ireland, France and Italy all rank as top services exporters to the United States.



## Foreign direct investment and foreign affiliate sales, not trade, represent the **backbone of the transatlantic economy**

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 become the overwhelming mode of delivery in a rather short period of time. Worldwide affiliate sales of U.S. services almost doubled in the ten years from 2005 to 2016, exceeding \$1 trillion for the first time in 2007. In 2016, the last year of full data, U.S. affiliate services sales (\$1.5 trillion) were roughly double the level of U.S. services exports (\$798 billion).

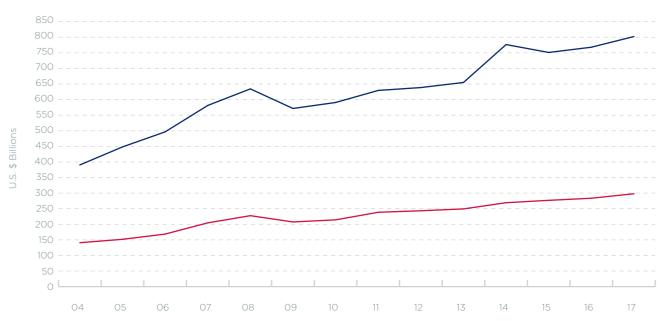
Sales of services of U.S. foreign affiliates in Europe rose modestly (2.2%) in 2016 to \$768 billion, and have risen by more than 30% since 2009, when services sales plunged on account of the transatlantic recession. U.S. services exports to Europe in the same year totaled \$284 billion, well below sales 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 accounted for roughly 30% of all U.S. affiliate services sales in Europe; affiliate sales totaled \$232 billion, a figure greater than total affiliate sales in South and Central America (\$118 billion), Africa (\$13 billion) and the Middle East (\$21 billion). Affiliate sales in Ireland remain quite large – \$125 billion – and reflect strong U.S-Irish foreign investment ties with leading U.S. internet, software and social media leaders. On a global basis, Europe accounted for roughly 53% of total U.S. affiliate service sales.

We estimate that sales of services of U.S. affiliates in Europe rose by around 4%, to \$802 billion in 2017. U.S. services exports to Europe for the same year were \$298 billion, well below sales of affiliates.

U.S. affiliate sales of services in Europe continue to exceed sales of services by U.S. affiliates of European firms. In 2016, the last year of complete data, European affiliate services sales in the United States totaled \$561 billion, about 27% 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 \$995 billion in 2016, with European firms accounting for 56% of the total. Within Europe, British affiliates lead in terms of affiliate sales of

Table 9 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 2017.

Table 10 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 2017.

services in the United States (\$143 billion), followed closely by Germany (\$134 billion).

We estimate that European affiliate services sales in the United States totaled \$583 billion in 2017, well above U.S. service imports from Europe (\$232 billion) in the same year. The difference between affiliate sales and service imports reflects the everwidening presence of European service leaders in the U.S. economy.

In the end, the U.S. and Europe each owe a good part of their competitive position in services globally to deep transatlantic connections in services industries provided by mutual investment flows. A good share of U.S. services exports to the world are generated by European companies based in the United States, just as a good share of European services exports to the world are generated by U.S. companies based in Europe.

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.

Table 11 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	3,553	59%
Manufacturing	440	51%

Note: Historic-cost basis, 2017. Source: Bureau of Economic Analysis..

Table 12 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	2,731	68%
Manufacturing	1,228	76%

Note: Historic-cost basis, 2017. Source: Bureau of Economic Analysis..

#### Endnotes

1 The United States, Mexico, and Canada are in the process of updating the NAFTA agreement via the new United States-Mexico-Canada Agreement.

# From Pipes to Platforms: The Transatlantic Digital Economy

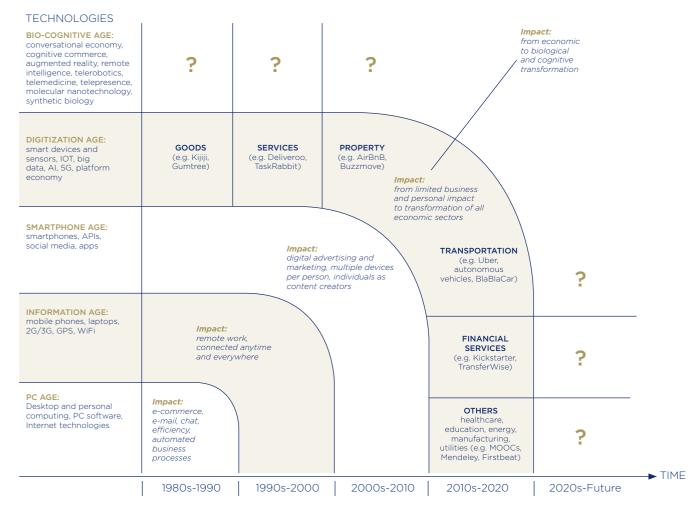




The digital revolution is transforming the strategic landscape for all industries, in all sectors, across the transatlantic economy as well as around the world. The numbers are staggering. In 2018, internet connectivity reached over half the world's population, companies spent over \$1.2 trillion on digital transformation, the cloud computing industry's global market worth was at least \$127 billion, and value-added services related to the Internet of Things (IoT) topped \$120 billion.¹ Average international bandwidth grew 330-fold between 2000 and 2015, and continues to expand rapidly.² Total digital information is projected to expand 60-fold from 2012-2025 to 16.1 trillion gigabytes.³ By 2022, 60% of global GDP will be digitized.⁴

The digital revolution is both an enabler and a disruptor. It is amplifying the efficiency and effectiveness by which businesses produce, market, sell and disseminate goods and services. It is also uprooting entire sectors of the economy. The media has learned that people no longer need a newspaper to get news; the retail sector has realized that customers don't need to go to a store to buy goods. We're now learning that we don't need a hotel to stay overnight, don't need to call a cab or own a car to get around, don't need a bank for banking services, don't need a television to watch TV, don't need a phone to make a call, don't need a camera to take a photo, and don't have to come to class to take a course.

**Table 1** The Expanding Digital Frontier



Sources: GSMA Intelligence; McKinsey Global Institute; Author's own estimates

The digital revolution has also turned some goods into services. Instead of buying a CD or a DVD, consumers simply access or download content.<sup>5</sup>

Disruption is unrelenting, even for the disruptors. The Smartphone Age has given way to a Digitization Age of smart, pervasive, and increasingly automated connectivity. The Internet of Things, 5G technologies, big data analytics, quantum computing, energy storage, precision agriculture, aquaponics, artificial intelligence, blockchain and distributed ledger technologies and other innovations are fast-tracking digital growth around the world. Moreover, some pathfinders are already charting the frontier of a "Bio-Cognitive Age" in which revolutionary advances in digitization, biology, nanotechnology, behavioral and cognitive sciences will combine to affect not only our economic and social lives, but life itself.<sup>6</sup>

These breathtaking changes promise untold opportunities for economic growth and prosperity, human health, and simple ease of life. They have also given rise to concerns on both sides of the Atlantic: worries about lesser privacy and greater insecurity; market dominance; impact on jobs; manipulation of democratic processes; and persistent digital divides across regions and classes. And as each side of the Atlantic has addressed these concerns differently, frictions have arisen. Yet given the dense interlinkages between the United States and Europe in the digital economy, we literally cannot afford to be disconnected.<sup>7</sup>

### **Digital Globalization: Still Uneven**

"Digital globalization" evokes the image of a seamless global marketplace in which unbridled data flows drive goods, services and money across national boundaries without friction. Reality is different. The digital revolution is global in its reach but uneven in its effects.

Digital connections are "thicker" between some continents and "thinner" between others – and they are "thickest" between the United States and Europe. The transatlantic theatre is the fulcrum of global digital connectivity. North America and Europe generate approximately 75% of digital content for internet users worldwide. U.S. and European cities (Frankfurt, London, Amsterdam, Paris, Stockholm, Miami, New York, Marseille, Los Angeles, San Francisco) represent the world's foremost hubs for international communication and data exchange. In this chapter we offer five metrics through which we can see more clearly the importance of transatlantic digital connections.

#### 1. Digital Services and Digitally-Enabled Services

The digital economy is dominated by services, which accounted for 87.5% of total digital economy currentdollar value added in 2016.10 Two metrics offer us a clearer picture of transatlantic connections in digital services. A narrow view can be had by looking at crossborder information and communications technology (ICT) services, or digital services as shorthand, which are services used to facilitate information processing and communication.<sup>11</sup> A broader view can be taken by looking at *digitally-enabled services*: services that can be but are not necessarily delivered remotely over ICT networks. These include digital services as well as "activities that can be specified, performed, delivered, evaluated and consumed electronically."12 Identifying potentially ICT-enabled services does not tell us with certainty whether the services are actually traded digitally.<sup>13</sup> But the U.S. Commerce Department notes that "these service categories are the ones in which digital technologies present the most opportunity to transform the relationship between buyer and seller from the traditional inperson delivery mode to a digital one,"14 which means a digital transaction is likely and thus can offer a rough indication of the potential for digital trade.<sup>15</sup>

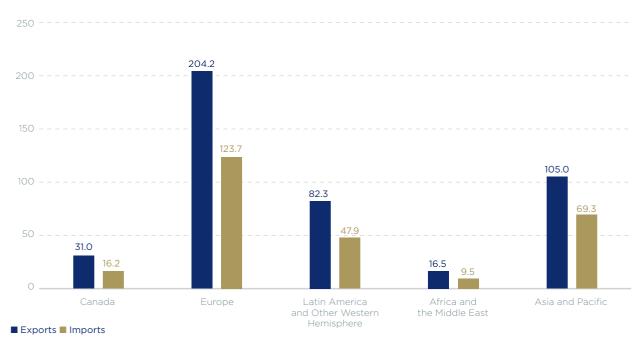
The transformative impact of each of these types of digital services is not limited to just the services sector but extends to manufacturing and the traditional bricks-and-mortar economy as well. Digitally-enabled services such as consulting, engineering, software, design and finance are used in manufacturing industries such as transport equipment, electrical equipment and food products. In this regard, digitally-enabled services from the United States have become critical to the competitiveness of European manufacturing and retail operations, and vice versa.

In addition, 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 United States from the EU is used to produce U.S. products for export, and vice versa, thus generating an additional value-added effect on trade that is not easily captured in standard metrics.<sup>16</sup>

In 2017, digitally-enabled services accounted for 55% of all U.S. services exports, 49% of all services imports, and 68% of the U.S. global surplus in trade in services.<sup>17</sup>

In 2017, the United States registered a \$172.6 billion trade surplus in digitally-enabled services with the world. Its main commercial partner was Europe, to which it exported \$204.2 billion in digitally-

Table 2 U.S. Trade in Digitally-Enabled Services by Major Area, 2017 (\$Billions)



Source: Bureau of Economic Analysis, Trade in Potentially ICT-Enabled Services Database. Data as of October 2018.

enabled services and from which it imported \$123.7 billion, generating a trade surplus with Europe in this area of \$80.5 billion, according to figures from the U.S. Bureau of Economic Analysis. U.S. exports of digitally-enabled services trade to Europe were 2 ½ times greater than U.S. digitally-enabled services exports to Latin America, and almost double U.S. digitally-enabled services exports to the entire Asia-Pacific region (Table 2).

In 2017, the 28 EU member states collectively exported \$1.24 trillion and imported \$1.02 trillion in digitally-enabled services to countries both inside and outside the EU (See Table 3 and Table 4). Excluding intra-EU trade, EU member states exported \$579.2 billion and imported \$459.6 billion in digitally-enabled services, resulting in a surplus of \$119.6 billion for these services.

Table 3 Destination of EU Exports of Digitally-Enabled Services, 2017 (\$Billions)

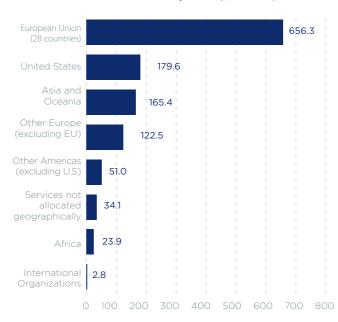
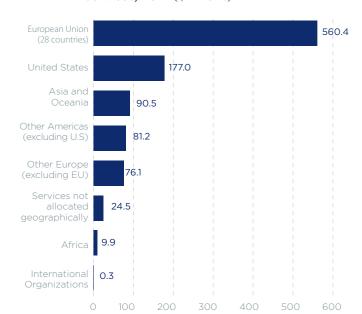


Table 4 Origin of EU Imports of Digitally-Enabled Services, 2017 (\$Billions)



Note: Digitally-Enabled Services include finance; insurance; IP charges; telecommunications, computer, information services; R&D services; professional and managemet services; architectural, engineering and other technical services; and other business services.

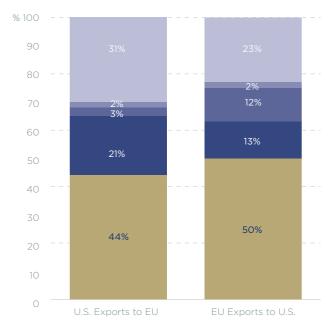
Organization for Economic Cooperation and Development.

Digitally-enabled services represented 56% of all EU services exports to non-EU countries and 57% of all EU services imports from non-EU countries.

In 2017, the United States accounted for 31% of the EU's digitally-enabled services exports to non-EU countries, and 39% of EU digitally-enabled services imports from non-EU countries.<sup>18</sup> The United States purchased \$179.6 billion, according to OECD data for 2017, making it the largest non-EU consumer of EU digitally-enabled services exports, accounting for more EU exports than the rest of non-EU Europe (\$122.5 billion), and more than all digitally-enabled services exports from the EU to Asia and Oceania (\$165.4 billion).<sup>19</sup>

EU member states with the largest estimated value of digitally-enabled services exports were Germany (\$171.6 billion), the United Kingdom (\$149.3 billion), Ireland (\$142.6 billion), and the Netherlands (\$134.1 billion).

Table 5 EU Digitally-Enabled Services Trade by Sector, 2017



- Charges for Use of Intellectual Property
- Telecommunications Insurance
- Business, Professional & Technical

Sources: U.S. Bureau of Economic Analysis. Data as of October 2018.

In 2017, EU member states imported \$1.02 trillion in digitally-enabled services, according to OECD data. 55% originated from other EU member states (See Table 4). Another 17% (\$177.0 billion) came from the United States, making it the largest supplier of these services. The EU imported more of these services from the U.S. than from EU member states Germany (\$95.3 billion) and the UK (\$112.7 billion).

Table 5 categorizes U.S.-EU digitally-enabled services trade into five sectors. For both economies, the most important exports are represented by business, professional and technical services, which accounted for 50% of digitally-enabled services exports from the EU to the United States and 44% of digitallyenabled services exports from the United States to the EU in 2017. The second most important category consists of intellectual property, including royalties and license fees, most of which are paid on industrial processes and software, underscoring how integral such transatlantic inputs are to production processes in each economy. Strong European demand for U.S. digitally-enabled intellectual property is reflected in the fact that this category accounts for 31% of all U.S. exports of digitally-enabled services to the EU.<sup>20</sup> Financial services comprise the third largest digitally-enabled services export category.

Digitally-Enabled Services Supplied Through Foreign **Affiliates** 

The digital economy has transformed the way trade in both goods and services is conducted across the Atlantic and around the world. Even more important, however, is the delivery of digital services by U.S. and European foreign affiliates. In fact, affiliate sales of digitally-enabled services have exploded on both sides of the Atlantic in recent years - another indicator reinforcing the importance of foreign direct investment, rather than trade, as the major driver of transatlantic commerce.

Table 6 underscores the relative importance of digitally-enabled services supplied by affiliates of U.S. companies located in Europe and affiliates of European companies in the United States, versus U.S. and European exports of digitally-enabled services. 52% of the \$767.99 billion in services provided in Europe by U.S. affiliates in 2016 were digitally-enabled. In 2016, U.S. affiliates in Europe



### Digitally-enabled services supplied by affiliates (2016)

\$401 billion U.S. affiliates in Europe

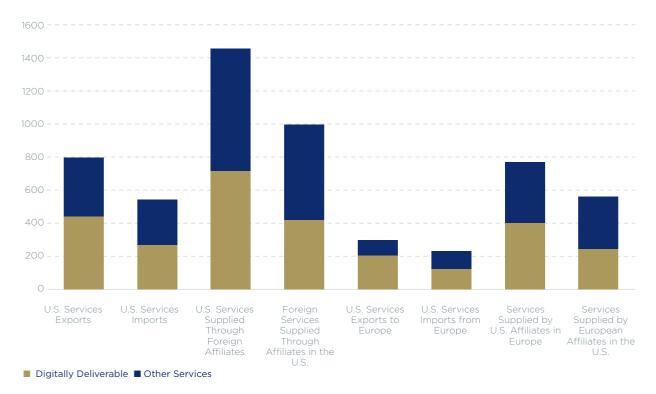
\$244 billion European affiliates in the U.S.

supplied \$401.47 billion in digitally-enabled services, whereas European affiliates in the United States supplied \$244.35 billion in digitally-enabled services. Digitally-enabled services supplied by U.S. affiliates in Europe were double U.S. digitally-enabled exports to Europe, and digitally-enabled services supplied by European affiliates in the United States were also roughly double European digitally-enabled exports to the United States.

The significant presence of leading U.S. service and technology leaders in Europe underscores Europe's

position as the major market for U.S. digital goods and services. Table 7 underscores this dynamic. In 2016, Europe accounted for two-thirds of the \$257.6 billion in total global information services supplied abroad by U.S. multinational corporations through their majority-owned foreign affiliates. This is not surprising given the massive in-country presence of U.S. firms throughout Europe, with outward U.S. FDI stock in information overwhelmingly positioned in Europe. Roughly 66% of U.S. overseas direct investment in the "information" industry was in Europe in 2016.<sup>21</sup>

Table 6 Digitally-Enabled Services Trade and Services Supplied through Affiliates\* (\$Billions)



\*Trade data are for 2017. Affiliate data are for 2016, the latest available year. Source: U.S. Bureau of Economic Analysis.



of U.S. overseas direct investment in the "information" industry is in Europe (2016)

Table 7 Information Services Supplied Abroad by U.S. Multinational Corporations Through Their MOFAs (\$Millions)

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Canada	3,595	4,140	3,971	5,996	6,316	7,135	7,595	7,401	8,487	8,342	9,259
Europe	67,270	76,156	85,450	84,117	96,310	110,525	119,123	120,796	157,811	162,409	170,419
France	4,045	3,794	4,475	4,713	4,582	5,013	4,768	5,258	6,085	5,894	5,887
Germany	5,260	6,031	6,104	6,456	7,143	7,798	7,970	10,599	12,018	11,191	11,464
Netherlands	5,925	8,152	9,980	8,674	8,719	9,313	10,196	9,117	12,686	13,590	13,228
Switzerland	2,871	2,527	3,197	3,747	4,034	4,419	5,243	4,778	(D)	5,452	5,833
United Kingdom	33,512	35,711	31,479	29,906	24,941	26,446	25,996	23,876	30,228	33,512	35,711
Latin America and Other Western Hemisphere	7,255	10,845	13,165	13,798	17,578	20,943	21,887	21,751	22,457	20,672	20,308
Australia	5,722	6,365	6,369	5,961	6,852	6,960	5,531	7,735	7,045	6,266	6,377
Japan	3,447	(D)	6,224	7,856	4,575	4,828	5,204	5,807	7,796	7,821	11,239
China	n/a	n/a	n/a	1,252	1,633	1,627	1,581	1,656	3,016	2,675	2,736
Other Asia- Pacific and MENA Countries	5,217	(D)	(D)	7,623	8,582	10,320	11,663	14,227	33,461	36,891	37,255
TOTAL	92,507	(D)	(D)	126,603	141,846	162,338	172,583	179,372	240,073	245,076	257,593

MOFA: Majority-owned foreign affiliate.

(D) indicates that the data in the cell have been suppressed to avoid disclosure of data of individual companies. Source: Bureau of Economic Analysis.

#### 2. E-Commerce

Electronic commerce offers a second window into transatlantic digital connections and complements our lens of digitally-enabled services, because most digital sales and purchases are delivered physically or in person – not digitally.<sup>22</sup> And while goods trade growth has been flattening worldwide, the share enabled by e-commerce has been registering double-digit growth in recent years.<sup>23</sup>

Here again we run into some definitional and data challenges. Most estimates of e-commerce do not distinguish whether such commerce is domestic or international. In addition, many metrics do not make it clear whether they cover all modes of e-commerce or only the leading indicators of business-to-business (B2B) and business-to-consumer (B2C) e-commerce. Finally, there are no official data on the value of cross-border e-commerce sales broken down by mode; official statistics on e-commerce are sparse and usually based on surveys rather than on real data.<sup>24</sup>

Nonetheless, we can evaluate and compare many different estimates and surveys that have been conducted. According to the U.S. International Trade Commission (ITC), global e-commerce, which the ITC defines as the sale of goods and services over the

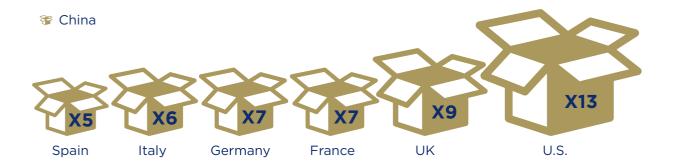
internet, was worth \$27.7 trillion in 2016, increasing by 44% percent from 2012 (\$19.3 trillion).

When most people hear the term "e-commerce," they think of consumers buying things from businesses via websites, social networks, crowdsourcing platforms, or mobile apps. These business-to-consumer transactions (B2C), however, currently pale in comparison to business-to-business (B2B) e-commerce. In 2016, B2B e-commerce accounted for more than 86% (\$23.9 trillion) of the total value of global e-commerce, six times larger than business-to-consumer (B2C) transactions (\$3.8 trillion).<sup>25</sup>

Current statistics do not break down e-commerce transactions by origin. As a result, domestic and cross-border transactions are not separately identifiable.<sup>26</sup> Consultancy firm Forrester forecasts annual international e-commerce growth of 17% through 2022, and 12% for overall e-commerce (crossborder and domestic, B2B and B2C).<sup>27</sup> According to DHL, cross-border e-commerce accounted for 15% of e-commerce merchandise sales in 2015, and is expected to grow at nearly twice the expected growth rate of domestic e-commerce, by 25% annually until 2020, and account for 22% of global e-commerce merchandise sales in that year.<sup>28</sup>



# Per capita e-commerce consumption expenditure compared to China



While B2B e-commerce accounts for the bulk of global e-commerce, most B2B e-commerce does not cross a border. Most B2B e-commerce users are manufacturers or wholesalers who are dependent on physically moving goods, and often heavy freight; the lack of freight digitalization ultimately poses a barrier to cross-border B2B e-commerce.<sup>29</sup>

The sheer volume of B2B e-commerce, however, means it still is the most important component of cross-border e-commerce sales. 30 Forrester estimates that cross-border B2B e-commerce transactions will reach \$1.2 trillion by 2021.31 Yet given the domestic orientation of B2B e-commerce and the relative ease with which B2C commerce can be conducted online, it is likely that B2C could catch up with B2B when it comes to cross-border e-commerce. Accenture and Alibaba project that cross-border B2C e-commerce will explode from \$230 billion to \$1 trillion by 2020.<sup>32</sup> By 2020, over 2 billion e-shoppers could be transacting 13.5% of their overall retail consumptions online, equivalent to a market value of \$3.4 trillion.<sup>33</sup> By 2022, cross-border shopping could make up 20% of e-commerce, with sales of \$627 billion.<sup>34</sup>

China was the biggest B2C e-commerce market (\$636.1 billion) in 2018. Revenues are expected to grow at a compound annual growth rate (CAGR) of 11.3% up to 2023, resulting in revenues of \$1.09 trillion. The U.S. B2C e-commerce market generated revenues of \$504.6 billion in 2018. Revenues are expected to grow 7.8% CAGR to reach \$735.4 billion by 2023. Europe's B2C e-commerce market generated \$346.5 billion in revenues in 2018. An annual growth of 6.9% will lead to revenues of \$483.8 billion by 2023.

China's e-commerce market is large, reflecting its population. Per capita e-commerce consumption expenditure, however, tells a different story: it is more than 13 times higher in the United States, 9 times higher in the UK, 7 times higher in Germany and France, 6 times higher in Italy, and 5 times higher in Spain than in China.

The nature of B2C e-commerce is also changing quickly, and the Asia-Pacific region is setting the pace. Consumers are increasingly paying for their purchases via e-wallets. They have already taken over from credit or debit cards in China, and are projected to do so in the United States and Europe by 2023. Moreover, while most cross-border B2C e-commerce purchases are made on a computer or laptop, alternative devices (tablet, smartphone, Smart TV, games console, feature phone) are becoming more important. Asia-Pacific markets are more likely than those in North America or Europe to make cross-border purchases on an alternative device. 36

Most reports do not separate out transatlantic e-commerce trade in goods, but a substantial portion of this global figure is undoubtedly between the EU and the United States. Nearly half of all U.S. companies polled by the U.S. International Trade Commission indicated that they had an online trading relationship with the European Union,<sup>37</sup> and almost half say that Europe is the region outside North America where they focus their cross-border strategy first, far ahead of other regions. Over half of European companies also focus first on North America as their primary e-commerce market outside of Europe, again far more than on other regions.<sup>38</sup>

Table 8 Who's Shopping Online, 2018

	Do You Shop Online?	If So, Do You Shop Internationally?
Norway	89%	65%
Sweden	85%	56%
United Kingdom	85%	38%
Austria	84%	82%
Italy	84%	54%
Netherlands	84%	49%
Poland	83%	38%
Greece	83%	67%
Spain	83%	60%
Ireland	82%	84%
United States	81%	34%
France	81%	40%
Germany	81%	32%
Belgium	81%	72%
Russia	80%	70%
Czech Republic	80%	51%
Hungary	79%	57%
Canada	77%	63%
Switzerland	74%	66%
Turkey	73%	35%
Portugal	70%	87%

B2C E-Commerce. Source: PayPal, https://www.paypal.com/us/webapps/mpp/passport/tools#consumer-purchasing-trends.

Table 9 Table 9. When You Buy Online Across Borders, From Which Countries Do You Buy?

Customers in	Buy Mainly from
United States	China (16%) Canada (10%) UK (8%)
Austria	Germany (71%) China (19%) USA (18%)
Belgium	Netherlands (38%) France (28%) Germany (21%)
Canada	USA (53%) China (22%) United Kingdom (8%)
Czech Republic	China (38%) USA (11%) Germany (9%) UK (7%)

Customers in	Buy Mainly from
France	China (17%) USA (13%) UK (12%) Germany (10%)
Germany	China (13%) USA (11%) United Kingdom (9%)
Greece	China (37%) UK (29%) USA (23%)
Hungary	China (43%) UK (12%) Hong Kong (12%) Germany (11%) USA (9%)
Ireland	UK (64%) USA (32%) China (26%)
Italy	China (23%) UK (21%) Germany (21%) USA (16%)
Netherlands	China (27%) Germany (17%) USA (11%) UK (11%)
Norway	USA (30%) China (29%) United Kingdom (26%)
Poland	China (22%) Germany (10%) UK (8%) USA (7%)
Portugal	United Kingdom (42%) China (41%) Spain (38%)
Russia	China (60%) USA (14%) Hong Kong (11%)
Spain	China (35%) UK (20%) USA (20%)
Sweden	China (25%) UK (20%) USA (18%) Germany (16%)
Switzerland	Germany (47%) USA (17%) France (16%)
Turkey	USA (18%) China (17%) Germany (8%)
United Kingdom	USA (17%) China (17%) Germany (6%) Hong Kong (6%)

 $B2C\ E-Commerce, 2018.\ Source:\ PayPal,\ https://www.paypal.com/us/webapps/mpp/passport/tools\#consumer-purchasing-trends.$ 

Still, e-commerce, especially via cross-border sales, is still evolving. In 2017, E-commerce sales accounted for 19.1% of total retail sales in the UK, 12.6% in Denmark, 9% in the United States, 7.9% in Germany, and only 3.2% in Italy.<sup>39</sup> While the European Single Market offers an opportunity for more vigorous crossborder e-commerce within the EU, and while 57% of European internet users shop online, European markets remain fragmented and the potential for cross-border e-commerce has not yet been fully exploited. Only 7% of EU enterprises made e-sales to other EU countries in 2016, although in 2018, 36% of e-buyers made purchases from sellers in other EU countries, up 10% from 2013, and 26% made purchases from sellers outside the EU, up 12% from 2013.40 In the United States, 34% of online consumers indicated they engaged in cross-border shopping in 2018.41 According to PayPal, the most popular destinations for crossborder shoppers to buy from online are China (26%), the United States (21%), the UK (14%), Germany (10%), and Japan (5%). Clothing and footwear, consumer electronics and toys are the most popular products purchased online internationally.<sup>42</sup>

#### 3. The C2C Platform Economy

Platforms and collaborative networks are at the heart of the new digital economy; 60–70% of new value created in the next ten years is expected to be based on data-driven digitally enabled networks and platforms.<sup>43</sup>

Platform companies that connect individuals and companies directly to each other to trade products and services are reshaping the U.S. and European economies, as well as the commercial connections between them. By matching supply and demand in real time, and at unprecedented scale, platforms are swiftly becoming a dominant business model in the transatlantic digital economy. While they have become important for B2C e-commerce, as we discussed in the previous chapter, and are beginning to impact B2B commerce, they have simply supercharged consumer-to-consumer (C2C) e-commerce (also known as peer-to-peer or P2P e-commerce) in ways that are potentially transformational.

The C2C platform economy model – with main sectors including lending and community financing, online distance work, home sharing, car sharing, online music and video streaming – is spreading quickly to new and more established sectors, such as medical equipment and healthcare, retail, legal services, human resources and food delivery.<sup>45</sup>

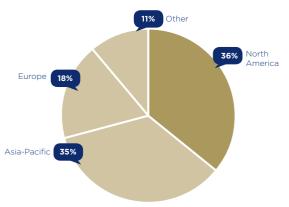
While C2C still commands a small share of the e-commerce market, the platform economy has

supercharged its potential. Annual growth currently exceeds 25%, and some sectors are projected to even reach 63% by 2025.<sup>46</sup> PriceWaterhouseCoopers estimates that the revenue of C2C platform economy companies will grow 22-fold by 2025 and catch up to the B2C model, with each model achieving sales revenue in 2025 of \$335 billion.<sup>47</sup>

The top 242 platform companies in the world now represent a market value of \$7.176 trillion.<sup>48</sup> Just seven so-called "super platforms" account for 69% (\$4.923 trillion) of this total: U.S.-based Apple, Amazon, Microsoft, Google, Facebook and Chinabased Alibaba and Tencent.<sup>49</sup>

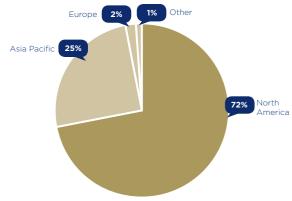
The platform economy is dominated by the United States and China. According to KPMG, 46% of platform companies valued at over \$1 billion are based in the United States, 35% in Asia (mostly China), 18% in the EU and 1% in Latin America. Total platform market value is even more skewed, with 72% going to the United States, 25% to China, and just 2% to the EU. Europe has markedly fewer platforms, and on average they are also significantly smaller (\$6.6 billion) than their U.S. (\$63 billion) and Asian (\$23 billion) counterparts.<sup>50</sup>

Table 10 World Regions by Number of Platforms



Source: KPMG

Table 11 World Regions by Value of Platforms



Source: KPMG

These figures are causing considerable anxiety in European capitals that Europe is missing the platform revolution. Despite the EU's effort to create a Digital Single Market, the European market remains relatively fragmented in terms of languages, consumer preferences and rules and regulations, which makes it much harder to achieve the kind of scale that platform companies have achieved in the large continental markets of the United States and China. There is also a more risk-averse culture that makes it generally harder to secure funding for potentially chancy bets on unproven technologies. More Chinese and U.S. platform companies operate multiple platforms than do their European counterparts, which means they can more easily use revenues from one platform to grow others.<sup>51</sup>

Nonetheless, Europe can look to some successes. Swedish company Spotify, for instance, is now worth \$25 billion, accounts for over 38% of all recorded music revenue, and is the largest music company in the world. It is deeply tied to the transatlantic economy: North Americans and Europeans accounted for 68% of all active monthly users (32% and 36%, respectively) and 71% of all subscriptions (31% and 40%, respectively). Spotify and other European platforms such as Booking.com or Adyen underscore that companies can achieve success even from relatively small home economies.<sup>52</sup>

There is certainly potential for European success in the platform economy. A study undertaken for the European Parliament estimates that the EU could gain €572 billion in annual consumption if it could harness the platform economy model to take more effective advantage of underutilized capacities across the Single Market. The study extends its analysis to include B2C transactions, so should be considered an expansive projection. Nonetheless, the potential is significant.<sup>53</sup>

In addition, while the United States and China lead the C2C platform economy, this sector of the UK economy is also robust. The UK is home to 10% of the businesses involved in the global C2C platform economy - more than France, Germany and Spain combined - and London is the C2C platform economy capital of Europe.<sup>54</sup>

Experts expect the platform economy to continue its rapid growth trajectory, and believe a next wave of platforms will transform the financial sector, the automotive industry, energy and construction services.<sup>55</sup> Some of the more expansive projections for the growth of the platform economy should be considered with caution, as public policies, which move at the speed of law, attempt to catch up with digital innovation, which seems to move at the speed of light. The platform economy is generating major economic opportunities, but is also creating new policy challenges across a wide spectrum of issues, ranging from tax and competition policy to privacy, insurance, finance and labor markets. Nonetheless, even with a more sober appreciation of the future possibilities, the potential is significant.<sup>56</sup>

#### 4. Cross-Border Data Flows

Another way to understand the nature of transatlantic digital connections is to appreciate the role of cross-border data flows, which not only contribute more to global growth than global goods trade in goods, they underpin and enable virtually every other kind of cross-border flow. According to McKinsey, the volume of data crossing borders has risen by 64 times during the course of this decade.<sup>57</sup> Globally, demand for international bandwidth increased at a rate of 52% in 2017. The amount of capacity deployed on international networks doubled between 2015 and 2017, rising to 684 Tera bits per second (Tbps).<sup>58</sup> According to the U.S. International Trade Commission, fully half of all global trade in services now depend on access to cross-border data flows.<sup>59</sup>

As of 2015, cross-border data flows between the United States and Europe, at about 15 terabits per second, were by far the most intense in the world - 50% higher than data flows between the United States and Asia in absolute terms, and 400% higher on a per capita basis.<sup>60</sup>



Cross-border data flows between the United States and Europe are 400% higher than data flows between the United States and Asia on a per capita basis
(2015)



## Global data flows now contribute more to global growth than global trade in goods

Researchers are reluctant to use data flows as a proxy for commercial links, since data traffic is not always related to commercial transactions. 61 Knowing the volume of data flows does not necessarily provide insight on the economic value of their content. The Bureau of Economic Analysis puts it succinctly: "Streaming a video might be of relatively little monetary value but use several gigabytes of data, while a financial transaction could be worth millions of dollars but use little data." 62

In addition, commercial transactions do not always accompany data, and data do not always accompany commercial transactions. For instance, multinational companies often send valuable, but non-monetized, data to their affiliates.<sup>63</sup> User-generated content on blogs and on YouTube drives very high volumes of internet traffic both within countries and across borders, but consumers pay for very little of this content. Since it does not involve a monetary transaction, the significant value that this content generates does not show up in economic or trade statistics but instead reveals itself as "consumer surplus." McKinsey estimates that this "consumer surplus" from the United States and Europe alone is close to €250 billion (\$266.4 billion) each year.<sup>64</sup>

In other words, data flows are commercially significant, yet their extent, as well as their commercial value, are hard to measure and are in constant flux. It is possible to get a better sense of their importance to the transatlantic economy, however, by literally taking a "deep dive" into the world of undersea cables.<sup>65</sup>

### 5. Under the Sea: The Hardware of the Transatlantic Digital Economy

The digital economy evokes images of electrons speeding through the ether. The reality is that subsea cables bring the internet to life. They transmit 99% of all intercontinental telecommunication traffic – data, content, financial payments, phone calls, tweets, texts, emails.<sup>66</sup> They serve as an additional proxy for the ties that bind continents, particularly Europe and North America.

Wall Township, New Jersey, a hamlet of about 26,000 people on the U.S. Atlantic coast, is charting the digital frontier in the North Atlantic. In late 2019, the first new subsea cable to connect the United States to Northern Europe in about two decades will link Wall to Blaabjerg, part of the Danish municipality of Varde, a city of about 50,000 in southern Jutland. Branches will go to Lecanvey, Ireland and Kristiansand, Norway. This new transatlantic link, called HAVRUE, is a sign that Wall Township and Blaabjerg, Denmark are not just sleepy seaside towns. Wall is home to the New Jersey Fiber Exchange, which links North America to three other continents. And Blaabjerg is the home of multiple transatlantic cable systems binding Europe to the United States.<sup>67</sup>

The Wall-Blaabjerg connection also heralds a significant shift in transatlantic subsea cables. For decades New York City was the center of the transatlantic digital universe, first for voice traffic and then fiber cables, until the congestion became unbearable and, in the wake of 911, the realization dawned that more than 14 transatlantic fiber cable systems had one common hub – and one single point of failure: 60 Hudson Street in the TriBeCa neighborhood of Manhattan. Since then, new cable routes have shifted away from legacy landing sites toward much greater diversity.<sup>68</sup>

The new diversity is exemplified by the state of Virginia. Over 70% of the world's internet traffic flows through Northern Virginia. Virginia Beach, Virginia, which is the landing site for the 2018 MAREA cable connection to Bilbao, Spain, will in 2019 be home to the Dunant cable linking North America to France. Named after Henri Dunant, the first Nobel Peace Prize winner and founder of the Red Cross, the 4,100-mile cable is a partnership between Google and the French telecommunications company Orange. Once Dunant goes live, it will provide enough capacity to transfer a 1GB movie in 30 microseconds.

Diversification of transatlantic routes is also happening on the European side of the Atlantic. Traditionally most subsea cables were routed



### **Undersea cables** bring the internet to life: they transmit **99%** of all intercontinental telecommunication traffic

from the United States to the small British coastal village of Porthcurno in Cornwall. This "Cornwall concentration" is now dissipating. In 2006 there were 8 transatlantic cable spans to the UK and only 6 to all of the rest of Europe. Since then one additional span has been completed to the UK and two to continental Europe, and two more will connect the United States to continental Europe by 2021.<sup>71</sup>

The new digital ports of the North Atlantic are emblematic of the fact that transatlantic cable connections represent the densest and highest capacity routes, with the highest traffic, in the world. Between 2011 and 2016 total available capacity increased 240%, with all 13 current transatlantic systems on at least 40G technology and 85% on 100G technology. Military agencies also build submarine cables, yet those do not appear on public maps. Suffice it to say that if such connections are also considered, transatlantic submarine cables are even more dense than commonly depicted. The support of the submarine cables are even more dense than commonly depicted.

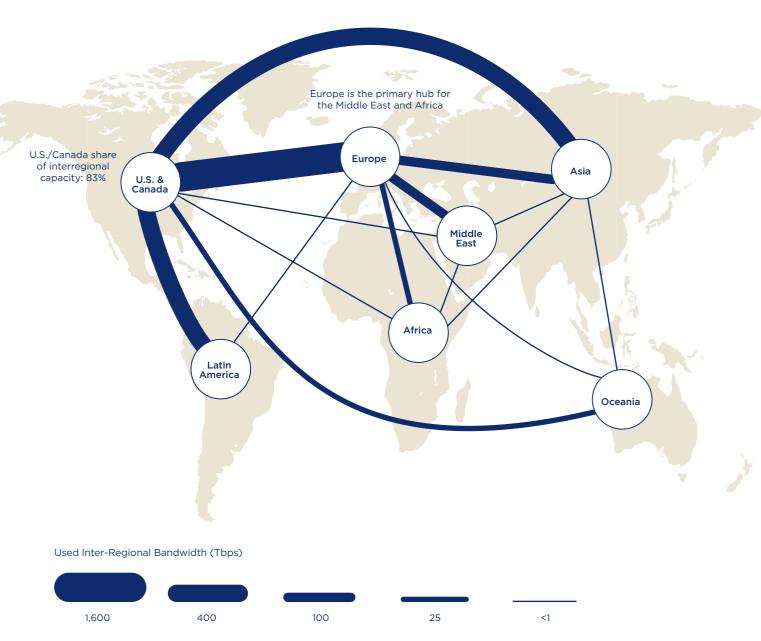
Between 2003 and 2014, no new transatlantic cables were laid. Yet commercial and consumer demand is rapidly outpacing supply, and simple upgrades are inadequate to racing bandwidth needs and greater infrastructure requirements.<sup>75</sup> Telegeography estimates a compound annual growth rate of 38% in transatlantic capacity until 2025.<sup>76</sup> Eight new transatlantic cables will be needed by 2027 just to keep up with demand, compared to four for intra-Asian routes, three for transpacific routes, and just one for

U.S.-Latin American routes.<sup>77</sup> The Dunant cable is but one of seven that Google plans to have come online in the next two years. Just those systems alone will more than double existing total transatlantic capacity.<sup>78</sup>

The Dunant cable is notable for yet another reason: it will be the first private transatlantic cable built by a non-telecom company.<sup>79</sup> Traditionally, transatlantic cables were laid and controlled by large consortia of national telecommunication carriers, also known as Internet Protocol "backbone" operators. This is now changing. The new surge in transatlantic capacity is being driven by private networks, mainly providers of content and cloud services, which have displaced backbone operators as the major investors in subsea cables and the largest source of used international bandwidth.80 In 2006, Internet backbone providers accounted for over 80% of international bandwidth. By 2018, content providers were accounting for 54% of used international bandwidth globally and 83% on transatlantic routes (Table 13). They are the sole drivers of new transatlantic cables planned through 2021.81

Content providers keen on getting closer to customers and achieving economies of scale are moving quickly to the digital frontier. Rather than rely on leasing arrangements with backbone providers, they see advantages in owning these cable networks themselves as they anticipate continuing massive growth in bandwidth needs. Their densest connections are between North America and Europe.<sup>82</sup>

Table 12 Used Inter-Regional Bandwidth, 2018



Tbps: Terabits per second. Source: Alan Mauldin, "Back to the Future," Telegeography, https://www.ptc.org/PTC19/Proceedings/WK\_TELEGEO\_Mauldin\_Alan.pdf

### Bypassing the Internet

The rise of private content providers as drivers of submarine cable traffic is related to yet another significant yet little understood phenomenon shaping the transatlantic digital economy: more and more companies are working to bypass the public internet as a place to do business in favor of private channels that can facilitate the direct electronic exchange of data among companies.

This demand for "interconnection" - private digital data exchange between businesses - is a fundamental driver behind the proliferation of transatlantic cable systems. Companies in a global digital economy must collaborate with partners instantly, across oceans, and they need to meet user expectations for high-performance connectivity anytime, anywhere. That is impossible for firms tethered to traditional IT architectures, in which data is shuttled back and forth between users and distant, centralized corporate data centers. They need interconnection, and the expansion of submarine cable infrastructure offers just that. Subsea cables bring companies to the digital edge, and the ability to land the cables directly inside data centers enables these systems to deliver the close, direct, many-to-many global connectivity that is the essence of interconnection.83

To better understand and track how industry leaders are driving business advantage with digital-ready infrastructures, Equinix developed the Global Interconnection Index, which tracks, measures and forecasts the explosive growth in digital business, in particular "interconnection bandwidth," which is the total capacity available to exchange traffic privately and directly with a diverse set of counterparties and providers at distributed IT exchange points inside carrier-neutral colocation data centers. Private interconnection bandwidth is not only distinct from public internet traffic, it is slated to grow much more quickly and become much larger.

Equinix projects that interconnection traffic – direct, private connections that bypass the public internet – will see a five-year compound annual growth rate (CAGR) of 48%. This is almost double the expected 26% CAGR of global internet traffic. By 2021, interconnection bandwidth will grow to 8,200-plus Terabits per second (Tbps) of capacity – ten times the projected capacity of internet traffic. Over the next five years, interconnection bandwidth in the United States is expected to grow at a 45% CAGR, contributing more than 40% of interconnection bandwidth globally; in Europe at 48% CAGR, contributing about 23% of interconnection

bandwidth globally; in Asia-Pacific at 51% CAGR, contributing more than 27% of interconnection bandwidth globally; and Latin America at 59% CAGR, contributing more than 9% of interconnection bandwidth globally.<sup>84</sup>

The growth in direct interconnection traffic between businesses rather than over the public internet is being driven by security and latency concerns. Cyberhacking and theft can be costly. By 2021, the global cost of cybersecurity breaches is expected to reach \$6 trillion annually. Direct, private connections help mitigate the risks. In addition, more and more countries are blocking the transfer of data outside their borders. Direct connections give organizations more control over the flow and ultimate destination of their data. Finally, customers want high-performance, instantaneous connectivity anytime, anywhere; even micro-lags associated with the public internet can be costly.<sup>85</sup>

Is the internet doomed? Unlikely. It is a pervasive force in most people's lives, and a key to digitally-delivered services, e-commerce and the platform economy. Yet private interconnection is likely to rise alongside the public internet as a powerful vehicle for business. And as we have shown here, its deepest links are across the Atlantic.<sup>86</sup>

#### Hubs, Nodes and Trombones

The internet is structured as a hub-and-spoke system: the hubs are the internet exchanges located in cities around the world, and the spokes are the undersea fiber optic cables that run between these exchanges. This submarine cable system underscores the unevenness of the digital economy and the critical roles U.S. and European cities play as major cross-border hubs. Europe is the global leader, with tremendous connected international capacity. Frankfurt, London, Amsterdam and Paris substantially outpace North American and Asian cities (Table 14). Frankfurt's connected capacity, for instance, is over three times greater than that of New York and almost five times greater than that of Singapore, the Asian leader. Marseille, France has quickly become a major hub for traffic between Europe, Africa and the Middle East.87

The role of the United States and Europe as critical digital gateways is also underscored by looking at interregional connections and capacity. Rising economies are becoming more integrated into the submarine cable network, yet few have data centers and so are reliant on content that is not stored locally. In addition, local content providers in many emerging economies

**Table 13 Major Interconnection Hubs** 

International Internet Bandwidth (Tbps)	2018 Bandwidth (Tbps)	CAGR 2014-2018
Frankfurt	73.1	30%
London	55.7	26%
Amsterdam	48.4	29%
Paris	47.8	29%
Stockholm	21.3	29%
Miami	20	27%
New York	19.2	25%
Marseille	18.3	55%
Los Angeles	16.7	30%
San Francisco	10.2	22%

Tbps: Terabits per second. Source: DE-CIX/Telegeography, Subsea cables and interconnection hubs: The Interplay of diversifying routes and peering markets, 2018, https://www.de-cix.net/en/about-de-cix/academy/white-papers/subsea-cables-and-interconnection-hubs-the-interplay-of-diversifying-routes-and-peering-markets/Download; Ivo Ivanov, "How Traditional Traffic Flows are Changing: The Eve of New Global Submarine Cable Networks?" Presentation to Pacific Telecommunications Council -PTC 19, January 23, 2019, https://www.ptc.org/PTC19/Proceedings/TS\_CDC\_Ivanov\_Ivo.pdf

choose to host their content abroad because the cost is much lower. South Americans, for instance, rely almost exclusively on international connections routed through data centers in the United States. Similarly, 85% of international traffic emanating from the Middle East travels to centers in Europe. Africa is equally dependent: most traffic travels the trombone-like path from Africa through Europe and back to Africa, even if the African user is browsing a local website for a business just down the street. This "trombone" effect highlights why both the United States and Europe play such outsized roles in international digital traffic.<sup>88</sup>

#### **Endnotes**

- International Telecommunications Union, Measuring the Information Society Report: Executive summary (Geneva, Switzerland: December 2018), <a href="https://www.itu.int/dms.pub/itu-d/opb/ind/D-IND-ICTOI-2018-SUM-PDF-E.pdf">https://www.itu.int/dms.pub/itu-d/opb/ind/D-IND-ICTOI-2018-SUM-PDF-E.pdf</a>; World Economic Forum, "Our Shared Digital Future Building an Inclusive, Trustworthy and Sustainable Digital Society," December 2018, <a href="https://www.aweforum.org/docs/WEF\_Our\_Shared\_Digital\_Future\_Report\_2018.pdf">https://www.itu.int/dms.pub/itu-d/opb/ind/D-IND-ICTOI-2018-SUM-PDF-E.pdf</a>; World Economic Forum, "Our Shared Digital Future Report\_2018.pdf; IDC, "IDC Forecasts Worldwide Spending on Digital Transformation Technologies to Reach \$1.3 Trillion in 2018," Dec. 17 2017, <a href="https://www.idc.com/getdoc.">https://www.idc.com/getdoc.</a> jsp?containerId=prUS43381817.
- World Trade Organization (WTO), World Trade Report 2018, https://www.wto.org/english/res\_e/publications\_e/world\_trade\_report18\_e.pdf.

  Ibid; D. Reinsel, J. Gantz, and J. Rydning, Data Age 2025: The Evolution of Data to Life-Critical (Framington, Massachusetts: International Data Corporation).
- https://www.idc.com/getdoc.jsp?containerld=prUS44417618.

  See Kevin Barefoot, Dave Curtis, William Jolliff, Jessica R. Nicholson, Robert Omohundro, "Defining and Measuring the Digital Economy." Working Paper, U.S. Bureau of Economic Analysis, March 15, 2018, https://www.bea.gov/system/files/papers/WP2018-4.pdf; World Economic Forum, op. cit.
- https://www.bea.gov/system/files/papers/WP2018-4.pdf; World Economic Forum, op. cit.

  See Daniel S. Hamilton, *The Transatlantic Digital Economy 2017* (Washington, DC: Center for Transatlantic Relations, 2017), <a href="https://transatlantic-digital-economy-2017/">https://transatlantic-digital-economy-2017/</a>; "Digital Economy Compass 2018," Statista.com, file:///C:/Users/Owner/Downloads/study\_id52194\_digital-economy-compass.pdf; International Technology and Innovation Foundation (ITIF), *The Task Ahead of US*, <a href="https://www.zitif.org/2019-task-ahead.pdf">https://www.zitif.org/2019-task-ahead.pdf</a>.

  WTO, op. cit; World Economic Forum, op. cit; Evonomie, "The Digital Economy in Europe," May 1, 2018, <a href="https://www.evonomie.net/2018/05/01/digitaltransformation/the-digital-economy-in-europe/">https://www.evonomie.net/2018/05/01/digitaltransformation/the-digital-economy-in-europe/</a>; Doug Kinkopf, "Five Digital Inclusion Trends in the United States, National Telecommunications and Information Administration, October 18, 2018, <a href="https://www.rsm.global/insights/economic-insights/transatlantic-data-flows-data-privacy-and-global-digital-economy">https://www.rsm.global/insights/economic-insights/transatlantic-data-flows-data-privacy-and-global-digital-economy</a> and Digital Europe see Hamilton op. cit.
- 8
- For more, including five ways to compare Digital America and Digital Europe, see Hamilton, op. cit.

- The U.S. Bureau of Economic Analysis (BEA) defines those services as including three categories of international trade in services: telecommunications services, computer services, and charges for the use of intellectual property associated with computer software.

  The BEA approach draws on work by UNCTAD and the OECD. See BEA International Data, https://www.bea.gov/iTable/index\_ita.cfm; Jessica R. Nicholson, "New BEA Estimates of International Trade in Digitally Enabled Services," May 24, 2016, Bureau of Economic Analysis, http://www.esa.doc.gov/economic-briefings/new-bea-estimates-international-trade-digitally-enabled-services.
- https://www.esa.doc.gov/economic-prierings/new-bea-est/inates-international-trade-digitally-enabled-services. https://www.ntia.doc.gov/files/ntia/publications/measuring\_cross\_border\_data\_flows.pdf; United States International Trade Commission, "Digital Trade in the U.S. and Global Economies, Part 2", Pub.4485, Investigation No.332-540, August 2014, p.47.

  Jessica R. Nicholson and Ryan Noonan, *Digital Economy and Cross-Border Trade: The Value of Digitally-Deliverable Services.* Washington, DC. U.S. Department of Commerce, Economics and Statistics Administration, ESA Issue Brief # 01-14, January 27, 2014, available at http://www.esa.doc.gov/sites/default/files/
- of Commerce, Economics and Statistics Administration, ESA issue Brief. # OF-14, January 27, 2014, available at http://www.esa.gov/sites/declary.incs/digitaleconomyandcross-bordertrade.pdf.
  For more, see Joshua P. Meltzer, "The Importance of the Internet and Transatlantic Data Flows for U.S. and EU Trade and Investment," Brookings Institution, Global Economy and Development Working Paper 79, October 2014; Ryan Noonan, "Digitally Deliverable Services Remain an Important Component of U.S. Trade," Washington, D.C. U.S. Department of Commerce, Economics and Statistics Administration, May 28, 2015, available at http://www.esa.gov/economicbriefings/digitally-deliverable-services-remain-important-component-us-trade
- Ibid; Meltzer, op. cit.
- Jessica R. Nicholson, "Digital Trade in North America (ESA Issue Brief # 01-18)," Office of the Chief Economist, Economics and Statistics Administration, U.S. Department of Commerce. (2018). Retrieved from <a href="https://www.esa.gov/reports/digital-trade-north-america">https://www.esa.gov/reports/digital-trade-north-america</a>.
- Ibid; OECD.
- Note that these figures are sourced from the OECD International Trade in Services Statistics database, and can vary from the corresponding U.S.-EU bilateral trade figures reported by the U.S. Bureau of Economic Analysis. Differences can occur in how services are measured, classified, and attributed to partner countries, resulting in asymmetries in the two data sources. For more information on these asymmetries, please see Eurostat report, "Transatlantic Trade in Services: Investigating Bilateral Asymmetries in EU-US Trade Statistics, 2017 edition," <a href="https://ec.europa.eu/eurostat/documents/7870049/8544118/KS-GQ-17-">https://ec.europa.eu/eurostat/documents/7870049/8544118/KS-GQ-17-</a> 016-EN-N.pdf/eaf15b03-5dcf-48dd-976f-7b4169f08a9e.
- While affiliate sales are a more important means of delivery for digital services and digitally-enabled services than cross-border trade, the two modes of delivery are more complements than substitutes, since foreign investment and affiliate sales increasingly drive transatlantic trade flows. The fact that digital services and digitally-enabled services are following this same broad pattern of transatlantic commercial flows reinforces our point that intra-firm trade is critical to the
- transatlantic economy.
  For official definitions and discussion of e-commerce, see U.S. International Trade Commission, Digital Trade in the U.S. and Global Economies, Part 2, Publication Number 4485, August 2014, https://www.usitc.gov/publications/332/pub4485.pdf; U.S. Census Bureau, https://www.census.gov/programs-surveys/e-stats. html; OECD, "E-commerce uptake," http://www.oecd-ilibrary.org/sites/sti\_scoreboard-2011-en/06/10/index.html.
- https://iOecommercetrends.com/10-ecommerce-trends-for-2018/.
  See UNCTAD, "In Search of Cross-Border E-Commerce Trade Data," Technical Note NO 6 Unedited, April 2016, available at http://unctad.org/en/ PublicationsLibrary/tn\_unctad\_ict4d06\_en.pdf.
- https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/march/2018-fact-sheet-key-barriers-digital; WTO, op. cit.; Susan Wu, et. al, "US B2B eCommerce Will Be Twice the Size of B2C eCommerce By 2020," Forrester Research, May 5, 2016, https://www.forrester.com/report/US+B2B+eCommerce+Will+Be+Twice+The+Size+Of+B2C+eCommerce+By+2020/-/E-RES122366; Ecommerce Foundations of the Commerce Policy of the tion, "E-commerce Europe 2015"; "Asia-Pacific B2C E-commerce Report" (Light Version), https://www.ecommercewiki.org/wikis/www.ecommercewiki.org/images/5/56/Global B2C Ecommerce Report 2016.pdf.
- WTO, op. cit.
- Daphe Howland, "Forrester: US e-commerce will top \$712B by 2022," Retail Dive, April 18 2018, https://www.retaildive.com/news/forrester-us-e-commerce-willtop-712b-by-2022/521724/; https://www.weforum.org/agenda/2018/10/us-withdrawing-144-year-old-treaty-heres-why/DHL, Global Connectiveness Index 2016; WTO, op. cit.
- Louis Columbus, "Predicting the Future of B2B E-Commerce," Forbes, September 12, 2016, https://www.forbes.com/sites/louiscolumbus/2016/09/12/predicting-the-future-of-b2b-e-commerce/#38e6eeceleb9; https://www.freightos.com/de/b2b-freight-ariba-demo/
- U.S. International Trade Commission, op. cit.; B2B generally involves multiple transactions among companies, and covers any type of transactions, such as that involving a manufacturer and wholesaler, or a wholesaler and a retailer. See Kyklo, "B2B and B2C E-Commerce: Why They Are Different and How To Win the
- B2B Digital Challenge." https://www.kyklo.co/b2b-b2c-e-commerce-different-win-b2b-digital-challenge." https://www.kyklo.co/b2b-b2c-e-commerce-different-win-b2b-digital-challenge/.

  Forrester Report, "Forrester Data B2B eCommerce Forecast, 2016 To 2021 (US)," November 3, 2016, https://www.forrester.com/report/Forrester+Data+B2B+eCommerce+Forecast+2016+To+2021+US/-/ERESI36541
  Alibaba Research, "Global Cross Border B2C e-Commerce Market 2020: Report highlights & methodology sharing," April 2016, https://unctad.org/meetings/en/Presentation/dtl\_eweek2016\_AlibabaResearch\_en.pdf. https://www.freightos.com/de/b2b-freight-ariba-demo/.

  Hendrik Laubscher, "Why Cross Border Ecommerce is the Future of Ecommerce," June 5, 2017, https://www.freightos.com/market.

- https://ecommerce-platforms.com/articles/cross-border-ecommerce-future-ecommerce.

  Michael O'Grady, "Cross-Border Services Will Help Cross-Border eCommerce Reach \$627 Billion By 2022," Forrester, June 23, 2017, https://www.forrester. com/report/CrossBorder+Services+Will+Help+CrossBorder+eCommerce+Reach+627+Billion+By+2022/-/E-RES137902#figure2?utm\_source=forrester\_search&utm\_medium=web&utm\_campaign=cross\_border&utm\_content=banner
- eCommerce Report 2019, Statista.com, file:///C:/Users/Owner/Downloads/study\_id42335\_ecommerce-report.pdf.

  According to Goldman Sachs forecasts, mobile commerce revenue in 2018 equaled total global e-commerce revenue for 2013, some \$626 billion, https://10ecommerctrends.com/10-ecommerce-trends-for-2018/. U.S. International Trade Commission, op. cit.
- Keira McDermott, "Key Business Drivers and Opportunities in Cross-Border Ecommerce," Payvision, 2016, http://www.payvision.com/downloads/key-business-drivers-and-opportunities-2016.pdf.
- E-commerce sales as percentage of total retail sales in selected countries in 2017, Statista.com, <a href="https://www.statista.com/statistics/255083/online-sales-as-share-of-total-retail-sales-in-selected-countries/">https://www.statista.com/statistics/255083/online-sales-as-share-of-total-retail-sales-in-selected-countries/</a>
- https://ec.europa.eu/eurostat/statistics-explained/index.php/E-commerce\_statistics\_for\_individuals. Usage of cross-border e-commerce in selected countries as of May 2018, Statista.com,

- https://www.statista.com/statistics/348108/cross-border-e-commerce-usage-worldwide/
  PayPal Cross-Border Consumer Research 2018, Global Summary Report, https://www.paypalobjects.com/digitalassets/c/website/marketing/global/shared/global/media-resources/documents/PayPal Insights 2018 Global Report.pdf; International Post Corporation, "Cross-border e-commerce shopper survey 2018," https://www.ipc.be/services/markets-and-regulations/cross-border-shopper-survey.
- This includes not only social media, but also platform environments that enable industries, supply chains, employment, financial services and health markets to name just a few. World Economic Forum, op. cit.; Diana Farrell Fiona Greig Amar Hamoudi, "The Online Platform Economy in 2018: Drivers, Workers, Sellers, and Lessors," JPMorganChase Institute, September 2018, <a href="https://www.jpmorganchase.com/corporate/institute/document/institute-ope-2018.pdf">https://www.jpmorganchase.com/corporate/institute/document/institute-ope-2018.pdf</a>. Once small and novel, platform businesses have grown substantially in recent years. A platform like Uber expanded to 67 countries in seven years; it took IBM 50 years to get there. See "Sam Palmisano speaks with TechTarget about 'Defining the Platform Enterprise," Center for Global Enterprise, August 26, 2016,
- http://thecge.net/sam-palmisano-speaks-with-techtarget-about-defining-the-platform-enterprise/; also Susan Lund and James Manyika, "How Digital Trade is Transforming Globalisation," E15 Expert Group on the Digital Economy, January 2016, http://e15initiative.org/wp-content/uploads/2015/09/E15-Digital-Economy-McKinsey-FINAL.pdf.
  - Nicolaus Henke, Jacques Bughin, Michael Chui, James Manyika, Tamim Saleh, Bill Wiseman, and Guru Sethupathy, The age of analytics: Competing in a datadriven world, McKinsey Global Institute, December 2016, http://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/the-age-of-analyticscompeting-in-a-data-driven-world.

- sharing-economy.pdf
- PriceWaterhouseCoopers, 2015, op. cit.; PricewaterhouseCoopers, "Five Key Sharing Economy Sectors Could Generate £9 Billion of UK Revenues by 2025," August 15, 2014, <a href="http://pwc.blogs.com/press\_room/2014/08/five-key-sharing-economy-sectors-could-generate-9-billion-of-uk-revenues-by-2025.html">http://pwc.blogs.com/press\_room/2014/08/five-key-sharing-economy-sectors-could-generate-9-billion-of-uk-revenues-by-2025.html</a>. Others also project rapid growth for various sectors. See, e.g., Sam Smith, "Uber, Lyft & Other Ride Sharing Services to See Revenues Double by 2020, Reaching \$6.5 Billion," Investorideas.com, April 6, 2016, <a href="http://www.investorideas.com/news/2016/main/04061.asp: Federal Trade Commission">http://www.investorideas.com/news/2016/main/04061.asp: Federal Trade Commission, op. cit.</a>
  This represents a 67% increase from the \$4.304 trillion reported by Peter C. Evans and Annabelle Gawer in their 2016 Global Platform Survey. Dutch
- Transformation Forum/KPMG, Unlocking the value of the platform economy: Mastering the good, the bad and the ugly, November 2018, https://dutchitchannel. nl/612528/dutch-transformation-platform-economy-paper-kpmg.pdf.
- Ibid.
- Ibid
- Ibid.
- Pierre Goudin, The Cost of Non-Europe in the Sharing Economy, European Parliamentary Research Service, January 2016, <a href="https://www.europarl.europa.eu/RegData/etudes/STUD/2016/558777/EPRS\_STU(2016)558777\_EN.pdf">https://www.europarl.europa.eu/RegData/etudes/STUD/2016/558777/EPRS\_STU(2016)558777\_EN.pdf</a>.

  JustPark, "The most popular ideas in the sharing economy," https://www.justpark.com/creative/sharing-economy-index/; "UK is sharing economy capital of Europe," op. cit.; "The sharing economy grows up. How the UK has embraced the sharing economy," PriceWaterhouseCoopers, 2016, <a href="http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/outlook-for-the-sharing-economy-in-the-uk-2016.html">http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/outlook-for-the-sharing-economy-in-the-uk-2016.html</a>.

  G. Parker, M. Van Alstyne, & S. Choudary, Platform Revolution: How networked markets are transforming the economy and how they make them work for you Platform Proceedings of the processing of the
- (Boston: WW Norton & Co., 2016); KPMG, op. cit.;
- WTO, op. cit.

- WTO, op. cit. 
  "Snowbalisation: The global list," The Economist, January 26, 2019.

  Telegeography, The State of the Network 2019, January 2019, <a href="https://www2.telegeography.com/hubfs/assets/Ebooks/state-of-the-network-2019.pdf">https://www2.telegeography.com/hubfs/assets/Ebooks/state-of-the-network-2019.pdf</a>.

  James Manyika, Susan Lund, Jacques Bughin, Jonathan Woetzel, Kalin Stamenov, and Dhruv Dhingra, Digital globalization: The new era of global flows, McKinsey Global Institute, February 2016, <a href="http://www.mckinsey.com/business-s-functions/mckinsey-digital/our-insights/digitalglobalization-the-new-era-of-global-flows">http://www.mckinsey.com/business-s-functions/mckinsey-digital/our-insights/digitalglobalization-the-new-era-of-global-flows</a>; U.S. International Trade Commission, op. cit.; James Manyika, Susan Lund, Jacques Bughin, Jonathan Woetzel, Kalin Stamenov, and Dhruv Dhringra, Digital Globalization: The New Era of Global Flows, McKinsey Global Institute, March 2016, <a href="https://www.necd.org/org/the-transation-the-new-era-of-global-flows">https://www.necd.org/org/the-transation-the-new-era-of-global-flows</a>; explication-global-globalization: The New Era of Global Flows, McKinsey Global Institute, March 2016, <a href="https://www.necd.org/org/the-transation-the-new-era-of-global-flows">https://www.necd.org/org/the-transation-the-new-era-of-global-flows</a>; explication-globalization: The New Era of Global Flows, McKinsey Global Institute, March 2016, <a href="https://www.necd.org/the-flows-era-of-global-flo publicdisplaydocumentpdf/?cote=TAD/TC/WP(2018)19/FINAL&docLanguage=En; https://www.techsling.com/2018/09/what-are-transatlantic-data-flowsand-how-do-they-affect-business/.
- Anthony Gardner, "A Transatlantic Perspective on Digital Innovation," September 2015, <a href="http://useu.usmission.gov/sp-092015.html">http://useu.usmission.gov/sp-092015.html</a>. It is difficult to be precise about transatlantic data flows, since there are currently no official U.S. or European statistical series that measure how cross-border data flows contribute to the overall U.S., European or transatlantic economies or various sectors within those economies. In addition, data flows can be overestimated owing to internet hubs that may route data across many borders to connect two endpoints. See "Measuring the Value of Cross-Border Data Flows," Economics and Statistics Administration and the National Telecommunications and Information Administration, U.S. Department of Commerce, September 2016, p. 21, <a href="https://www.ntia.doc.gov/files/ntia/publications/measuring\_cross\_border\_data\_flows.pdf">https://www.ntia.doc.gov/files/ntia/publications/measuring\_cross\_border\_data\_flows.pdf</a>.

- Susan Lund and James Manyika, "How Digital Trade is Transforming Globalization," World Economic Forum,
  E15 Expert Group on the Digital Economy, January 2016, <a href="http://e15initiative.org/wp-content/uploads/2015/09/E15-Digital-Economy-McKinsey-FINAL.pdf">http://e15initiative.org/wp-content/uploads/2015/09/E15-Digital-Economy-McKinsey-FINAL.pdf</a>. "Measuring the Value of Cross-Border Data Flows," op cit.
  Lund and Manyika, op. cit.; Michael Mandel, "Data, Trade and Growth," Progressive Policy Institute, April 2014, <a href="http://www.progressivepolicy.org/wp-content/">http://www.progressivepolicy.org/wp-content/</a> uploads/2014/04/2014.04-Mandel\_Data-Trade-and-Growth.pdf. lbid; http://e15initiative.org/wp-content/uploads/2015/09/E15-Digital-Economy-McKinsey FINAL.pdf

- FINAL.pdf
  Lund and Manyika, op. cit.; Raghu Das and Peter Harrop, RFID forecasts players and opportunities 2014-2024, IDTechEx, November 2013.

  TeleGeography, Global Internet Geography, 2013; TeleGeography, Global Internet Map, 2012.

  Satellites transmit less than one-half of 1% of such traffic. They cannot compete with submarine cables when it comes to digital communication capacity, speed, or transaction time (latency). See David W. Brown, "10 Facts about the Internet's Undersea Cables," Mental Floss, Nov 12, 2015, http://mentalfloss.com/article/60150/10-facts-about-internets-undersea-cables; Geof Wheelwright, "Undersea cables span the globe to send more data than satellites," Financial Times, November 2, 2016, https://www.ft.com/content/128f1368-9123-11e6-8df8-d3778b55a923. When we use our cell phones, we tend to think of it as a wireless communications device. But when we use our polone its radio signal is converted at a pearly base station into an optical signal and this optical signal. wireless communications device. But when we use our phone, its radio signal is converted at a nearby base station into an optical signal, and this optical signal travels to its destination through fixed fiber optic cables. See Jeff Hecht, "The bandwidth bottleneck that is throttling the internet," Nature, August 10, 2016,
- $\frac{\text{http://www.nature.com/news/the-bandwidth-bottleneck-that-is-throttling-the-internet-1.20392.}{\text{https://www.lightwaveonline.com/articles/2018/01/hafvrue-consortium-targets-transatlantic-submarine-cable-system.html;}{\text{www.NJFX.net;}} \frac{\text{http://www.nuture.com/news/the-bandwidth-bottleneck-that-is-throttling-the-internet-1.20392.}}{\text{https://www.lightwaveonline.com/articles/2018/01/hafvrue-consortium-targets-transatlantic-submarine-cable-system.html;}}{\text{http://www.nuture.com/articles/2018/01/hafvrue-consortium-targets-transatlantic-submarine-cable-system.html;}}$ aduacomms com
- https://www.totaltele.com/501883/Transition-at-Transatlantic-TAT-20
- Vinay Nagpal, "Global Subsea Resurgence," August 20, 2018, <a href="https://www.linx.net/wp-content/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf">https://www.linx.net/wp-content/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf</a>, <a href="https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf">https://www.linx.net/wp-content/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf</a>, <a href="https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf">https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf</a>. <a href="https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf">https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf</a>. <a href="https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf">https://www.linx.net/uploads/LINX102-GlobalSubseaResurgence-VinayNagpal.pdf</a>. <a href="https://www.linx.net/uploads/LINX102-GlobalSubsea-Cable/">https://www.linx.net/uploads/LINX102-GlobalSubsea-Cable/</a>; <a href="https://www.linx.net/uploads/LINX102-GlobalSubsea-Cable/">https://www.linx.net
- com/en/content/download/48554/1388195/version/3/file/CP\_Orange\_Google\_Dunant\_EN\_121018.pdf

  Alan Mauldin, "Back to the Future," Telegeography, January 2019, <a href="https://www.ptc.org/PTC19/Proceedings/WK\_TELEGEO\_Mauldin\_Alan.pdf">https://www.ptc.org/PTC19/Proceedings/WK\_TELEGEO\_Mauldin\_Alan.pdf</a>; Nigel Bayliff, "The Connectivity Evolution: The Past, Present, and Future," January 2019, <a href="https://www.ptc.org/PTC19/Proceedings/TS\_SC\_Bayliff\_Nigel.pdf">https://www.ptc.org/PTC19/Proceedings/TS\_SC\_Bayliff\_Nigel.pdf</a>
  Wayne Nielsen, "North Atlantic Regional Roundup," Presentation to the 2017 Pacific Telecommunications Council, January 2017, <a href="https://www.ptc.org/assets/">https://www.ptc.org/assets/</a>
- uploads/papers/ptc17/PTC17 Sun Submarine%20WS Nielsen.pdf
- Ingrid Burrington, "What's Important About Underwater Internet Cables," The Atlantic, November 9, 2015, https://www.theatlantic.com/technology/ archive/2015/11/submarine-cables/414942/
- lbid; Nielsen, op. cit.; https://www.networkworld.com/article/3260784/lan-wan/submarine-cable-boom-fueled-by-new-tech-soaring-demand.html.
- Mauldin, op. cit.
- Nielsen, op. cit
- $https://www.forbes.com/sites/amitchowdhry/2018/10/16/google-orange-dunant-transatlantic-cable/\#646455fd3c10; \\https://blog.telegeography.com/google-first-private-trans-atlantic-cable-non-telecom-dunant.$
- Jayne Miller, "Google and Facebook have Joined the Pacific Light Cable Project," Telegeography, October 13, 2016, http://blog.telegeography.com/google-and-
- facebook-have-joined-the-pacific-light-cable-project.

  Mauldin, op. cit.; Alan Mauldin, "Content, Capacity, and the Great, Growing Demand for International Bandwidth," Telegeography, May 30, 2018, <a href="https://blog.telegeography.com/t-growing-demand-for-international-bandwidth-content-providers-capacity">https://blog.telegeography.com/t-growing-demand-for-international-bandwidth-content-providers-capacity</a>; Alan Mauldin, "International Internet Capacity Growth Just Accelerated for the First Time Since 2015," Telegeography, September 20, 2018, https://blog.telegeography.com/international-internet-capacity-growth-justaccelerated-for-the-first-time-since-2015
- accelerated-nor-trie-first-time-since-ZUIS.

  Alan Mauldin, "Rising Tide: Content Providers' Investment in Submarine Cables Continues," Telegeography, May 27, 2016, <a href="http://blog.telegeography.com/rising-tide-content-providers-investment-in-submarine-cables-continues">http://blog.telegeography.com/rising-tide-content-providers-investment-in-submarine-cables-continues</a>; Wheelwright, op. cit.; Jayne Miller, "The Colocation Sector: Shifting Dynamics, Stable Fundamentals," Telegeography, February 3, 2017, <a href="http://blog.telegeography.com/ptc-colocation-presentation-2017-market-summary">http://blog.telegeography.com/ptc-colocation-presentation-2017-market-summary</a>.

  Jim Poole, "Submarine cable boom fueled by new tech, soaring demand," Network World, March 6, 2018, <a href="https://www.networkworld.com/article/3260784/">https://www.networkworld.com/article/3260784/</a>

  Janvang-fueld-world-general-break-ing-demand-b
- lan-wan/submarine-cable-boom-fueled-by-new-tech-soaring-demand.html;
- Equinix, Global Interconnection Index 2018, Volume 2, https://onegtm.com/wp-content/uploads/2018/09/EQIX-Index2-USEN-15Aug18\_web.pdf,
  John Kennedy, "Interconnection traffic to hit 8,200Tbps as firms switch from public internet," October 8, 2018, Silicon Republic, https://www.siliconrepublic.
- com/comms/interconnection-traffic-equinix-internet; Nagpal, op. cit.

  See Pacific Telecommunications Council Secretariat, "Is this the end of the internet as we know it?" January 3, 2019, <a href="https://www.ptc.org/2019/01/is-this-the-">https://www.ptc.org/2019/01/is-this-the-</a>
- John Hjembo, Telegeography, "The Colocation Sector. Shifting Dynamics and Stable Fundamentals," presentation at Telegeography Workshop, Pacific Telecommunication Council '17, Jan 15-18, 2017.

  Jayne Miller, "Building the Local Exchange of Content in Africa: Dispatches from AfPIF," Telegeography, September 27, 2016, http://blog.telegeography.com/
- building-the-local-exchange-of-content-in-africa-dispatches-from-afpif; Jayne Miller, "The Trombone Effect, Explained," http://blog.telegeography.com/whatis-the-trombone-effect.



### The 50 U.S. States:

European-Related Jobs, Trade and Investment





The U.S. economy expanded by

n 2018

In July 2019, the U.S. economy is on target to reach a milestone – America's longest economic expansion on record, outpacing the current record reached during the lead-up to the dot-com bubble. Yet despite such a prolonged period of growth, many factors suggest that the U.S. economy still has further room to run, which should benefit the many multinational companies that invest and create jobs in the United States.

First, the consumer backdrop remains relatively healthy and is supported by a strong labor market. With the national unemployment rate at 4% in early 2019, a healthy jobs market and rise in incomes should lead to higher levels of 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. Firms have used the cash in a number of ways, from share buybacks and dividends to greater spending on productivity-enhancing capital equipment.

Meanwhile, the synchronized global expansion of 2017 broke down in 2018, as several countries suffered from a slowdown in growth while the United States proved resilient in the face of global uncertainty. Although U.S. growth is estimated to be weaker in 2019 than in 2018, the increase in economic output comes from an already strong base – an economy that is now in excess of \$20 trillion.

The latest figures suggest that the U.S. economy expanded by 2.9% in 2018. Risks to the economic outlook for 2019 and 2020 are abundant, however, and include uncertainty around trade, political gridlock in Washington, less accommodative financial conditions caused by Federal Reserve interest rate hikes, and weaker-than-expected global growth. Significant geopolitical risks, such as the U.S. trade war with China and Britain's expected departure from the EU, were cited by the IMF as key downside risks to the growth outlook. In January the IMF revised its projections downward for global growth in 2019 and 2020, while leaving its projections for U.S. growth unchanged at 2.5% in 2019 and 1.8% in 2020. In short, while the U.S. economy remains one of the most competitive and resilient economic forces in the world, there are indications that growth, while continuing, is likely to slow.

Given these factors, despite some turbulence the United States remains one of the most attractive countries in the world for foreign direct investment (FDI). For the past twelve years, the United States has ranked number one in the world for FDI inflows, attracting over \$200 billion in 2018 (Table 1).

As Table 2 depicts, no country has attracted more FDI this century than the United States, taking in \$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% of total global foreign investment flows this century, and of the top ten recipient countries for investment flows, six are developed nations.

### Risks to the economic outlook 2019 and 2020





Uncertainty around trade





Weaker-than-expectedglobal growth



**Brexit** 



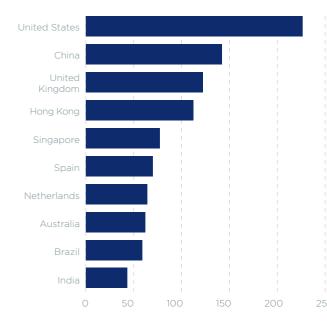
Less accommodative financial conditions





**European firms** will continue to deepen and spread their footprint in the United States in the years ahead

Table 1 FDI Inflows: Top 10 Host Economies, 2018 (\$Billions)



Source: United Nations Conference on Trade and Development (UNCTAD). Data for 2018 are preliminary estimates as of January 2019.

Table 2 Cumulative Investment Inflows 2000-2017
Rankings

Rank	Country	Cumulative Flows (Billions of U.S. \$)	Percent of World Total
1	United States	3,973.1	17.0%
2	China	1,704.3	7.3%
3	United Kingdom	1,413.9	6.0%
4	Hong Kong	1,203.1	5.1%
5	Brazil	807.5	3.5%
6	Germany	782.4	3.3%
7	Canada	757.4	3.2%
8	Netherlands	736.7	3.2%
9	Belgium	705.7	3.0%
10	Singapore	694.7	3.0%

Source: United Nations Conference on Trade and Development (UNCTAD).
Data as of January 2019.

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 327 million and per capita income of almost \$60,000. 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.

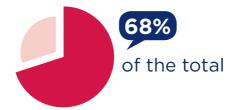
Second, the United States boasts a hyper-competitive economy, moving up to first place in the World Economic Forum's latest Global Competitiveness rankings. This competitiveness is driven by a strong innovative, risk-taking corporate culture and is underpinned by strong institutions, technological readiness, 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.

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 multinational enterprises topped 4.5 million in 2017.

Meanwhile, the United States is a friendly locale to do business, ranking 8th place in the World Bank's 2019 Ease of Doing Business ranking. After ranking 6th in last year's report, the U.S. lost ground to two European countries: Georgia (6th) and Norway (7th). 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

# Total European FDI stock in the U.S.

**\$2.7 trillion** (2017)



seen oil production more than double since 2008, in addition to soaring natural gas production.

And with a lower 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. economy 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. economy. 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 2018. Based on our preliminary estimates, we anticipate that 60% (\$136 billion) of the total \$226 billion worth of U.S. FDI inflows in 2018 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 2018 than the prior year. This marks the third straight year of declines for European FDI flows to the U.S., after reaching a peak of \$339 billion in 2015. That said, most of the retreat in foreign investment flows can be attributed to weaker-than-usual cross-border mergers and acquisition (M&A) activity conducted in the United States in 2018.

According to the United Nations, acquisitions of U.S. assets accounted for 12 of the 20 largest M&A deals completed in 2016 and 2017, but only six in 2018. These large megadeals can skew the data on FDI flows materially, so any major year-over-year fluctuations in the investment data should be interpreted carefully.

Data from the Bureau of Economic Analysis similarly suggests a retreat in U.S. FDI inflows in 2018. During the first nine months of last year, U.S. FDI inflows from Europe came in at \$102 billion, which is almost 20% lower than comparable figure from a year earlier. Most

of the shortfall in flows was caused by a massive net negative investment flow from Luxembourg of -\$122 billion in the second quarter of 2018. Total FDI inflows from Europe were -\$19 billion in the second quarter, though rebounded to +\$64 billion in Q3. The large negative outliers in the 2018 data are likely caused by a transfer of ownership abroad of previously U.S.based investments. In other European countries, the net change in investment flows to the United States in 2018 was mixed, with some countries posting strong growth in FDI flows, while others saw a pullback. French investment flows to the United States grew 18% in the first three months of the year, German flows increased 23%, while Irish flows were 70% higher. Meanwhile, the comparable figures for the UK and Switzerland were -42% and -21% respectively.

UK firms were the largest source of greenfield foreign investment projects in 18 U.S. states during the tenyear period from October 2008-September 2018. German companies led in 16 states, followed by Canadian and Japanese companies each in 8 states.

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 \$4.0 trillion of foreign capital sunk in the United States as of 2017. Total European stock in the United States of \$2.7 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 \$541 billion in 2017. Luxembourg ranked second in Europe (\$411 billion), followed by the Netherlands (\$367 billion), Germany (\$310 billion), Switzerland (\$309 billion), and France (\$275 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 in the U.S. peaked in 2016, but declined in 2017.

Chinese investment flows to the United States in 2018 are estimated to have declined even further due to more restrictive Chinese policies on outbound investment, significant Chinese disinvestment of U.S. real estate, hospitality and entertainment assets, tighter U.S. investment screening, and a more protectionist tilt from the administration in the United States. According to data from the Rhodium group, in 2018 Chinese greenfield investments and acquisitions in the United States fell to \$5 billion, their lowest level in seven years. At the same time, Chinese investment in several large mining acquisitions in Canada meant that Canada received more Chinese investment than the United States in 2018. Looking ahead, the pipeline of pending deals in North America (less than \$5 billion) is weak.

Chinese investment in Europe fell dramatically in 2018, but was more robust than Chinese investment in the United States. According to the Rhodium Group, Chinese FDI in Europe was \$22.5 billion in 2018, 70% down from the 2017 figure of \$80 billion (over half of which was due to one deal alone: ChemChina's acquisition of Syngenta for \$43 billion). The UK received the most Chinese investment (\$4.94 billion), but this was 76% less than in 2017. Similar falls were seen in the Netherlands (down 76%), Switzerland (down 99%) and Italy (down 21%).

Chinese investment increased in Central and Eastern Europe, albeit from a low base. Chinese investors also made acquisitions worth \$1.83 billion in France (up 86% compared to 2017), \$2.52 billion in Germany (up 34%), \$1.17 billion in Spain (up 162%) and \$4.05 billion in Sweden (up 186%). Investment in Luxembourg spiked from under \$100 million in 2017 to \$1.87 billion, while in Denmark it grew from \$200 million to \$1.1 billion. Pending deals of more than \$20 billion means that the Chinese investment pipeline in Europe will continue to be more robust than in North America.<sup>2</sup>

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, Lietchtenstein.

Source: Rhodium Group. Data as of January 2019.

■ Europe ■ U.S.



### **European affiliate** earnings in the U.S.

\$132 billion (estimate 2018)



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 2018, European firms earned an estimated \$132 billion in the United States, a 12% increase from the income levels that European affiliates recorded in 2017. Through the first nine months of 2018, European affiliate income earned in the U.S. totaled \$99 billion. Affiliates of British multinationals are the top earners and saw a steady increase in income of 7% in the first nine months of 2018, compared to the same period in 2017. 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 2019.

### **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, 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 – some of the most populous states in the nation – are home to the largest share of European affiliate jobs. Over 1 million U.S. workers were on the payrolls of European affiliates in the three states combined in 2016. 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 2016, all 20 of the top 20 states measured by European affiliate employment increased hiring.

UK firms were the largest sources of onshored jobs in 27 U.S. states. Japanese companies led in 10 states, Canadian companies in 9, and German and Dutch companies each 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	2014	2015	2016
California	389.6	423.1	442.5
Texas	332.8	361.4	367.9
New York	310.0	332.1	348.4
Illinois	206.0	212.1	230.1
Pennsylvania	213.7	213.3	220.4
Florida	181.0	196.4	203
New Jersey	187.4	190.4	198.4
North Carolina	173.8	181.9	184.3
Michigan	147.6	155.6	159.9
Massachusetts	161.9	152.6	159.5
Ohio	145.1	152.8	157.5
Georgia	124.8	131.8	138.3
Virginia	126.7	131.6	137.1
Indiana	108.8	112.2	113.2
South Carolina	92.1	98.2	101.5
Tennessee	82.4	93.3	98.0
Maryland	87.5	90.7	91.8
Connecticut	80.9	81.3	82.7
Missouri	73.1	74.8	79.2
Minnesota	64.7	70.6	74.0

Source: Bureau of Economic Analysis.

By industry, Europe is by far the largest source of FDI in the manufacturing industry, with European companies representing 76% of the total inward investment position in the U.S. Within the manufacturing industry, the U.S. chemicals sector was the biggest recipient of European investment followed by transportation equipment. In terms of European affiliate employment, the retail trade industry employed the most workers



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

Top 3 states with the largest share of European affiliate jobs







California Texas

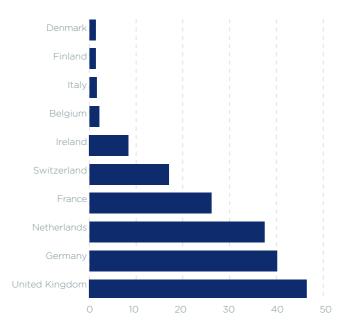
New York

(509,000 jobs in 2016) while European companies in the chemicals manufacturing and transportation equipment industries were also important contributors to U.S. jobs. (See Box 2 on EU-U.S. auto investment and trade).

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, with the bulk of these exports resembling intra-firm trade, or trade between the affiliate and parent company. In 2016, the last year of available data, U.S. exports shipped by all foreign affiliates totaled \$370 billion, with European affiliates accounting for 52% of the total. The United Kingdom, the Netherlands and Germany dominate European affiliate exports from the United States, with the three countries combined representing 65% of European affiliate exports in 2016. By commodity, transportation equipment accounted for 25% 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 2016.

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 2017, with California ranked number one, followed by Texas, New York and Washington. Overall exports increased moderately, up 5% in 2017 from the prior year, but have jumped sizably since 2000.



Europe is by far the largest source of FDI in the U.S. manufacturing industry



### 45/50 states export more to Europe than China (2017)

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 double U.S. exports to China. On a state level, 45 of 50 states exported more to Europe than China in 2017. California, Texas, Michigan, Illinois and Ohio each exported more than twice as many goods to Europe as to China. New York's exports to Europe were more than eight times those to China. Only the Pacific-oriented states of Alaska, Hawaii, New Mexico, Oregon and Washington sent more goods to China than Europe in 2017.

In addition, while the 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 states.

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

U.S. State	2000	2017	% Change from 2016	% Change from 2000
California	27.9	35.7	4%	28%
Texas	12.3	33.7	17%	174%
New York	15.3	26.2	0%	71%
Washington	13.1	15.2	-11%	16%
Illinois	7.3	12.9	15%	76%
Florida	3.9	10.7	9%	175%
Massachusetts	8.0	10.6	3%	32%
New Jersey	6.4	10.5	9%	65%
Pennsylvania	4.7	10.1	0%	116%
Kentucky	3.1	10.1	6%	229%
Indiana	3.1	9.6	7%	205%
Louisiana	3.3	9.4	9%	187%
South Carolina	2.8	9.1	-10%	227%
North Carolina	4.6	9.1	19%	97%
Ohio	5.0	8.7	3%	73%
Georgia	4.0	8.6	5%	117%
Michigan	5.0	7.6	7%	51%
Connecticut	3.5	7.3	15%	108%
Tennessee	2.7	6.7	5%	146%
Nevada	0.3	5.9	22%	1940%
U.S. Total	187.4	332.7	5%	78%

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

### Box 2. The EU-U.S. Auto Trade and Investment Landscape

The auto industry is a key example of the strong trade and investment ties between the U.S. and Europe. Foreign auto companies are critical supports to the U.S. economy in terms of employment, value added, exports, technological advancements and ultimately America's productivity and competitiveness.

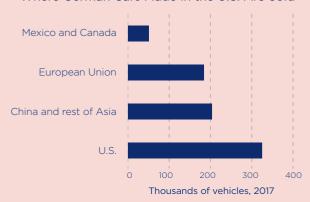
- Employment: European companies directly supported 173,000 jobs in the U.S. motor vehicle and parts industry, or 42% of total foreign affiliate employment in this industry. This figure, however, only accounts for direct employment by affiliates and ignores the downstream effects that European auto manufacturing investment has had on other industries such as automotive dealers, parts suppliers, research and development, etc. Incorporating the larger downstream employment effects, the European Commission estimates that EU auto companies support around 420,000 U.S. jobs.
- **Production:** According to the European Automobile Manufacturers Association, EU auto companies produced roughly 2.9 million passenger cars in 2017, or 26% of total U.S. production. All totaled, European auto and parts companies contributed \$34 billion towards America's gross domestic product in 2016.
- Exports: European manufacturers not only produce vehicles for U.S. consumers, but also use the U.S. market as a key export hub to send their vehicles overseas. About 60% of European cars produced in the U.S. are exported to third markets, like China and the EU. Thus, trade tensions between the U.S. and China threaten an important source of demand for European automakers.
- Innovation: European auto companies that invest in the U.S. are also key contributors to the innovation and research culture that drives the U.S. economy. R&D expenditures by European affiliates in the U.S. auto industry reached a record \$5.5 billion in 2016, or 12.5% of total European affiliate R&D spending.

While foreign direct investment is the primary method of cross-border commerce in the auto industry, U.S.-EU trade ties are also significant, with auto-related trade representing 10% of total trade between the two regions. The U.S. was the largest global market for EU car exports in 2017, representing 29% (€40 billion) of total EU auto exports. Meanwhile, Europe was a significant purchaser of U.S. produced vehicles, taking in 20% of total U.S. car exports. The EU applies a 10% tariff on imported cars. The U.S. applies a 2.5% tariff, but imposes higher duties than the EU on imported trucks.

The accompanying charts highlight European auto companies' investment stakes in the U.S. as a source of exports, investment, jobs and R&D to the U.S. economy.

### 1. Exports

Made in America, Exported from America: Where German Cars Made in the U.S. Are Sold

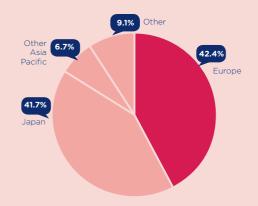


Source: German Automotive Manufacturers' Association, Wall Street Journal.

#### 3. Jobs

Foreign Affiliate Employment in the U.S. Autos/Parts Manufacturing Industry

% of total (2016)



Source: Bureau of Economic Analysis.

### 2. Capital Investment

Investments in the U.S. Auto Industry

Announced Capital Investments, Billions of \$ (2013-2017)



Source: American Auto Council. OEM: Original Equipment Manufacturer.

### 4. Innovation

R&D Expenditures by European Auto Companies in the U.S.



Source: Bureau of Economic Analysis.

Table 8 U.S. State Exports of Goods to Europe and China, 2017 (\$Millions)

II.C. Chata	Бинана	China
U.S. State	Europe	China
Alabama	5,609	3,573
Alaska	888	1,322
Arizona	3,964	1,190
Arkansas	1,732	368
California	35,741	16,433
Colorado	1,669	586
Connecticut	7,258	795
Delaware	1,010	353
Florida	10,696	1,865
Georgia	8,594	2,837
Hawaii	19	125
Idaho	409	353
Illinois	12,874	5,271
Indiana	9,583	2,068
Iowa	2,543	587
Kansas	2,031	706
Kentucky	10,083	2,815
Louisiana	9,432	7,761
Maine	444	238
Maryland	3,012	600
Massachusetts	10,574	2,304
Michigan	7,591	3,675
Minnesota	4,642	1,987
Mississippi	2,143	787
Missouri	2,475	929
Montana	227	129
Nebraska	933	483
Nevada	5,913	805
New Hampshire	1,875	423
New Jersey	10,495	1,594
New Mexico	345	1,002
New York	26,221	3,168
North Carolina	9,112	2,362
North Dakota	225	
		52
Ohio Oklahoma	8,693 1,275	3,815 222
Oregon	2,853	3,933
Pennsylvania	10,093	2,563
Rhode Island	686	166
South Carolina	9,143	6,230
South Dakota	131	64
Tennessee	6,650	2,502
Texas	33,690	16,419
Utah	4,107	737
Vermont	418	202
Virginia	4,869	1,720
Washington	15,152	17,967
West Virginia	2,485	535
Wisconsin	4,224	1,732
Wyoming	72	37

By destination, key markets in Europe for U.S. states include Germany, the United Kingdom, and the Netherlands. Germany is the most important European customer for 18 different U.S. states; The UK is the biggest European customer for 14 U.S. states, followed by Belgium for 5 states, and France and the Netherlands each of 4 states. Germany is the most important European goods supplier for 33 different U.S. states.

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

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

#### **Endnotes**

<sup>1</sup> https://rhg.com/research/chinese-fdi-in-north-america-vs-europe/; https://www.bakermckenzie.com/en/newsroom/2019/01/chinese-fdi 2 Rhodium defines "Europe" as the EU-28 plus the EFTA countries: Iceland, Liechtenstein, Norway and Switzerland.

5

### **European Countries:**

U.S.-Related Jobs, Trade and Investment



### Real economic growth in the eurozone

(estimate 2018)



Over the past year, Europe has had to navigate a series of shocks, ranging from uncertainty over the United Kingdom's Brexit negotiations with the European Union and disputes over Italy's budget plans to protests in France, trade tensions with the United States, and financial stress in Turkey. Amidst all the uncertainty and fears of a global growth slowdown, the European economy ended 2018 in a less stable position than it had been in when the year began. Real economic growth, as high as 2.4% in 2017, slowed to an estimated 1.8% for the eurozone in 2018. Looking ahead, the IMF projects eurozone growth to weaken slightly to 1.6% in 2019 and 1.7% in 2020.

The slowdown in Europe's economy in 2018 can be attributed to a number of factors: trade and investment uncertainty, the rollout of new EU emissions standards for the auto industry, and a slowdown in China - a major trading partner for the EU. 2019 brings a handful of additional risks that economists, investors and business leaders should monitor closely, including elections for the European Parliament and the subsequent formation of a new European Commission, Presidential elections in Ukraine amidst continuous Russian meddling and aggression, a March 29th Brexit deadline, adoption of a new EU e-privacy regulation that supplements the EU's 2018 General Data Protection Regulation (GDPR), and higher-than-expected government deficits in some EU member countries. Meanwhile, the rise of populist pressures across the continent will remain a key area of focus.

Notwithstanding these risks, Europe remains one of the most attractive regions of the world for U.S. FDI. The latest economic figures underscore corporate America's enduring commitment to its long-standing transatlantic partner. Measured on a historic cost basis, the total stock of U.S. FDI in Europe was \$3.6 trillion in 2017, or 59% of the total U.S. global investment position. This is more than three-and-ahalf times the amount of comparable U.S. investment in the Asia-Pacific region.

While FDI flows from the United States have historically been directed towards Europe - with Europe usually attracting more than 50% of U.S. investment each year - 2018 was not a typical year for U.S. capital outflows. Due to large scale repatriations

### **U.S. FDI stock in Europe**



### \$3.6 trillion

59% of the total U.S. global investment position

of U.S. multinational companies' accumulated foreign earnings, U.S. FDI outflows to Europe were negative for the first nine months of the year, or -\$13 billion. These repatriations of cash - brought about by a major tax overhaul in the United States that encouraged companies to bring home foreign capital at lower tax rates - spanned multiple regions, from the Caribbean to Europe to the Asia-Pacific region (See Box 1).

In total, U.S. global FDI outflows were -\$125 billion from Q1-Q3 of 2018, compared to a positive \$240 billion during the same period a year earlier. Most of the decline was caused by U.S. companies with offshore operations in Bermuda; these firms repatriated large quantities of accumulated capital, leading to a net -\$148 billion outflow in the first three quarters of 2018. FDI in Europe was also impacted by the change to the U.S. tax code. The Netherlands had the largest negative outflows in Europe (-\$35 billion from Q1-Q3 2018). Meanwhile, U.S. FDI flows to Ireland were -\$20 billion in the first nine months of 2018. This is small compared to the \$376 billion worth of U.S. FDI outflows directed to Ireland over the past ten years. By comparison, Bermuda's -\$148 billion outflow last year (Q1-Q3) came after it received only about \$200 billion in U.S. investment in the previous ten years.

At the other end of the spectrum are countries where U.S. FDI flows actually increased in the first nine months of 2018, compared to the previous year. These include France (+18%), Italy (+79%) and Spain (+55%). Investment in Belgium, Germany, Luxembourg, the UK and numerous other European countries was positive in 2018, though lower than the prior year, according to our estimates.

U.S. FDI activity in Europe has become more concentrated over the years. For a variety of reasons, ranging from the cost of labor to country-specific tax rates, firms are doing more activities in less locations across the region. In 2017, of the \$164 billion of investment that Europe received from the United States, 87% went to four countries: Ireland (\$45) billion), the Netherlands (\$35 billion), Luxembourg (\$33 billion), and Switzerland (\$30 billion). That said, some of these investment flows, ultimately make their way to neighboring countries, so they likely misrepresent the ultimate destination of U.S. direct investment.

### **Box 1. U.S. Corporate Tax Reform: Impact on FDI Outflows**

In December 2017, the United States passed the "The Tax Cuts and Jobs Act," which included several changes to the U.S. taxation of international profits. An important provision of the tax reform bill, which had a material impact on U.S. international investment flows, was the reduced tax rate on U.S. firms' repatriated earnings. This repatriation tax break, which was expected, led to negative U.S. FDI outflows as companies brought home significant quantities of cash. The sweeping U.S. tax reform package also reduced the corporate tax rate from 35% to 21% and moved the United States towards a "territorial" system, under which profits earned by U.S. foreign affiliates will not be taxed.

For years, U.S. multinational companies reinvested their global earnings back into their operations abroad to defer U.S. taxation of these foreign profits. This strategy, widely adopted by U.S. multinationals, caused reinvested earnings to become the primary source of U.S. FDI flows. Table 1a shows the breakout of U.S. global FDI flows by component, with retained earnings making up the bulk of total U.S. investment.

The cumulative effect of years of companies keeping profits overseas led to a large accumulation of U.S. corporate earnings abroad. When the U.S. government passed corporate tax reform, reducing the tax rate on these earnings, it allowed companies to tap into the large pile of foreign profits by repatriating the foreign capital. When companies withdraw prior accumulated earnings, this results in negative retained earnings and negative overall U.S. FDI outflows. A similar pattern occurred in 2005 after the U.S. Homeland Investment Act introduced a similar tax break for multinational companies (Table 1b).

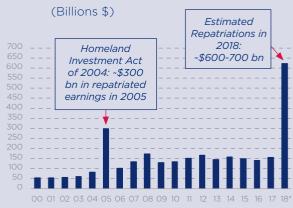
In the first three quarters of 2018, U.S. repatriations of global earnings are estimated to have totaled approximately \$600-700 billion. This is relatively small compared to the estimated \$2.7 trillion in funds stockpiled overseas. These repatriations and negative FDI outflows are likely a to be a short-term anomaly in the data. According to UNCTAD's January 2019 Investment Trends Monitor, however, in the long run the shift to a territorial tax system in the United States may lead to "structurally lower reinvested earnings by U.S. multinationals in the future."

Table 1a U.S. Global Outflows by Component (Billions \$)



\*Seasonally adjusted. Source: U.S. Bureau of Economic Analysis. Data as of December 2018.

Table 1b U.S. Repatriations of Global Earnings



\*2018 estimate based on three quarters of data. Source: U.S. Bureau of Economic Analysis. Data as of December 2018. These figures underscore that changes in quarterly, and even annual, FDI flows can be an extremely volatile measure of U.S.-European investment ties. Table 2 provides a more long-term view of U.S. foreign direct investment across Europe. A few items stand out. First, three countries on the list (Finland, Russia and Sweden) have experienced net outflows of U.S. investment since the start of this decade. After sinking over \$11 billion into Russia in the first decade of this century, U.S. investment in Russia has dried up since 2010.

Second, as mentioned earlier, the share of U.S. FDI in both Germany and France has declined sharply this decade, with France accounting for just 1.4% of U.S. FDI flows to Europe since 2010. Germany's share is slightly higher, 1.7%, but still off the levels of previous decades. That said, some of these figures need to be used carefully, since some U.S. investment in countries neighboring Germany, for instance the Netherlands, Belgium or Luxembourg, ultimately finds its way to Germany.

Table 2 U.S. FDI in Europe: The Long View (Millions of \$, (-) inflows)

	1990-1999		2000-2009		2010-3Q2018		
Country	\$ Aggregate Total	% of Total	\$ Aggregate Total	% of Total	\$ Aggregate Total	% of Total	
Europe	465,337		1,149,810		1,377,570		
Austria	2,908	0.6%	501	0.0%	7,939	0.6%	
Belgium	12,028	2.6%	40,120	3.5%	17,869	1.3%	
Czech Republic	155	0.0%	1,941	0.2%	3,532	0.3%	
Denmark	2,798	0.6%	5,782	0.5%	9,948	0.7%	
Finland	1,485	0.3%	1,598	0.1%	-447	0.0%	
France	29,063	6.2%	42,963	3.7%	19,159	1.4%	
Germany	31,817	6.8%	60,363	5.2%	23,558	1.7%	
Greece	413	0.1%	943	0.1%	388	0.0%	
Hungary	2,929	0.6%	1,376	0.1%	835	0.1%	
Ireland	21,369	4.6%	115,085	10.0%	300,147	21.8%	
Italy	13,825	3.0%	26,462	2.3%	8,622	0.6%	
Luxembourg	15,912	3.4%	126,989	11.0%	271,604	19.7%	
Netherlands	70,770	15.2%	295,889	25.7%	346,369	25.1%	
Norway	4,198	0.9%	4,997	0.4%	9,441	0.7%	
Poland	2,681	0.6%	4,699	0.4%	1,776	0.1%	
Portugal	1,993	0.4%	2,212	0.2%	1,226	0.1%	
Russia	1,555	0.3%	11,289	1.0%	-1,437	-O.1%	
Spain	11,745	2.5%	28,371	2.5%	13,241	1.0%	
Sweden	10,783	2.3%	16,974	1.5%	-5,200	-0.4%	
Switzerland	32,485	7.0%	97,869	8.5%	104,347	7.6%	
Turkey	1,741	0.4%	5,994	0.5%	5,120	0.4%	
United Kingdom	175,219	37.7%	237,906	20.7%	245,577	17.8%	
Other	17,465	2.6%	19,487	1.4%	-6,044	-0.4%	

Source: Bureau of Economic Analysis.

Ireland has become a favored destination for FDI among U.S. multinationals looking to take advantage of the country's flexible and skilled English-speaking labor force, low corporate tax rates, membership in the European Union, and pro-business policies. Add in Ireland's economic rebound – the Irish economy is among the fastest-growing in the world – and one of Europe's smallest economies has emerged as one of the most attractive destinations for U.S. firms. Even when adjusting U.S. FDI figures to take account of flows of U.S. holding companies, Ireland still ranks as one of the most attractive places in the world for U.S. businesses.

Just as U.S. firms leverage different states across America, with certain activities sprinkled around the Northeast, Midwest, the South and West, U.S. firms deploy the same strategies across Europe, leveraging the specific attributes of each country. Economic activity across the EU is just as distinct and differentiated by country. Different growth rates, differing levels of consumption, varying degrees of wealth, labor force participation rates, financial development, innovation market capabilities, corporate tax rates - all of these factors, and more, determine where and when U.S. firms invest in Europe.

Table 3 Top 20 U.S. Affiliate Sales Abroad by Destination\* (\$Millions)

	1982		1990		2000		2016		
Rank	Country	Value	Country	Value	Country	Value	Country	Value	
1	United Kingdom	33,500	United Kingdom	51,350	United Kingdom	94,712	Ireland	292,885	
2	Switzerland	27,712	Canada	46,933	Canada	94,296	Singapore	264,012	
3	Canada	25,169	Germany	41,853	Germany	69,522	Switzerland	239,549	
4	Germany	19,117	Switzerland	38,937	Netherlands	67,852	United Kingdom	172,905	
5	Netherlands	15,224	Netherlands	33,285	Singapore	56,961	Netherlands	154,114	
6	Belgium	11,924	France	24,782	Switzerland	56,562	Germany	138,217	
7	Singapore	11,579	Belgium	21,359	Ireland	51,139	Canada	125,241	
8	France	11,255	Singapore	15,074	Mexico	37,407	Mexico	79,817	
9	Indonesia	8,289	Hong Kong	9,951	France	35,797	Hong Kong	74,431	
10	Hong Kong	4,474	Italy	9,562	Belgium	32,010	Belgium	62,951	
11	Italy	3,993	Ireland	9,469	Hong Kong	22,470	China	57,245	
12	Australia	3,710	Spain	7,179	Malaysia	16,013	France	53,805	
13	Ireland	2,842	Japan	7,066	Sweden	15,736	Spain	29,805	
14	United Arab Emirates	2,610	Australia	6,336	Italy	14,370	Luxembourg	29,534	
15	Brazil	2,325	Mexico	5,869	Spain	12,928	Japan	28,418	
16	Japan	2,248	Indonesia	5,431	Japan	11,845	Brazil	28,201	
17	Malaysia	2,046	Brazil	3,803	Australia	9,370	Australia	27,801	
18	Panama	1,662	Norway	3,565	Brazil	8,987	India	26,740	
19	Spain	1,635	Malaysia	3,559	China	7,831	Italy	25,772	
20	Mexico	1,158	Nigeria	2,641	Norway	6,238	Malaysia	23,808	
	All Country Total	252,274	All Country Total	398,873	All Country Total	857,907	All Country Total	2,296,497	

Source: Bureau of Economic Analysis.

<sup>\*</sup>Destination = affiliate sales to third markets and sales to U.S. for majority-owned foreign affiliates.



### A launchpad for U.S. companies

### 10 European countries in top 20 global export platforms

Table 3 underscores this point. The figures show U.S. affiliate sales to other destinations, or the exports of affiliates per country. Ireland is the number one export platform for U.S. affiliates in the entire world, reflecting the country's attraction as a strategic beachhead for U.S. multinationals hoping to penetrate the larger European market.

Ireland ranked well down the list in 1982, ranking 13<sup>th</sup> in the world in terms of U.S. foreign affiliate exports. Then, U.S. affiliates exports totaled just \$2.8 billion. By 1990 that figure had grown to \$9.5 billion and by 2000, was in excess of \$50 billion. In the first decade of this century, as the industrial and technological capacities of U.S. affiliates in Ireland surged, so did U.S. affiliate exports, soaring nearly six times between 2000 and 2016 to \$293 billion. U.S. firms leverage Ireland as an export base to a far greater degree than low-cost locales like Mexico, Hong Kong and China. U.S. affiliates export five times more from Ireland than from China and almost four times more than from Mexico, despite strong NAFTA linkages.

On a standalone basis, U.S. affiliates' exports from Ireland are greater than most countries' exports. Such is the export-intensity of U.S. affiliates in Ireland and the strategic importance of Ireland to the corporate success of U.S. firms operating in Europe and around the world. Moreover, the UK decision to leave the EU may further solidify Ireland's spot as the number one location for U.S. affiliate exports if companies decide to relocate operations to Ireland in search of easier access to the EU market. Brexit may generate additional uncertainties, however, further underscoring Ireland's huge stakes in the outcome of the Brexit drama.

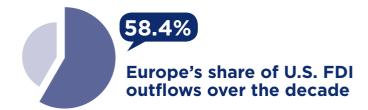
Of the top twenty global export platforms for U.S. multinationals in the world, ten are located in Europe, a trend that reflects the intense cross-border trade and investment linkages of the European Union and the strategic way U.S. firms leverage their European supply chains. Switzerland, ranked third, remains a key export platform and pan-regional distribution hub for U.S. firms.

The UK still plays an important role for U.S. companies as an export platform to the rest of Europe. The exports of U.S. firms based in the UK to the rest of Europe are greater than the exports of U.S. firms based in China to the rest of the world. However, the introduction of the euro, the Single Market and EU enlargement have enticed more U.S. firms to invest directly in continental member states of the EU. The extension of EU production networks and commercial infrastructure throughout a larger pan-continental Single Market has shifted the center of gravity in Europe eastward within the EU, with Brussels playing an important role in economic policies and decisionmaking. Additionally, the ongoing Brexit saga has many implications for the strategy of U.S. firms when it comes to investment in different European countries.

### **Why Europe Still Matters**

The secular and structural case for investing in Europe remains relatively positive for a number of reasons. First, while both the United States and China loom large in the hierarchy of the global economy, so does the European Union, still one of the largest economies in the world. This fact is often overlooked or ignored by fashionable - and often superficial - political and media consensus, which is more attuned to what's wrong with Europe, as opposed to what's right. In nominal U.S. dollar terms, the European Union (plus Norway, Switzerland, Iceland) accounted for 23.5% of world output in 2018, according to estimates from the International Monetary Fund. Even when the United Kingdom is excluded from the figures, the aggregate output of this group of nations - \$17.1 trillion, or 20.2% - is among the largest in the world. The figure (EU excluding the UK) is slightly less than America's share (24.2%), but in excess of China's - 15.9%. Based on purchasing power parity figures, the European Union's share, including Norway, Switzerland, and Iceland, was greater than that of the United States, but slightly less than that of China in 2018.

What started out as a loosely configured market of six nations (Belgium, France, West Germany, Italy, Luxembourg and the Netherlands) in the late 1950s



is now an economic behemoth of 28 member states joined together in a Single Market. Even with the UK's decision to leave the EU, the sum of Europe's parts is one of the largest economic entities in the world; as such, Europe remains a key pillar of the global economy and critical component to the corporate success of U.S. firms.

Table 4 Cumulative U.S. FDI Outflows (\$Millions)

Decade	All Countries	Europe	Europe as a % of World
1950-1959	20,363	3,997	19.6%
1960-1969	40,634	16,220	39.9%
1970-1979	122,721	57,937	47.2%
1980-1989	171,880	94,743	55.1%
1990-1999	869,489	465,337	53.5%
2000-2009	2,056,009	1,149,810	55.9%
2010Q1-2018Q3	2,358,055	1,377,570	58.4%

Source: Bureau of Economic Analysis.

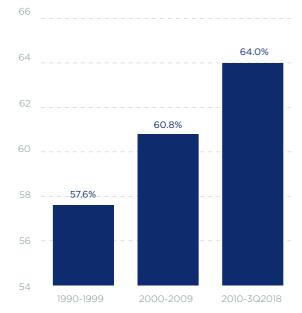
As Table 4 highlights, Europe attracts more than half of U.S. aggregate FDI outflows. The region's share of total U.S. FDI this decade is 58.4%, which is up from the first decade of this century as well as from the level of the 1990s. When U.S. FDI flows to Caribbean offshore financial centers are subtracted from the total, Europe's share climbs even higher, to almost two-thirds of U.S. direct investment.

Even after adjusting for FDI flows related to holding companies, Europe remains the favored destination of U.S. firms (see Box 2 on holding company flows). This runs counter to the fashionable narrative that Corporate America prefers low-cost nations in Asia, Latin America and Africa to developed markets like Europe. Reality is different for a host of reasons.

First, investing in emerging markets such as China, India and Brazil remains difficult, with indigenous barriers to growth (poor infrastructure, dearth of human capital, corruption, etc.) as well as policy headwinds (foreign exchange controls, tax preferences favoring local firms,) reducing the overall attractiveness of these markets to multinationals.

Table 5 U.S. FDI Flows to Europe

(% of World Total\*)



\*Excluding Caribbean and Other Western Hemisphere. Source: Bureau of Economic Analysis. Data as of January 2019.

Second, real growth in the emerging markets has downshifted, notably in Brazil, Russia and China. Although both Russia and Brazil have emerged from recession, growth is still projected to remain relatively weak in 2019. Growth prospects in China, meanwhile, have slowed considerably as Beijing shifts towards more consumption and service-led growth and away from export- and investment-driven growth. India's economy is on the rebound but poor and too closed off to make much of a difference to the bottom line of Corporate America. In the end, for both cyclical and structural factors, the BRICs and the emerging markets remain difficult places to do business. Hence the wide divergence between U.S. FDI to the BRICs (Brazil, Russia, India, China) and U.S. FDI to Europe (See Tables 6 and 7).

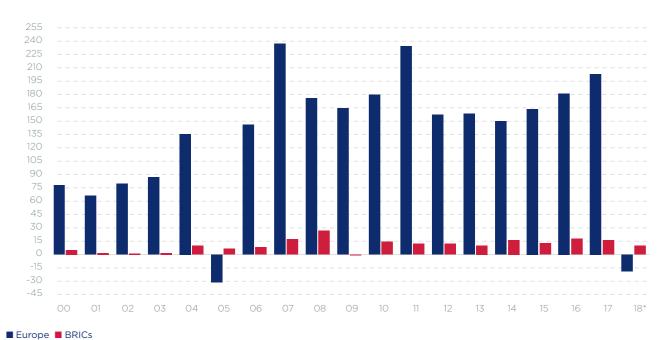
Third, while overall economic growth in Europe is moderating, there are pockets of the eurozone economy that are projected to grow rapidly in the near term. Ireland's growth rate for 2019 is estimated at 4%, while several other EU economies, such as Poland, the Czech Republic, Romania, and Hungary, are estimated to grow in the 3-4% range this year.

Table 6 U.S. Foreign Direct Investment Flows to China vs. Europe (\$ Billions)



\*2018 etimate based on 1Q-3Q data. Source: Bureau of Economic Analysis. Data as of January 2019.

Table 7 U.S. Foreign Direct Investment Outflows to the BRICs vs. Europe¹ (\$ Billions)



1 Europe does not include flows to Russia.

\*2018 Estimate based on 1Q-3Q data. Source: Bureau of Economic Analysis. Data as of January 2019. Fourth, in addition to being one of the largest economic blocs in the world, Europe is also wealthy, and wealth matters. Wealth is correlated with highly skilled labor, rising per capita incomes, innovation, and a world class R&D infrastructure, among other things. In the aggregate, 15 of the 25 wealthiest nations in the world are European. Per capita income levels in Europe are light years ahead of those in India and China, and all of Africa.

While much has been made of the rise of China, with the mainland's economy now the second largest in the world, the Middle Kingdom remains relatively poor. China's per capita income totaled just \$8,827 in 2017, according to figures from the World Bank. The Chinese figure ranks 74th in the world and is well below the per capita income levels of Sweden (\$53,442), the Netherlands (\$48,223), Finland (\$45,703), Germany (\$44,470), and the European Union average of around \$34,000. With a miserly per capita income of about \$1,900, India ranks  $142^{nd}$ .

Wealth, in turn, drives consumption. The EU accounts for about 21% of total global personal consumption expenditures in 2017, a slightly lower share than that of the United States but well above that of China (10%) and India (3%) and the BRICs combined (18%). Gaining access to wealthy consumers is among the primary reasons why U.S. firms invest overseas, and hence the continued attractiveness of wealthy Europe to American companies.

Europe is also attractive because of the ease of doing business in the region. Just as the macroeconomic backdrop influences any business climate, so too do micro factors. Country and industry regulations can help or hamper the foreign activities of U.S. multinationals, and greatly influence where U.S. companies invest overseas. Think property rights, the ability to obtain credit, regulations governing employment, the time it takes to start a business, contract enforcements, and rules and regulations concerning cross border trade. These and other metrics influence and dictate the ease of doing business, and on this basis many European countries rank as the most attractive in the world.

The World Bank annually ranks the regulatory environment for domestic firms in 190 nations, a ranking which serves as very good proxy for the ease of doing business for domestic and foreign companies alike. And in the 2019 Ease of Doing Business rankings, 16 European economies ranked among the top 30 most business-friendly countries. Denmark ranked 3<sup>rd</sup> overall, followed by Georgia (6<sup>th</sup>), Norway (7<sup>th</sup>), the United Kingdom (9<sup>th</sup>), Macedonia (10<sup>th</sup>), Sweden (12<sup>th</sup>), Lithuania (14<sup>th</sup>), Estonia (16<sup>th</sup>), Finland (17<sup>th</sup>), Latvia (19<sup>th</sup>), Iceland (21<sup>st</sup>), Ireland (23<sup>rd</sup>),

Germany (24<sup>th</sup>), Azerbaijan (25<sup>th</sup>), Austria (26<sup>th</sup>), and Spain (30<sup>th</sup>) (See Table 8).

Table 8 Ease of Doing Business 2018 Global Rankings

Ease of Doing Business 2019	
Rank	Country
1	New Zealand
2	Singapore
3	Denmark
4	Hong Kong
5	South Korea
6	Georgia
7	Norway
8	United States
9	United Kingdom
10	Macedonia
11	United Arab Emirates
12	Sweden
13	Taiwan
14	Lithuania
15	Malaysia
16	Estonia
17	Finland
18	Australia
19	Latvia
20	Mauritius
21	Iceland
22	Canada
23	Ireland
24	Germany
25	Azerbaijan
26	Austria
27	Thailand
28	Kazakhstan
29	Rwanda
30	Spain

Source: World Bank, Ease of Doing Business Report 2019.

Outliers include Italy, ranked 51st, Croatia, ranked 58th, and Greece, ranked 72nd. Meanwhile, reflecting the challenging business environment in many emerging markets, these countries rank low on the list. However, there are signs of improvement, with many of the major developing countries seeing their business rankings significantly increase in the past year. China ranked 46th in terms of ease of doing business in the latest rankings, up from 78th last year, while Brazil improved to the 109th spot after ranking 125<sup>th</sup> the prior year. India ranked 77<sup>th</sup>, moving up from number 100 last year and 130 in 2017. However, these nations still lag some of the developing countries in Europe. There is still much to be improved in terms of the regulatory environment in the BRIC nations; strong real GDP growth does not necessarily equate

to a favorable environment for business. Other factors need to considered, like the rise of state capitalism in many developing nations, continued intellectual property right infringements, capital controls, and discriminating domestic policies against foreign firms. These factors have become favorite policy tools in many key emerging markets, further enhancing the attractiveness of Europe in the eyes of U.S. multinationals.

In the end, the greater the ease of doing business in a country, the greater the attractiveness of that nation to U.S. firms. The micro climate matters just as much as the macro performance; Europe trumps many developing nations by this standard.

Table 9 North Atlantic Economies are the Most Competitive in the World

Global Competitiveness Index 2018 Rankings	
Rank	Country
1	United States
2	Singapore
3	Germany
4	Switzerland
5	Japan
6	Netherlands
7	Hong Kong
8	United Kingdom
9	Sweden
10	Denmark
11	Finland
12	Canada
13	Taiwan
14	Australia
15	Korea
16	Norway
17	France
18	New Zealand
19	Luxembourg
20	Israel
21	Belgium
22	Austria
23	Ireland
24	Iceland
25	Malaysia
26	Spain
27	United Arab Emirates
28	China
29	Czech Republic
30	Qatar

Source: World Economic Forum, Global Competitiveness Report

In addition, despite numerous structural challenges in Europe and notwithstanding current market problems, many European economies remain among the most competitive in the world. For instance, in the latest rankings of global competitiveness from the World Economic Forum, six European countries were ranked among the top ten, and ten more among the top thirty. Germany ranked 3<sup>rd,</sup> Switzerland 4<sup>th</sup>, the Netherlands 6<sup>th</sup>, the United Kingdom 8<sup>th</sup>, Sweden 9<sup>th</sup> and Denmark 10<sup>th</sup> (see Table 9). The United States, by way of comparison, ranked 1<sup>st</sup>.

At the other end of the spectrum, a handful of European nations scored poorly, underscoring the fact that Europe's competitiveness is hardly homogenous. Some nations did not even score in the top fifty – Bulgaria ranked 51st, Romania 52nd, Greece 57th, while Croatia ranked 68th in the latest survey, the worst performer among EU members.

The spread between third-placed Germany and floundering Croatia underscores the divergent competitiveness of the EU and highlights the fact that various nations exhibit various competitive strengths and weaknesses. For instance, Croatia's ranking was dragged down by a weak entrepreneurial culture, a large percentage of non-performing loans and poor labor market flexibility. Greece received low marks for its institutions and macroeconomic stability, which stands in contrast to Finland's strong protection of property rights and transparent institutions or Germany's healthy inflation and debt dynamics.

Belgium was cited for outstanding macroeconomic stability and utility infrastructure; France was highlighted for its research and development capability as well as its high life expectancy; Spain's ranking was hurt by labor market inefficiencies and worrisome public debt dynamics, but is the top country in terms of the overall health of its citizens. Switzerland ranked highly across many variables: quality of infrastructure, health of the labor market, innovation capability, and financial system stability, among other things.

All of the above is another way of saying that there is a great deal more to Europe than the daily diet of negative headlines. The various countries of Europe offer specific micro capabilities/competencies that are lacking on a relative basis in the United States and critical to the global success of U.S. firms.

Finally, Europe is no slouch when it comes to innovation and knowledge-based activities. Based on the European Innovation Scoreboard for 2018, Sweden, Denmark, Finland, the Netherlands, the UK, and Luxembourg rank as "innovation leaders" in

# Number of researchers hosted (2016)





1.7 million China



Europe. These are the most innovative states in the EU, performing well above that of the EU 28 average.

So-called "strong innovators" include Germany, Belgium, Ireland, Austria, France, and Slovenia. The performance of Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Slovakia and Spain was below that of the EU average; these nations are considered moderate innovators. The laggards, or modest innovators, include Bulgaria and Romania.

While significant discrepancies exist among nations in the EU as to knowledge-based capabilities, the innovation performance of the EU remains ahead of all BRIC nations. In addition, based on the latest figures from the innovation scoreboard, the EU is closing its innovation performance gap with the United States.

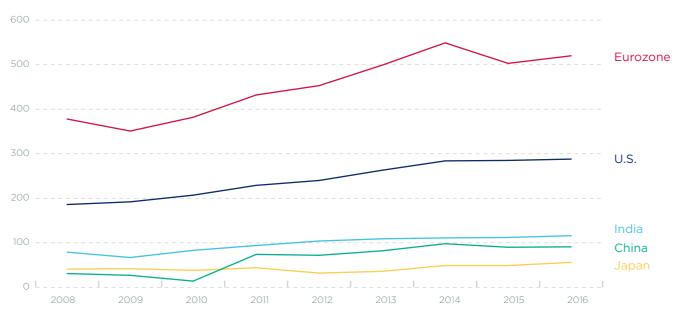
In that R&D expenditures are a key driver of value-added growth, it is interesting to note that Europe-based organizations accounted for 21.0% of total global R&D in 2017. That lagged the share of the United States (25.6%) but exceeded the share of Japan (8.8%), South Korea (4.1%), and India (3.7%). However, as of 2017, China is estimated to have outspent Europe in terms of R&D, with a 21.2%

share. In 2017, the ratio of R&D-to-GDP was larger in Germany, Switzerland, Austria, and Denmark than in the United States.

Led by European industry leaders like Roche, Novartis, Daimler, Sanofi, and GlaxoSmithKline, Europe remains a leader in a number of cutting-edge industries including life sciences, agriculture and food production, automotives, aerospace, nanotechnology, energy, and information and communications. Innovation requires talent, and on this basis, Europe is holding its own relative to other parts of the world. Europe is among one of the world leaders in full time equivalent (FTE) research staff. Of the world's total pool of research personnel, the EU housed 1.9 million researchers in 2016 versus 1.4 million in the United States and 1.7 million in China, according to OECD estimates.

The EU is a global leader in high-technology manufacturing industries such as pharmaceuticals, scientific instruments and aerospace. Also, the EU is the largest exporter of commercial knowledge-intensive services (excluding intra-EU exports), which includes communications, business services, financial services, telecommunications, and computer and information services (See Table 10).

Table 10 Commercial Knowledge-Intensive Services Exports, Selected Countries (\$ Billions)



EU exports do not include intra-EU exports.

Sources: World Trade Organization; National Science Foundation, Science & Engineering Indicators 2018.

Finally, in terms of future workers, Europe is home to one of the most educated workforces in the world. The share of the working age population with a bachelor's degree or higher in Switzerland is the highest in the OECD, at 43%. The comparable figures for Lithuania, Belgium, Iceland, Luxembourg, Ireland, and the UK are all higher than that of the United States (currently 35%).

While U.S. universities remain a top destination for foreign students, the UK, Germany and France are also notable attractions. In the end, Europe remains among the most competitive regions in the world in terms of science and technology capabilities. The U.S. National Science Board has explicitly recognized EU research performance as strong and marked by pronounced EU-supported, intra-EU collaboration.

### **Adding It All Up**

Given all the above, Europe remains a key destination for U.S. multinational companies looking to expand their global footprint. The region remains large, wealthy, richly endowed, open for business, and an innovation leader in many key global industries.

Despite a slight moderation in growth expected in the immediate term, in the long run Europe is expected to remain a critical and indispensable geographic node in the global operations of U.S. companies. Remember: U.S. multinationals increasingly view the world through a tripolar lens—a world encompassing the Americas, Europe and Asia, along with attendant offshoots. In this tripolar world, U.S. companies are not about to give up on or decamp from one of the largest segments of the global economy.

### Box 2. U.S. FDI Outflows to Europe Adjusted for Flows of Holding Companies

For the past few years, we have highlighted the role of U.S. holding companies in determining U.S. investment flows to Europe. This additional lens is warranted since holding companies have accounted for a growing share of total U.S. FDI outflows to Europe over the years. This has generated considerable political and media attention, and is important to understand in order to get a full picture of transatlantic commercial linkages.

In 2017, the last year of available data, nonbank holding companies accounted for \$127 billion, or about 42% of global U.S. FDI of \$300 billion, and 51% of total U.S. foreign direct investment to the European Union of \$164 billion. As the U.S. Bureau of Economic Analysis (BEA) notes, "The growth in holding-company affiliates reflects a variety of factors. Some holding-company affiliates are established primarily to coordinate management and administration activities – such as marketing, distribution, or financing – worldwide or in particular geographic region. In addition, the presence of holding-company affiliates in countries where the effective income tax rate faced by affiliates is relatively low suggests tax considerations may have also played a role in their growth. One consequence of the increasing use of holding companies has been a reduction in the degree to which the U.S. Direct Investment Abroad position (and related flow) estimates reflect the industries and countries in which the production of goods and services by foreign affiliates actually occurs."

Against this backdrop, total U.S. FDI flows to Europe over the past few years have been driven in part by holding companies. The countries attracting the most investment of holding companies, not surprisingly, are those with some of the lowest corporate tax rates in Europe, such as Luxembourg, the Netherlands, the UK and Ireland.

Tables 11a and 11b, drawing on BEA data, reflect the significance of holding companies in the composition of U.S. FDI outflows. European markets have accounted for roughly 56% of total U.S. FDI outflows since 2009. However, when flows to nonbank holding companies are excluded from the data, the share of outflows to markets such as Europe and Other Western Hemisphere declines.

The bottom line: when FDI related to holding companies is stripped from the numbers, U.S. FDI outflows are not as large as typically reported by the BEA. Nonetheless, Europe remains the top destination of choice among U.S. firms even after the figures are adjusted. Between 2009 and 2017, Europe still accounted for over 47% of total U.S. FDI outflows when flows from holding companies are removed from the aggregate. Europe's share was still more than double the share to Asia, underscoring the deep and integrated linkages between the U.S. and Europe.

Table 11a Total U.S. FDI Outflows, 2009-2017
(% of Total)

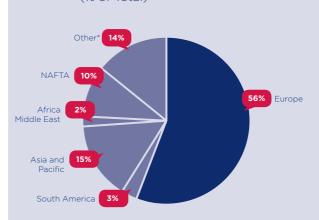
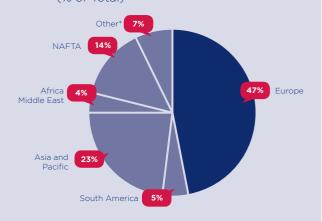


Table 11b U.S. FDI Outflows Excluding Flows to Nonbank Holding Companies, 2009-2016 (% of Total)



\*Includes Central America (excluding Mexico) and Other Western Hemisphere. Source: Bureau of Economic Analysis. Data as of January 2019.

# **Appendix A**

# **European Commerce and the 50 U.S. States:**

A State-by-State Comparison





## Alabama and Europe





59,500

Since 2006: +17,400 (41.3%)



European companies account for

**55%** 

of foreign affiliate jobs

#### **Employment within Alabama, 2016**

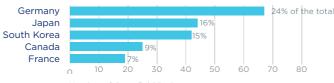
Country	Employment
Japan	20,000
United Kingdom	16,100
Germany	13,200
Canada	10,700
France	10,000

On a country basis, U.K. companies operating in Alabama represented 15% of total foreign affiliate employment in Alabama, with U.K. multinationals supporting approximately 4,500 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### Sources of Greenfield Foreign Direct Investment (FDI)





Greenfield Projects (October 2008 -September 2018)

Number of Greenfield Projects

Number of projects does not directly translate to value of projects or jobs added. Greenfield EDI is investment in new assets.



#### Alabama Goods Exports to Europe, 2017

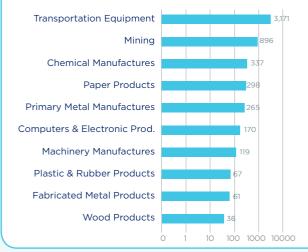
\$5.6 bn

57% of total exports from Alabama to Europe were transportation equipment, reflecting the state's linkages with European auto manufacturers.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	2,948
Belgium	580
France	411
Italy	283
United Kingdom	256

#### Top Ten Exports to Europe, 2017 (\$ millions)



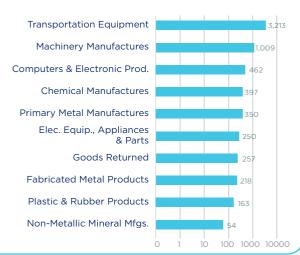
#### **Alabama Goods Imports from Europe, 2017**

Transportation equipment and machinery manufactures were the top product imports.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	3,853
France	632
<b>United Kingdom</b>	428
Italy	203
Czech Republic	174

#### **Top Ten Imports from Europe, 2017** (\$ millions)



## 14. \*



## **Alaska and Europe**





6,600

Since 2006: +1,600 (32.0%)

iii

European companies account for

**38**%

of foreign affiliate jobs

#### **Employment within Alaska, 2016**

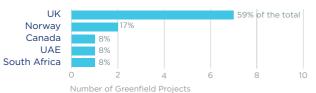
Country	Employment
Canada	5,000
United Kingdom	4,600
Japan	2,700
Switzerland	500
France	400

On a country basis, U.K. companies operating in Alaska represented 27% of total foreign affiliate employment in Alaska, with U.K. multinationals supporting approximately 300 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### Sources of Greenfield Foreign Direct Investment (FDI)





Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### Alaska Goods Exports to Europe, 2017

\$887.8 m

The bulk of the state's exports consist of primary commodities.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	182
Netherlands	181
Spain	161
France	71
Italy	68

## Alaska Goods Imports from Europe, 2017

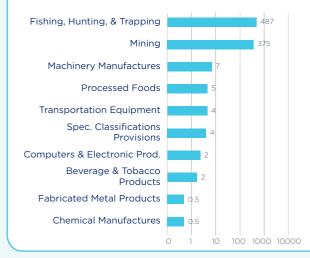
\$158.4 m

Oil & gas extraction made up about one-third of total imports from Europe. Other large import categories from Europe include transportation equipment, machinery manufactures, and computer & electronic products.

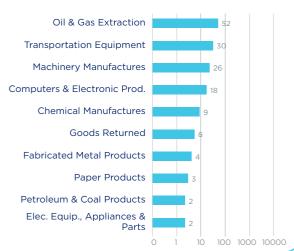
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Russia	83
United Kingdom	18
Germany	14
France	9
Netherlands	5

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 





## **Arizona and Europe**





59,600

Since 2006: +12,400 (26.3%)



European companies account for

**55**%

of foreign affiliate jobs

#### **Employment within Arizona, 2016**

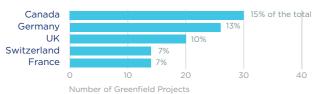
Country	Employment
United Kingdom	17,600
Canada	17,300
France	11,000
Japan	9,300
Switzerland	8,800

On a country basis, U.K. companies operating in Arizona represented 16% of total foreign affiliate employment in Arizona, with U.K. multinationals supporting approximately 4,500 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**







Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.

#### **Arizona Goods Exports to Europe, 2017**

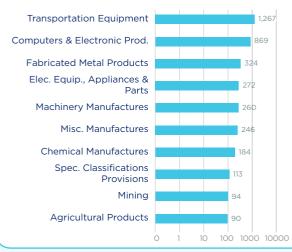
\$4.0 bn

Roughly one-third of the state's exports to Europe consist of transportation equipment.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	977
Germany	692
France	470
Netherlands	378
Switzerland	248

## Top Ten Exports to Europe, 2017 (\$ millions)



#### **Arizona Goods Imports from Europe, 2017**

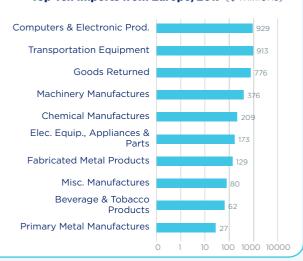
\$3.8 bn

Computers & electronic products were the top product imports, representing 24% of total imports from Europe

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	815
France	689
United Kingdom	633
Italy	500
Netherlands	289

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## Arkansas and Europe





28,500

Since 2006: +4,800 (20.3%)

European companies account for

**61%** 

of foreign affiliate jobs

#### **Employment within Arkansas, 2016**

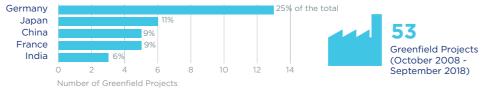
Country	Employment
United Kingdom	6,900
France	6,300
Japan	6,100
Switzerland	4,800
Canada	3,500

On a country basis, U.K. companies operating in Arkansas represented 15% of total foreign affiliate employment in Arkansas, with U.K. multinationals supporting approximately 3,200 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



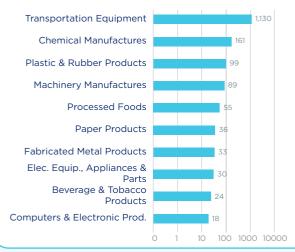
#### **Arkansas Goods Exports to Europe, 2017**

Transportation equipment made up 65% of exports to Europe in 2017.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
France	728
United Kingdom	250
Switzerland	160
Netherlands	137
Belgium	91

#### Top Ten Exports to Europe, 2017 (\$ millions)



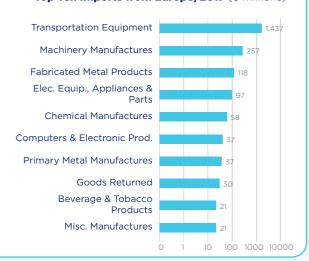
#### **Arkansas Goods Imports from Europe, 2017**

Transportation equipment and machinery manufactures were the top product imports, combined accounting for over 75% of total imports from Europe.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
France	1,334
Germany	251
Italy	135
United Kingdom	94
Poland	42

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **California and Europe**





442,500

Since 2006: +97,000 (28.1%)

iti

European companies account for

**58**%

of foreign affiliate jobs

#### **Employment within California, 2016**

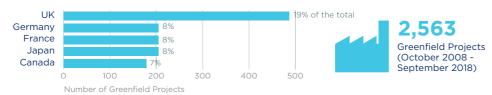
Country	Employment
Japan	117,900
United Kingdom	112,700
France	87,500
Germany	72,000
Switzerland	72,000

On a country basis, U.K. companies operating in California represented 15% of total foreign affiliate employment in California, with U.K. multinationals supporting approximately 28,200 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### Sources of Greenfield Foreign Direct Investment (FDI)



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### California Goods Exports to Europe, 2017

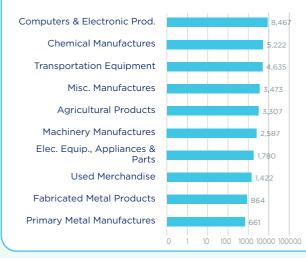
\$35.7 bn

24% of California's exports to Europe in 2017 consisted of high-tech goods (computers & electronic products).

#### **Top European Export Markets, 2017**

Exports (\$ millions)
6,003
5,785
5,030
3,707
3,184

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### California Goods Imports from Europe, 2017

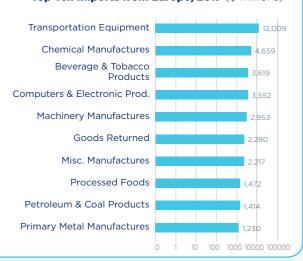
\$43.2 bn

Transportation equipment and chemical manufactures were the top product imports, representing 28% and 11% of total European imports, respectively.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	11,502
United Kingdom	5,555
Italy	4,291
France	3,695
Switzerland	2,860

#### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 



## Colorado and Europe





59,600

Since 2006: +12,500 (26.5%)



European companies account for

**55%** 

of foreign affiliate jobs

#### **Employment within Colorado, 2016**

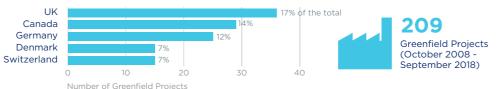
Country	Employment
United Kingdom	18,000
Canada	13,900
Germany	7,500
Japan	7,400
France	7,300

On a country basis, U.K. companies operating in Colorado represented 17% of total foreign affiliate employment in Colorado, with U.K. multinationals supporting approximately 4,800 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### Sources of Greenfield Foreign Direct Investment (FDI)



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Colorado Goods Exports to Europe, 2017**

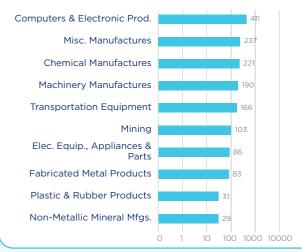
\$1.7 bn

25% of the state's exports consist of high-tech goods (computers & electronic products).

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	314
Netherlands	276
<b>United Kingdom</b>	220
Switzerland	171
Belgium	143

#### Top Ten Exports to Europe, 2017 (\$ millions)



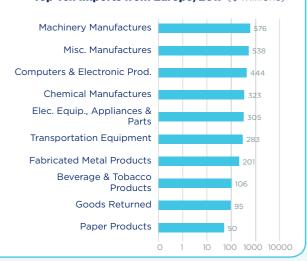
#### **Colorado Goods Imports from Europe, 2017**

Colorado's largest imports from Europe were machinery and miscellaneous manufactured

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Switzerland	724
Germany	662
Denmark	263
Italy	237
Spain	230

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## Connecticut and Europe





82,700

Since 2006: +5,400 (7.0%)

European companies account for

9%

of foreign affiliate jobs

#### **Employment within Connecticut, 2016**

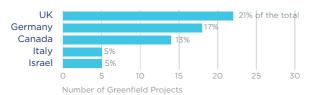
Country	Employment
Netherlands	19,100
United Kingdom	18,500
Germany	12,400
Switzerland	8,100
France	7,400

On a country basis, Dutch companies operating in Connecticut represented 18% of total foreign affiliate employment in Connecticut, with Dutch multinationals supporting approximately 1,200 fewer jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Connecticut Goods Exports to Europe, 2017**

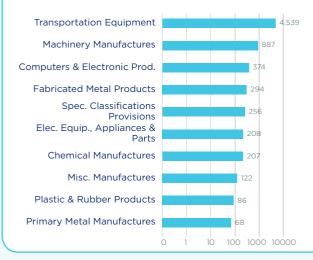
\$7.3 bn

Exports are heavily skewed towards transportation

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
France	2,114
Germany	1,825
United Kingdom	1,300
Netherlands	619
Belgium	172

# Top Ten Exports to Europe, 2017 (\$ millions)



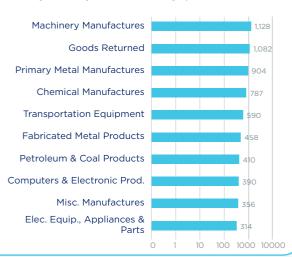
#### **Connecticut Goods Imports from Europe, 2017**

Machinery was Connecticut's main import from Europe, representing 16% of the total merchandise imports from Europe.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	1,342
United Kingdom	1,084
France	710
Ireland	636
Italy	526

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Delaware and Europe**





18,100

Since 2006: -600 (-3.2%)

2006 2016



European companies account for

2%

of foreign affiliate jobs

#### **Employment within Delaware, 2016**

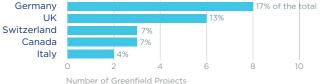
Country	Employment
United Kingdom	7,800
Germany	3,000
Canada	2,300
Japan	1,700
France	1,600

On a country basis, U.K. companies operating in Delaware represented 31% of total foreign affiliate employment in Delaware, with U.K. multinationals supporting approximately 1,600 fewer jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



## **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Delaware Goods Exports to Europe, 2017**

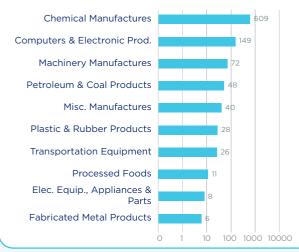
\$1.0 bn

Chemicals are Delaware's primary export to Europe, representing 60% of the state's total exports.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	323
Germany	231
Belgium	200
Netherlands	88
France	24

#### **Top Ten Exports to Europe, 2017** (\$ millions)



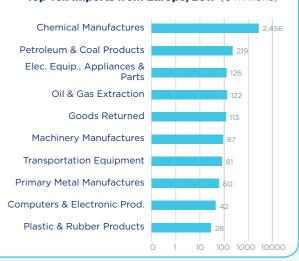
#### **Delaware Goods Imports from Europe, 2017**

Chemicals are Delaware's top import from Europe, representing 70% of total European imports.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
France	806
United Kingdom	758
Germany	412
Switzerland	283
Spain	184

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## Florida and Europe





203,000

Since 2006: +42,700 (26.6%)

European companies account for

**58%** 

of foreign affiliate jobs

#### **Employment within Florida, 2016**

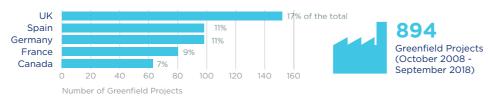
Country	Employment
United Kingdom	70,400
Canada	43,900
France	31,100
Germany	30,300
Japan	21,200

On a country basis, U.K. companies operating in Florida represented 20% of total foreign affiliate employment in Florida, with U.K. multinationals supporting approximately 28,800 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### Florida Goods Exports to Europe, 2017

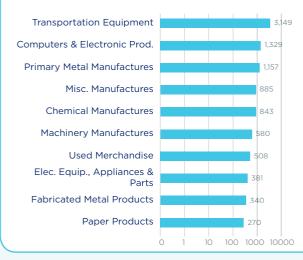
\$10.7 bn

Transportation Equipment accounts for about 29% of total exports to Europe.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	2,368
United Kingdom	1,492
Switzerland	1,363
Netherlands	1,184
France	1,088

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### Florida Goods Imports from Europe, 2017

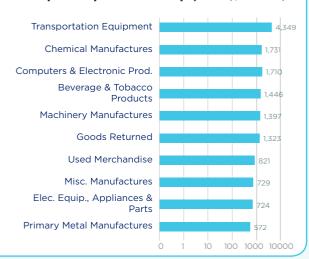
\$18.4 bn

Florida's imports from Europe are concentrated in transportation equipment, representing a 24% share of the state's total imports from Europe in 2017.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	3,627
France	3,518
United Kingdom	1,997
Italy	1,891
Spain	1,122

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Georgia and Europe**





138,300

Since 2006: +26,100 (23.3%)

European companies account for

**58**%

of foreign affiliate jobs

#### **Employment within Georgia, 2016**

Country	Employment
United Kingdom	33,700
Japan	30,900
Canada	25,600
Germany	25,000
France	22,000

On a country basis, U.K. companies operating in Georgia represented 14% of total foreign affiliate employment in Georgia, with U.K. multinationals supporting approximately 10,400 more jobs in 2016 than in 2010.

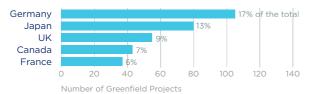
Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



Trade

#### **Sources of Greenfield Foreign Direct Investment (FDI)**





**615**Greenfield Projects (October 2008 -

September 2018)



\$8.6 bn

Roughly 30% of Georgia's exports to Europe consist of transportation equipment.

#### **Georgia Goods Imports from Europe, 2017**

\$28.4 bn

Transportation equipment, chemicals and machinery manufactures were the top product imports from Europe.

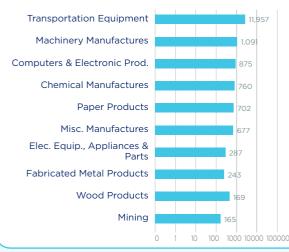
#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	1,852
United Kingdom	1,278
Netherlands	1,037
Belgium	684
Italy	607

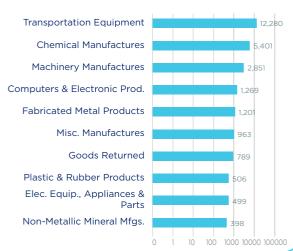
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	12,403
United Kingdom	3,963
France	2,439
Italy	1,833
Ireland	1,045

#### **Top Ten Exports to Europe, 2017** (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Hawaii and Europe**





14,900

Since 2006: +6,400 (75.3%)

iii

European companies account for

**43**%

of foreign affiliate jobs

#### **Employment within Hawaii, 2016**

Country	Employment
Japan	17,400
France	5,500
United Kingdom	3,000
Canada	1,300
Germany	1,000

On a country basis, French companies operating in Hawaii represented 15% of total foreign affiliate employment in Hawaii, with French multinationals supporting approximately 1,100 more jobs in 2016 than in 2010.

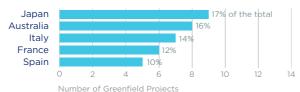
Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



Trade

#### **Sources of Greenfield Foreign Direct Investment (FDI)**





Greenfield Projects (October 2008 -September 2018)

Henrell Condo Francisto to

#### **Hawaii Goods Exports to Europe, 2017**

\$19.3 m

Transportation equipment, computer & electronic products, and processed foods led the way as top export categories.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	6
France	3
Germany	2
Sweden	2
Italy	1

## Hawaii Goods Imports from Europe, 2017

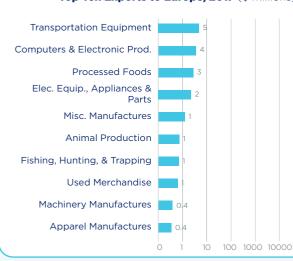
\$613.1 m

Hawaii's top European import category was oil & gas, which made up 45% of total imports in 2017.

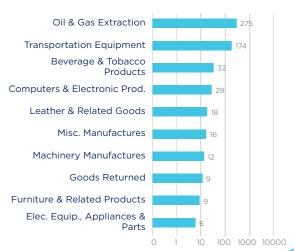
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Russia	275
France	184
Italy	41
Germany	29
Switzerland	18

#### **Top Ten Exports to Europe, 2017** (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)



Sources: Bureau of Economic Analysis; Foreign Trade Division, U.S. Census Bureau; U.S. Department of Commerce; SelectUSA.



## Idaho and Europe





10,600

Since 2006: -100 (-0.9%)

2006 2016



European companies account for

**69%** 

of foreign affiliate jobs

#### **Employment within Idaho, 2016**

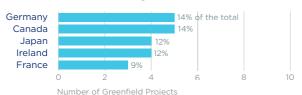
Country	Employment
Canada	2,800
United Kingdom	2,400
France	2,400
Germany	1,800
Switzerland	900

On a country basis, U.K. companies operating in Idaho represented 16% of total foreign affiliate employment in Idaho, with the number of U.K. supported jobs unchanged since 2010 at approximately 2,400.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Idaho Goods Exports to Europe, 2017**

\$409.1 m

Computers & electronic products made up one-third of total exports to Europe.

#### **Top European Export Markets, 2017**

Exports (\$ millions)
142
75
30
26
25

\$348.3 m

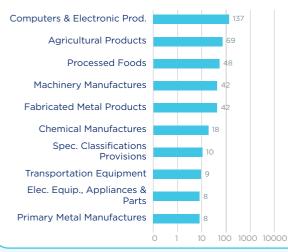
Machinery manufactures represented 31% of the state's total imports from Europe.

**Idaho Goods Imports from Europe, 2017** 

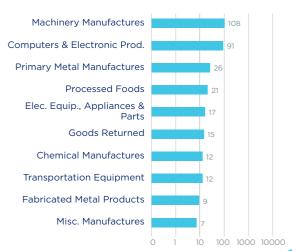
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	88
United Kingdom	45
Italy	36
Netherlands	33
Greece	30

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Illinois and Europe**





230,100

Since 2006: +58,800 (34.3%)

European companies account for

**68%** of foreign affiliate jobs

#### **Employment within Illinois, 2016**

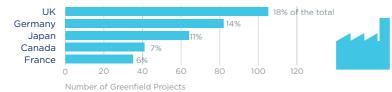
Country	Employment
United Kingdom	79,400
Japan	42,400
Germany	40,400
France	36,400
Canada	27,900

On a country basis, U.K. companies operating in Illinois represented 23% of total foreign affiliate employment in Illinois, with U.K. multinationals supporting approximately 28,500 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### Illinois Goods Exports to Europe, 2017

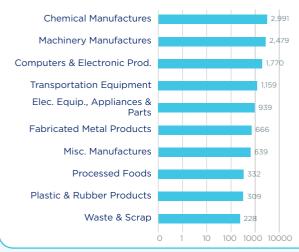
## \$12.9 bn

Chemicals and machinery are top exports, followed by computers & electronic products and transportation equipment.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	3,439
United Kingdom	1,740
Netherlands	1,711
Belgium	1,665
France	836

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### Illinois Goods Imports from Europe, 2017

**Greenfield Projects** 

(October 2008 -

September 2018)

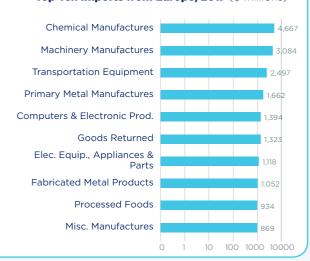
## \$22.1 bn

Chemicals and machinery are also the state's top imports from Europe.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	5,571
United Kingdom	2,595
Italy	2,468
Ireland	1,857
France	1,819

#### **Top Ten Imports from Europe, 2017** (\$ millions)





## **Indiana and Europe**





113,200

Since 2006: +15,300 (15.6%)



European companies account for

**59**%

of foreign affiliate jobs

#### **Employment within Indiana, 2016**

Country	Employment
Japan	50,600
United Kingdom	36,000
France	28,500
Canada	16,100
Germany	15,100

On a country basis, U.K. companies operating in Indiana represented 19% of total foreign affiliate employment in Indiana, with U.K. multinationals supporting approximately 4,400 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Indiana Goods Exports to Europe, 2017**

\$9.6 bn

Trade in chemicals represented 51% of total exports.

#### **Indiana Goods Imports from Europe, 2017**

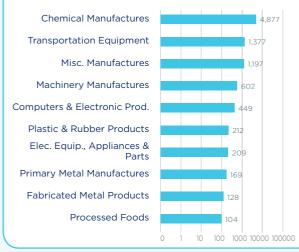
\$21.4 bn

Chemicals were also the state's largest import from Europe, representing 60% of total imports.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
France	1,557
Germany	1,546
Italy	1,357
United Kingdom	1,158
Netherlands	1,045

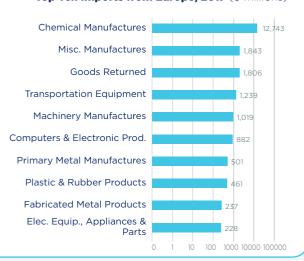
## Top Ten Exports to Europe, 2017 (\$ millions)



#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Ireland	8,208
Germany	3,257
Denmark	2,971
France	1,841
Switzerland	1,388

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Iowa and Europe**



34,800 Since 2006: +

Since 2006: +4,000 (13.0%)

# 100

2006 2016

European companies account for

**58%** 

of foreign affiliate jobs

#### **Employment within Iowa, 2016**

Country	Employment
United Kingdom	8,200
Netherlands	6,700
Japan	4,900
Canada	4,600
Germany	4,500

On a country basis, U.K. companies operating in Iowa represented 14% of total foreign affiliate employment in Iowa, with U.K. multinationals supporting approximately 100 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



# Sources of Greenfield Foreign Direct Investment (FDI) Germany Japan 10% 22% of the total

Denmark
France
Italy
0 2 4 6 8 10 12 14

Number of Greenfield Projects

Greenfield Projects (October 2008 -September 2018)



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.

#### Iowa Goods Exports to Europe, 2017

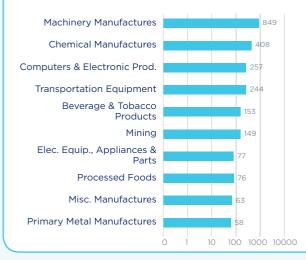
### \$2.5 bn

Machinery manufactures accounted for 33% of total exports, or roughly \$850 billion. Chemicals, the second largest export category, represented just half of that amount.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	471
United Kingdom	331
France	320
Ireland	190
Netherlands	148

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Iowa Goods Imports from Europe, 2017**

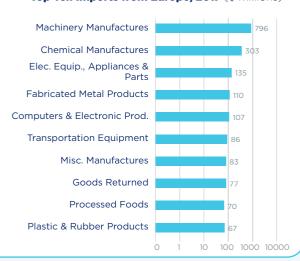
## \$1.9 bn

Machinery manufactures and chemicals were also the top product imports from Europe.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	665
Italy	266
France	162
United Kingdom	134
Netherlands	106

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Kansas and Europe**





34,500

Since 2006: +5,800 (20.2%)

Euro

European companies account for

**59%** 

of foreign affiliate jobs

#### **Employment within Kansas, 2016**

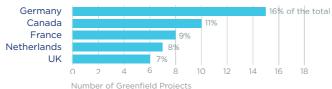
Country	Employment
Japan	9,600
United Kingdom	7,500
Canada	6,800
Switzerland	6,800
Germany	5,900

On a country basis, U.K. companies operating in Kansas represented 13% of total foreign affiliate employment in Kansas, with U.K. multinationals supporting approximately 1,700 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**





Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Kansas Goods Exports to Europe, 2017**

\$2.0 bn

Over two-thirds of Kansas' exports to Europe were concentrated in three main export categories: transportation equipment, computer & electronic products, and chemicals.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	430
United Kingdom	419
France	270
Belgium	104
Switzerland	98

## Kansas Goods Imports from Europe, 2017

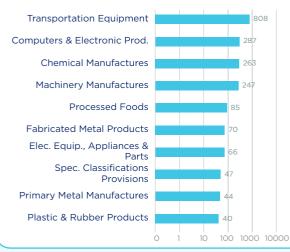
\$2.7 bn

Transportation equipment represented 31% of the state's total imports from Europe.

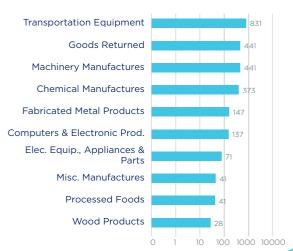
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	835
United Kingdom	553
France	286
Italy	209
Turkey	111

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)



## (8)



## **Kentucky and Europe**





51,300

Since 2006: +3,600 (7.5%)

European companies

of foreign affiliate jobs

account for

**42%** 

## Employment within Kentucky, 2016

Country	Employment
Japan	45,700
Germany	12,000
France	11,200
Canada	10,800
United Kingdom	9,400

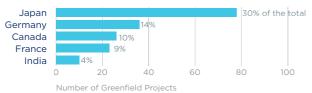
On a country basis, German companies operating in Kentucky represented 9% of total foreign affiliate employment in Kentucky, with German multinationals supporting approximately 2,500 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### Sources of Greenfield Foreign Direct Investment (FDI)







#### **Kentucky Goods Exports to Europe, 2017**

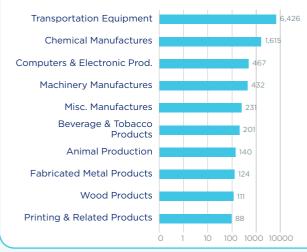
## \$10.1 bn

Reflecting the large presence of automobile manufacturers in the state, Kentucky's top export to Europe in 2017 was transportation equipment (64% of total exports).

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
<b>United Kingdom</b>	3,186
France	2,937
Germany	1,068
Netherlands	1,056
Austria	429

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Kentucky Goods Imports from Europe, 2017**

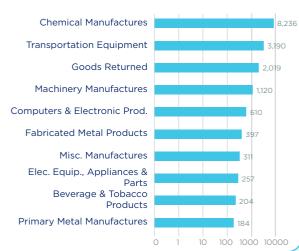
## \$13.6 bn

Chemical manufactures were the state's largest import, followed by transportation equipment.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Switzerland	3,389
France	2,701
Ireland	2,678
Germany	2,229
Belgium	1,244

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## Louisiana and Europe





45,600

Since 2006: +14,000

European companies account for

**67%** 

of foreign affiliate jobs

#### **Employment within Louisiana, 2016**

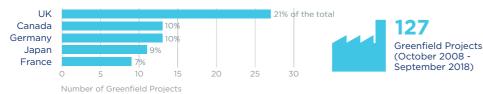
Country	Employment
United Kingdom	16,300
France	10,400
Canada	8,100
Germany	5,800
Netherlands	5,200

On a country basis, U.K. companies operating in Louisiana represented 24% of total foreign affiliate employment in Louisiana, with U.K. multinationals supporting approximately 4,800 more jobs in 2015 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Louisiana Goods Exports to Europe, 2017**

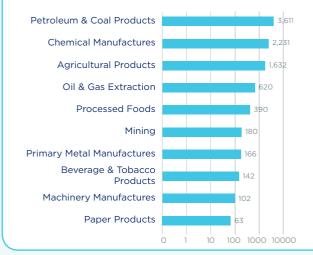
\$9.4 bn

The majority of the state's exports consist of a mix of petroleum & coal products and chemicals.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Netherlands	2,507
Belgium	1,235
United Kingdom	1,015
France	976
Spain	737

#### Top Ten Exports to Europe, 2017 (\$ millions)



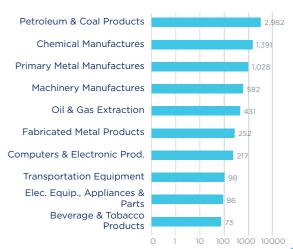
#### **Louisiana Goods Imports from Europe, 2017**

Petroleum & coal products were Louisiana's top imported good from Europe.

#### Top European Import Markets, 2017

Country	Imports (\$ millions)
Russia	2,762
United Kingdom	780
Germany	592
Norway	546
Italy	456

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Maine and Europe**





22,100

Since 2006: +3,100 (16.3%)

European companies account for

**65%** of foreign affiliate jobs

#### **Employment within Maine, 2016**

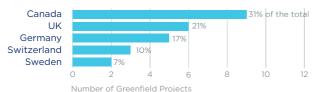
Country	Employment
Canada	8,600
United Kingdom	2,800
Switzerland	2,500
Germany	1,800
Japan	1,200

On a country basis, U.K. companies operating in Maine represented 8% of total foreign affiliate employment in Maine, with U.K. multinationals supporting approximately 900 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**





Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Maine Goods Exports to Europe, 2017**

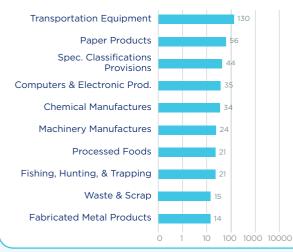
\$443.5 m

Transportation equipment and paper products are the state's top exports to Europe.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	150
Italy	58
Netherlands	54
United Kingdom	48
Belgium	27

#### **Top Ten Exports to Europe, 2017** (\$ millions)



#### **Maine Goods Imports from Europe, 2017**

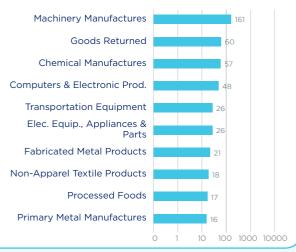
\$533.6 m

Machinery was the largest import category, representing over 30% of the state's total European imports

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	143
United Kingdom	60
Italy	43
Turkey	29
France	28

#### **Top Ten Imports from Europe, 20167**(\$ millions)



**Employment within Maryland, 2016** 





## **Maryland and Europe**





91,800

Since 2006: +5,200 (6.0%)

Country	Employment
United Kingdom	25,600
Netherlands	24,500
Canada	14,000
France	9,500
Germany	8,000

On a country basis, U.K. companies operating in Maryland represented 22% of total foreign affiliate employment in Maryland, with U.K. multinationals supporting approximately 7,700 more jobs in 2016 than in 2010.



European companies account for 78%

**78%** of foreign affiliate jobs

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Maryland Goods Exports to Europe, 2017**

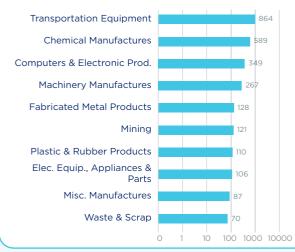
\$3.0 bn

Top exports are transportation equipment, chemicals, and computers & electronic products.

#### **Top European Export Markets, 2017**

Exports (\$ millions)
619
462
436
433
428

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Maryland Goods Imports from Europe, 2017**

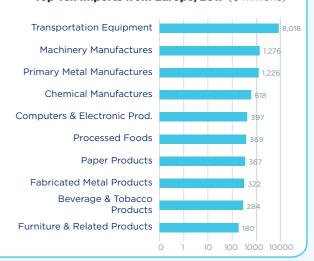
\$14.1 bn

Transportation equipment and machinery manufactures were the top product imports.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	4,074
United Kingdom	3,882
Sweden	895
Finland	845
Russia	778

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Massachusetts and Europe**





159,500

Since 2006: +40,200 (33.7%)



European companies account for

**75**%

of foreign affiliate jobs

#### **Employment within Massachusetts, 2016**

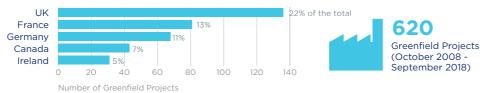
Country	Employment
United Kingdom	40,700
Netherlands	36,200
France	22,700
Canada	22,600
Germany	17,700

On a country basis, U.K. companies operating in Massachusetts represented 19% of total foreign affiliate employment in Massachusetts, with U.K. multinationals supporting approximately 2,400 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### Sources of Greenfield Foreign Direct Investment (FDI)



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Massachusetts Goods Exports to Europe, 2017**

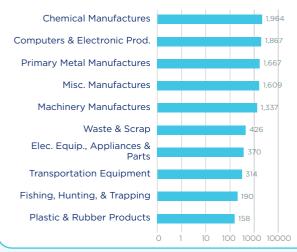
## \$10.6 bn

Computers & electronic products and chemicals each account for over 17% of total European exports.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	2,116
Germany	1,820
Netherlands	1,255
Switzerland	1,119
Ireland	914

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Massachusetts Goods Imports from Europe, 2017**

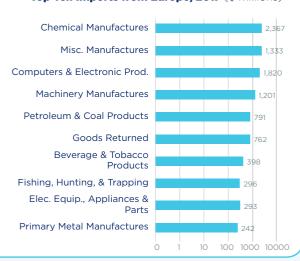
## \$12.1 bn

Key imports from Europe include chemicals, miscellaneous manufactured items, and computer & electronic products.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Ireland	2,388
Germany	1,982
Italy	1,905
United Kingdom	1,577
Switzerland	1,123

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Michigan and Europe**





159,900

Since 2006: +19,000 (13.5%)



European companies account for

**64%** of foreign affiliate jobs

#### **Employment within Michigan, 2016**

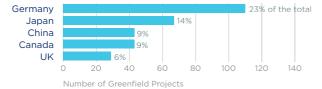
Country	Employment
Germany	37,600
Japan	34,000
United Kingdom	31,800
Canada	26,700
Netherlands	25,000*

On a country basis, German companies operating in Michigan represented 15% of total foreign affiliate employment in Michigan, with German multinationals supporting approximately 11,700 more jobs in 2016 than in 2010. \*Netherlands employment data supressed to avoid disclosure of individual company data. Range of 25,000 - 49,999 employees was given instead.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**







Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.

#### Michigan Goods Exports to Europe, 2017

\$7.6 bn

Not surprisingly, transportation equipment is the largest exported product to Europe, representing 35% of the state's total exports.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	1,986
Italy	1,155
<b>United Kingdom</b>	945
Belgium	744
France	518

#### ATE C In ...

Michigan Goods Imports from Europe, 2017

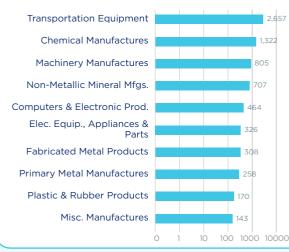
\$15.6 bn

Imports from Europe mainly consist of transportation equipment and machinery.

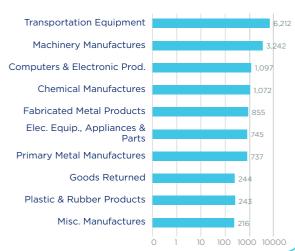
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	5,079
Italy	3,810
Spain	1,353
United Kingdom	856
France	612

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)



## **(9)**



## **Minnesota and Europe**





74,000

Since 2006: +23,300 (46.0%)

European companies account for

**62%** of foreign affiliate jobs

#### **Employment within Minnesota, 2016**

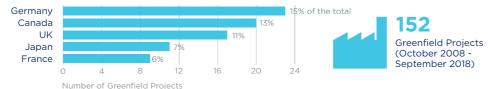
Country	Employment
Canada	23,900
United Kingdom	19,300
Germany	15,700
Japan	8,000
France	7,300

On a country basis, U.K. companies operating in Minnesota represented 16% of total foreign affiliate employment in Minnesota, with U.K. multinationals supporting approximately 4,600 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### Sources of Greenfield Foreign Direct Investment (FDI)



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Minnesota Goods Exports to Europe, 2017**

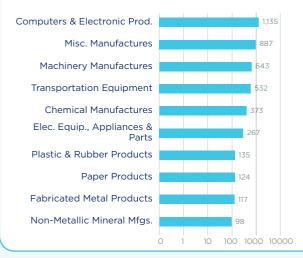
\$4.6 bn

Computers & electronic products account for 24% of Minnesota's exports to Europe.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	886
Belgium	661
United Kingdom	590
Netherlands	502
Ireland	397

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Minnesota Goods Imports from Europe, 2017**

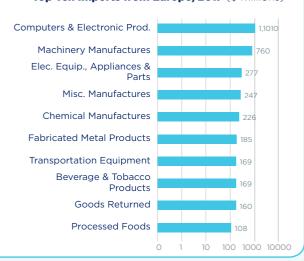
\$3.6 bn

Computers & electronic products were also the state's top imports from Europe.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	946
Ireland	669
Italy	413
United Kingdom	355
France	250

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Mississippi and Europe**





20,800

Since 2006: +8,300 (66.4%)

European companies account for

**55**%

of foreign affiliate jobs

#### **Employment within Mississippi, 2016**

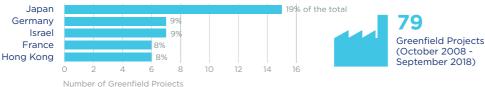
Country	Employment
Japan	9,400
United Kingdom	4,800
Germany	4,300
France	4,200
Canada	4,000

On a country basis, U.K. companies operating in Mississippi represented 13% of total foreign affiliate employment in Mississippi, with U.K. multinationals supporting approximately 1,100 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.







Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### Mississippi Goods Exports to Europe, 2017

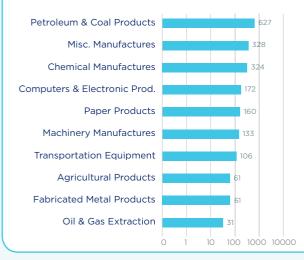
\$2.1 bn

Petroleum & coal products, miscellaneous manufactured commodities, and chemicals rank as the top exports to Europe.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Belgium	468
Netherlands	365
Gibraltar	351
Germany	213
United Kingdom	170

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Mississippi Goods Imports from Europe, 2017**

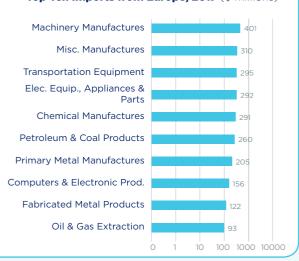
\$2.7 bn

Imports from Europe were relatively diverse, with seven different product categories each accounting for over \$200 billion worth of European imports in 2017.

#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	740
United Kingdom	314
Italy	246
France	185
Ireland	162

#### **Top Ten Imports from Europe, 2017** (\$ millions)







## **Missouri and Europe**





79,200

Since 2006: +17,500 (28.4%)



European companies account for

**66%** of foreign affiliate jobs

#### **Employment within Missouri, 2016**

Country	Employment
United Kingdom	25,500
Canada	13,100
Germany	11,800
France	11,500
Japan	10,400

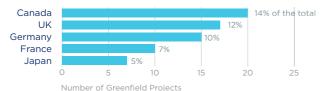
On a country basis, U.K. companies operating in Missouri represented 21% of total foreign affiliate employment in Missouri, with U.K. multinationals supporting approximately 8,100 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 -September 2018)



#### **Missouri Goods Exports to Europe, 2017**

Top exports to Europe from Missouri are chemicals, transportation equipment and machinery manufactures.

#### **Top European Export Markets, 2016**

Country	Exports (\$ millions)
Belgium	492
Germany	459
<b>United Kingdom</b>	302
France	207
Switzerland	151

## **Missouri Goods Imports from Europe, 2017**

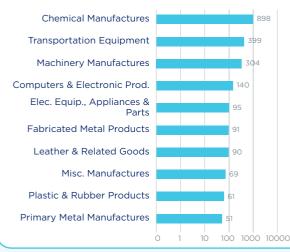
\$4.0 bn

Chemicals, machinery, and beverage & tobacco products were the top imported goods from

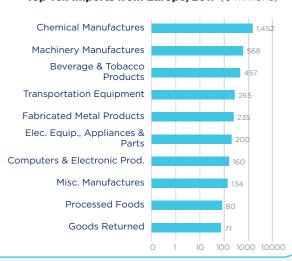
#### **Top European Import Markets, 2016**

Country	Imports (\$ millions)
Germany	1,353
Belgium	387
<b>United Kingdom</b>	316
Italy	277
France	258

#### Top Ten Exports to Europe, 2017 (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)



## MONTANA



## **Montana and Europe**





4,800

Since 2006: -800 (-14.3%)

European companies account for

**67**%

of foreign affiliate jobs

#### **Employment within Montana, 2016**

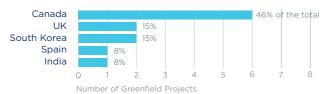
Country	Employment
United Kingdom	2,200
Canada	1,000
France	800
Germany	300
Netherlands	300

On a country basis, U.K. companies operating in Montana represented 31% of total foreign affiliate employment in Montana, with U.K. multinationals supporting approximately 1,100 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



#### **Sources of Greenfield Foreign Direct Investment (FDI)**





Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



#### **Montana Goods Exports to Europe, 2017**

\$227.5 m

Exports are relatively small and skewed towards chemicals, machinery and agricultural products.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Belgium	52
Germany	28
<b>United Kingdom</b>	25
Netherlands	18
France	16

## Montana Goods Imports from Europe, 2017

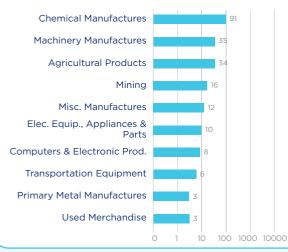
\$347.9 m

Montana's imports from Europe are also small and heavily concentrated in waste & scrap, machinery and used merchandise.

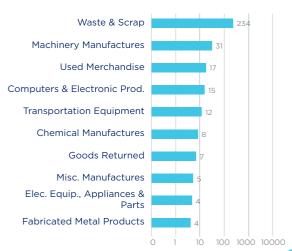
#### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	264
Italy	19
France	17
United Kingdom	12
Finland	5

#### **Top Ten Exports to Europe, 2017** (\$ millions)



#### **Top Ten Imports from Europe, 2017** (\$ millions)



Sources: Bureau of Economic Analysis; Foreign Trade Division, U.S. Census Bureau; U.S. Department of Commerce; SelectUSA.





## **Nebraska and Europe**





16,000

Since 2006: +4,900 (44.1%)

European companies account for

**50%** of foreign affiliate jobs

#### **Employment within Nebraska, 2016**

Country	Employment
Japan	4,800
United Kingdom	4,500
France	3,300
Switzerland	2,100
Canada	1,900

On a country basis, U.K. companies operating in Nebraska represented 14% of total foreign affiliate employment in Nebraska, with U.K. multinationals supporting approximately 1,900 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.





## Sources of Greenfield Foreign Direct Investment (FDI)

| Germany | 30% of the to | 30



Greenfield Projects (October 2008 -September 2018)



#### **Nebraska Goods Exports to Europe, 2017**

\$0.9 bn

Top exports are processed foods, machinery and chemicals.

#### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Netherlands	170
Belgium	139
Germany	136
France	106
Italy	64

#### **Top Ten Exports to Europe, 2017** (\$ millions)



#### Nebraska Goods Imports from Europe, 2017

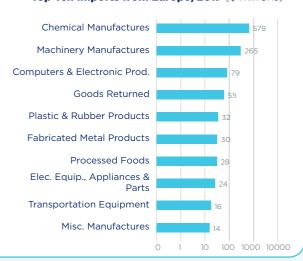
**\$1.2** br

Chemicals were nearly half of Nebraska's total imports from Europe in 2017.

#### **Top European Import Markets, 2016**

Country	Imports (\$ millions)
Germany	272
Switzerland	251
<b>United Kingdom</b>	211
Austria	121
France	85

#### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 

# 8



# **Nevada and Europe**





25,600

Since 2006: +4,700 (22.5%)

iji

European companies account for

**53**%

of foreign affiliate jobs

### **Employment within Nevada, 2016**

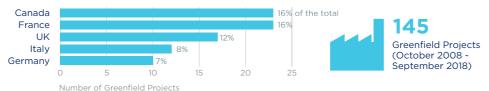
Country	Employment
Canada	9,400
United Kingdom	6,900
France	6,000
Germany	3,400
Japan	3,200

On a country basis, U.K. companies operating in Nevada represented 14% of total foreign affiliate employment in Nevada, with U.K. multinationals supporting approximately 600 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Nevada Goods Exports to Europe, 2017**

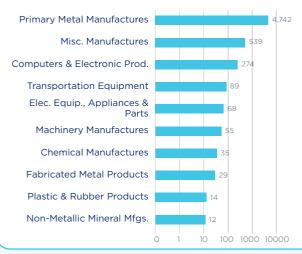
\$5.9 bn

Primary metal manufactures account for 80% of total exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Switzerland	4,736
Germany	285
Belgium	170
United Kingdom	157
Netherlands	133

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Nevada Goods Imports from Europe, 2017**

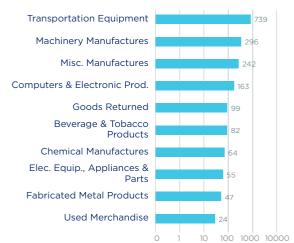
\$2.0 br

Imports from Europe to Nevada are more diverse, ranging from transportation equipment to machinery to beverages & tobacco.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	685
France	421
Belgium	133
Italy	131
Switzerland	124

### Top Ten Imports from Europe, 2017 (\$ millions)







# **New Hampshire and Europe**





29,700

Since 2006: +500 (17%)



European companies account for

**69%** of foreign affiliate jobs

### **Employment within New Hampshire, 2016**

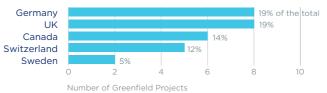
Country	Employment
United Kingdom	10,600
Canada	6,300
Switzerland	4,200
Japan	3,900
France	3,800

On a country basis, U.K. companies operating in New Hampshire represented 24% of total foreign affiliate employment in New Hampshire, with U.K. multinationals supporting approximately 300 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





42
Greenfield Project
(October 2008 -

Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **New Hampshire Goods Exports to Europe, 2017**

\$1.9 bn

Computers and transportation equipment are the top exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Ireland	369
Germany	325
<b>United Kingdom</b>	202
France	200
Spain	192

### New Hampshire Goods Imports from Europe, 2017

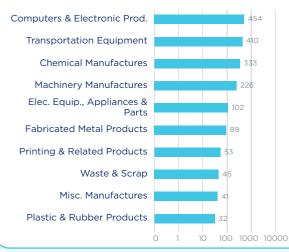
\$2.7 br

Transportation equipment represented 41% of the state's total imports from Europe.

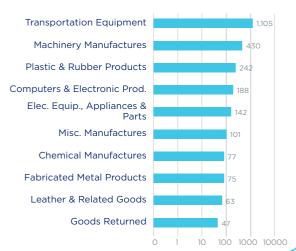
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	584
Poland	499
<b>United Kingdom</b>	443
Italy	171
Ireland	137

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)







# **New Jersey and Europe**





198,400

Since 2006: +27,600 (16.2%)

# iii

European companies account for

**70%** of foreign affiliate jobs

### **Employment within New Jersey, 2016**

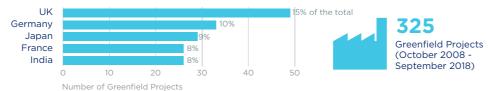
Country	Employment
United Kingdom	46,400
France	45,500
Switzerland	31,000
Canada	27,100
Japan	26,100

On a country basis, U.K. companies operating in New Jersey represented 16% of total foreign affiliate employment in New Jersey, with U.K. multinationals supporting approximately 10,400 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **New Jersey Goods Exports to Europe, 2017**

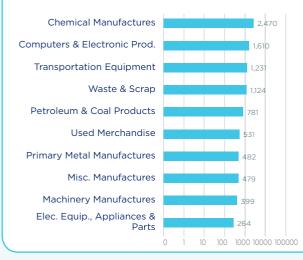
# \$10.5 bn

Top exports consist of chemical manufactures and computers & electronic products.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	2,200
Germany	1,506
Netherlands	1,484
France	1,009
Belgium	874
Netherlands France	1,484 1,009

### Top Ten Exports to Europe, 2017 (\$ millions)



### **New Jersey Goods Imports from Europe, 2017**

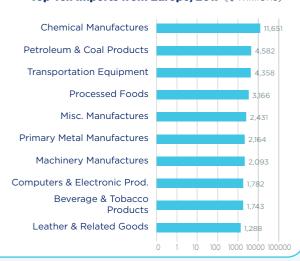
# \$40.8 bn

29% of imports from Europe were related to the chemicals industry.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Italy	6,567
Germany	6,350
Switzerland	5,441
France	3,993
United Kingdom	3,843

### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 





# **New Mexico and Europe**





10,800

Since 2006: +3,000 (38.5%)

European companies account for 60%

60% of foreign affiliate jobs

### **Employment within New Mexico, 2016**

Country	Employment
Canada	3,100
Germany	2,700
France	2,600
United Kingdom	2,600
Japan	1,300

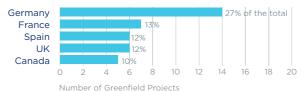
On a country basis, German companies operating in New Mexico represented 15% of total foreign affiliate employment in New Mexico, with German multinationals supporting approximately the same number of jobs in 2016 as in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





**52**Greenfield Projects (October 2008 -

(October 2008 -September 2018)



### **New Mexico Goods Exports to Europe, 2017**

\$344.6 m

Exports are relatively small and skewed toward computers & electronic products and transportation equipment

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	63
Turkey	43
Italy	31
Belgium	30
Netherlands	28

### +---

\$392.0 m

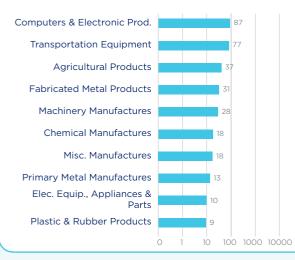
Chemicals were the most imported products from Europe, followed by machinery and computers & electronic products.

**New Mexico Goods Imports from Europe, 2017** 

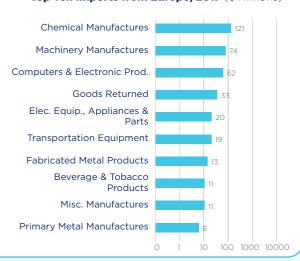
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Austria	120
Germany	82
Netherlands	33
United Kingdom	33
France	31

### **Top Ten Exports to Europe, 2017** (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 





# New York and Europe





348,400

Since 2006: +66,300 (23.5%)

European companies account for

**70**% of foreign affiliate jobs

### **Employment within New York, 2016**

Country	Employment
United Kingdom	112,400
France	56,700
Canada	53,700
Japan	42,500
Germany	42,200

On a country basis, U.K. companies operating in New York represented 23% of total foreign affiliate employment in New York, with U.K. multinationals supporting approximately 23,200 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





2,099 **Greenfield Projects** (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **New York Goods Exports to Europe, 2017**

Number of Greenfield Projects

\$26.2 bn

Germany

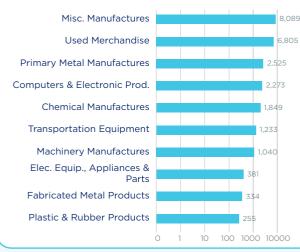
Spain

Miscellaneous manufactures and used merchandise were the top exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	6,760
Switzerland	5,593
Belgium	3,389
Germany	2,718
France	2,042

### Top Ten Exports to Europe, 2017 (\$ millions)



### **New York Goods Imports from Europe, 2017**

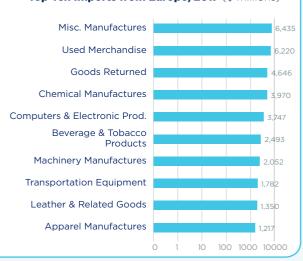
\$40.4 bn

New York's imports from Europe are relatively diverse, ranging from manufactured goods to chemicals and transportation equipment.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
France	6,882
Italy	5,939
Switzerland	5,492
Germany	5,013
United Kingdom	4,885

### **Top Ten Imports from Europe, 2017** (\$ millions)







# **North Carolina and Europe**





184,300

Since 2006: +30,500 (19.8%)



European companies account for

**71%** 

of foreign affiliate jobs

### **Employment within North Carolina, 2016**

Country	Employment
United Kingdom	37,900
Germany	31,400
Japan	25,800
France	20,000
Switzerland	18,800

On a country basis, U.K. companies operating in North Carolina represented 15% of total foreign affiliate employment in North Carolina, with U.K. multinationals supporting approximately 11,200 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### North Carolina Goods Exports to Europe, 2017

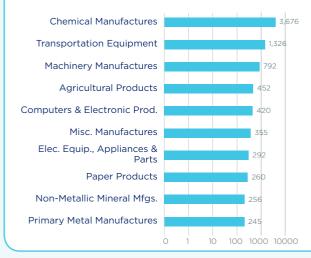
### \$9.1 bn

Chemical manufactures account for about 40% of total exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
France	1,444
United Kingdom	1,348
Germany	1,121
Ireland	1,008
Netherlands	930

### Top Ten Exports to Europe, 2017 (\$ millions)



### North Carolina Goods Imports from Europe, 2017

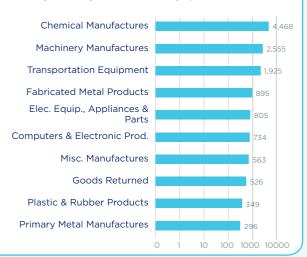
# \$14.5 br

Imports from Europe mainly consist of chemicals, machinery and transportation equipment.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	4,051
France	2,122
Italy	1,531
United Kingdom	1,339
Switzerland	740

### **Top Ten Imports from Europe, 2017** (\$ millions)





# **North Dakota and Europe**





5,200

Since 2006: +1,200 (30.0%)

European companies

account for 41%

of foreign affiliate jobs

### **Employment within North Dakota, 2016**

Country	Employment
Canada	2,200
United Kingdom	1,800
Netherlands	1,000*
Japan	800
France	600

On a country basis, U.K. companies operating in North Dakota represented 14% of total foreign affiliate employment in North Dakota, with U.K. multinationals supporting approximately 1,200 more jobs in 2016 than in 2010.

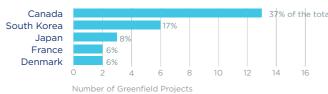
data supressed to avoid disclosure of individual company data. Range of 1,000 - 2,499 employees was given instead.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





### **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### North Dakota Goods Exports to Europe, 2017

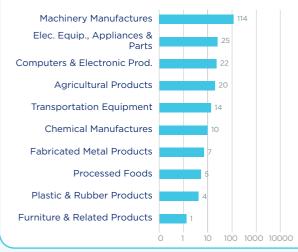
\$225.0 m

51% of the state's exports consist of machinery

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	46
Czech Republic	46
Russia	23
United Kingdom	20
Ukraine	18

### **Top Ten Exports to Europe, 2017** (\$ millions)



### North Dakota Goods Imports from Europe, 2017

Machinery is North Dakota's primary product import from Europe, followed by transportation equipment.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	109
France	57
<b>United Kingdom</b>	42
Italy	33
Czech Republic	17

### **Top Ten Imports from Europe, 2017** (\$ millions)







# Ohio and Europe





157,500

Since 2006: +23,500 (17.5%)

European companies account for

**59%** 

of foreign affiliate jobs

### **Employment within Ohio, 2016**

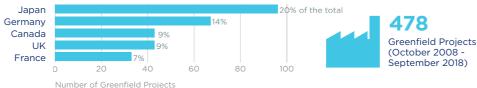
Country	Employment
Japan	62,800
United Kingdom	45,900
Germany	31,900
Canada	24,700
Switzerland	19,700

On a country basis, U.K. companies operating in Ohio represented 17% of total foreign affiliate employment in Ohio, with U.K. multinationals supporting approximately 9,300 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



# **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Ohio Goods Exports to Europe, 2017**

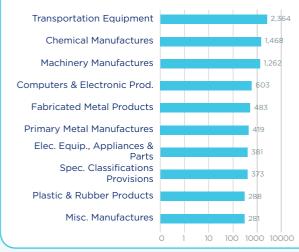
\$8.7 bn

Transportation equipment, chemicals and machinery are the state's top exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
<b>United Kingdom</b>	2,105
Germany	1,338
France	1,236
Netherlands	698
Belgium	667

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Ohio Goods Imports from Europe, 2017**

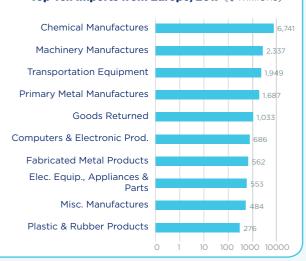
\$17.4 bn

Chemical manufactures make up 39% of Ohio's

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	4,682
Ireland	3,565
France	1,679
Italy	1,318
United Kingdom	1,205

### **Top Ten Imports from Europe, 2017** (\$ millions)







# **Oklahoma and Europe**





35,600

Since 2006: +14,100 (65.6%)

iii

European companies account for

**69%** of foreign affiliate jobs

### **Employment within Oklahoma, 2016**

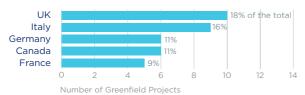
Country	Employment
United Kingdom	10,000
France	8,800
Germany	3,900
Switzerland	3,600
Canada	3,200

On a country basis, U.K. companies operating in Oklahoma represented 19% of total foreign affiliate employment in Oklahoma, with U.K. multinationals supporting approximately 4,200 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**







 $Number\ of\ projects\ does\ not\ directly\ translate\ to\ value\ of\ projects\ or\ jobs\ added.\ Greenfield\ FDI\ is\ investment\ in\ new\ assets.$ 

### **Oklahoma Goods Exports to Europe, 2017**

\$1.3 bn

Top exports include computers, transportation equipment and machinery.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	406
Netherlands	247
United Kingdom	210
Russia	75
France	67

# Oklahoma Goods Imports from Europe, 2017

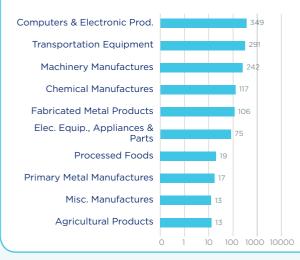
\$1.5 bn

Machinery manufactures and transportation equipment are key European import categories.

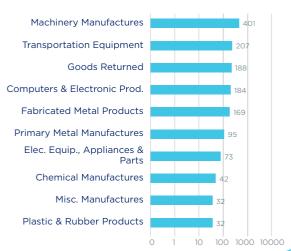
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	360
United Kingdom	229
France	185
Italy	166
Spain	106

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)



Sources: Bureau of Economic Analysis; Foreign Trade Division, U.S. Census Bureau; U.S. Department of Commerce; SelectUSA.





# **Oregon and Europe**





45,100

Since 2006: +14,800 (48.8%)



European companies account for

**69%** of foreign affiliate jobs

### **Employment within Oregon, 2016**

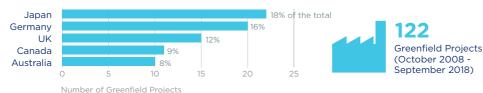
Country	Employment
United Kingdom	17,000
Japan	9,300
Germany	8,800
Switzerland	5,700
Canada	5,500

On a country basis, U.K. companies operating in Oregon represented 26% of total foreign affiliate employment in Oregon, with U.K. multinationals supporting approximately 8,700 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### Sources of Greenfield Foreign Direct Investment (FDI)



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Oregon Goods Exports to Europe, 2017**

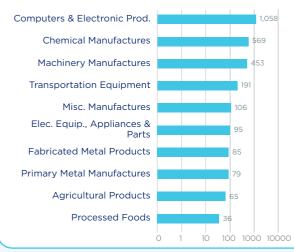
\$2.9 bn

More than one-third of Oregon's exports to Europe consist of computers & electronic products.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	498
United Kingdom	451
Switzerland	417
Netherlands	360
France	187

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Oregon Goods Imports from Europe, 2017**

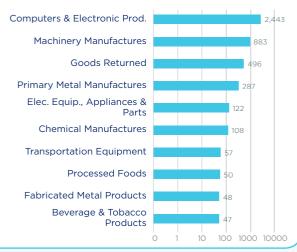
\$4.8 bn

Computers & electronic products represent over 50% of Oregon's total European imports.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Ireland	2,480
Netherlands	751
Germany	486
Russia	237
United Kingdom	140

### Top Ten Imports from Europe, 2017 (\$ millions)



# NO.



# **Pennsylvania and Europe**





220,400

Since 2006: +37,900 (20.8%)

European companies account for

**73**%

of foreign affiliate jobs

### **Employment within Pennsylvania, 2016**

Country	Employment
United Kingdom	53,100
Netherlands	43,000
Germany	36,600
France	29,600
Japan	24,300

On a country basis, U.K. companies operating in Pennsylvania represented 18% of total foreign affiliate employment in Pennsylvania, with U.K. multinationals supporting approximately 500 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### Pennsylvania Goods Exports to Europe, 2017

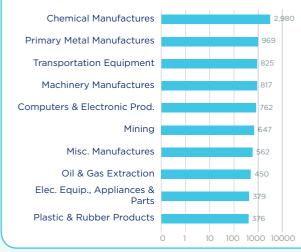
### \$10.1 bn

Chemicals and primary metals were the state's largest exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
<b>United Kingdom</b>	1,882
Netherlands	1,521
Germany	1,472
Belgium	1,330
France	667

### **Top Ten Exports to Europe, 2016** (\$ millions)



### Pennsylvania Goods Imports from Europe, 2017

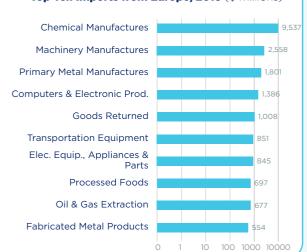
# \$22.5 bn

Imports are heavily concentrated, with chemicals making up over 42% of the state's total European imports.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	5,216
Switzerland	3,146
Italy	2,297
United Kingdom	1,991
France	1,191

### Top Ten Imports from Europe, 2016 (\$ millions)



Sources: Bureau of Economic Analysis; Foreign Trade Division, U.S. Census Bureau; U.S. Department of Commerce; SelectUSA.





# **Rhode Island and Europe**





21,700

Since 2006: +7,300 (50.7%)

iti

European companies account for

**79**%

of foreign affiliate jobs

### **Employment within Rhode Island, 2016**

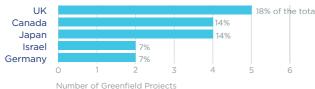
Country	Employment
Netherlands	5,000*
United Kingdom	4,700
France	4,300
Canada	1,500
Japan	1,400

On a country basis, Dutch companies operating in Rhode Island represented 19% of total foreign affiliate employment in Rhode Island, with Dutch multinationals supporting approximately 1,250 more jobs in 2016 than in 2010. \*Netherlands employment data supressed to avoid disclosure of individual company data. Range of 5,000 - 9,999 employees was given instead.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





28
Greenfield Projects
(October 2008 September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Rhode Island Goods Exports to Europe, 2017**

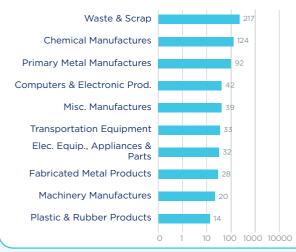
\$0.7 bn

Waste & scrap account for 32% of exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Turkey	125
Germany	120
Italy	114
United Kingdom	89
Ireland	65

### **Top Ten Exports to Europe, 2017** (\$ millions)



### **Rhode Island Goods Imports from Europe, 2017**

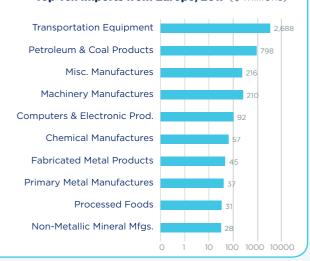
\$4.3 bn

Transportation equipment is the top imported product from Europe, which represents 62% of total European imports.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	1,881
United Kingdom	611
Slovakia	550
France	317
Hungary	179

### **Top Ten Imports from Europe, 2017** (\$ millions)





# South Carolina and Europe





101,500

Since 2006: +17,300 (20.5%)

European companies account for

1% of foreign affiliate jobs

### **Employment within South Carolina, 2016**

Country	Employment
Germany	29,200
France	25,100
Japan	15,100
United Kingdom	12,300
Canada	10,500

On a country basis, German companies operating in South Carolina represented 21% of total foreign affiliate employment in South Carolina, with German multinationals supporting approximately 9,900 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



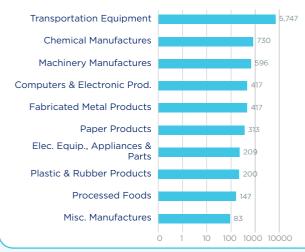
### **South Carolina Goods Exports to Europe, 2017**

63% of the state's exports consist of transportation equipment, reflecting the state's linkages with European auto manufacturers.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Germany	3,647
United Kingdom	2,287
Belgium	595
France	504
Norway	335

### Top Ten Exports to Europe, 2017 (\$ millions)



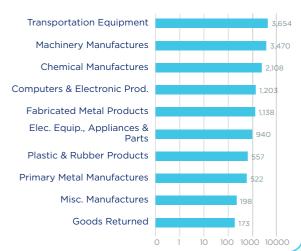
### South Carolina Goods Imports from Europe, 2017

Transportation equipment was also the top imported product from Europe, making up 24% of the state's total European imports.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	6,873
Austria	1,115
France	933
United Kingdom	890
Italy	740

### **Top Ten Imports from Europe, 2017** (\$ millions)







# **South Dakota and Europe**





4,900

Since 2006: +1,600 (50.0%)

Europe accour

European companies account for

**40%** of foreign affiliate jobs

### **Employment within South Dakota, 2016**

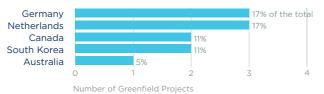
Country	Employment
Canada	2,300
United Kingdom	1,500
France	1,400
Germany	600
Switzerland	600

On a country basis, U.K. companies operating in South Dakota represented 12% of total foreign affiliate employment in South Dakota, with U.K. multinationals supporting approximately the same number of jobs in 2016 as in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





Greenfield Pro

Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **South Dakota Goods Exports to Europe, 2017**

\$131.4 m

Machinery manufactures are the state's top export to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Belgium	38
Germany	28
<b>United Kingdom</b>	18
Ukraine	8
Finland	7

### **#17**

\$120.9 m

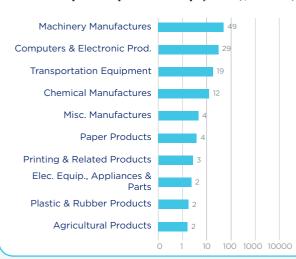
Machinery manufactures and computers & electronic products make up the bulk of imports from Europe.

**South Dakota Goods Imports from Europe, 2017** 

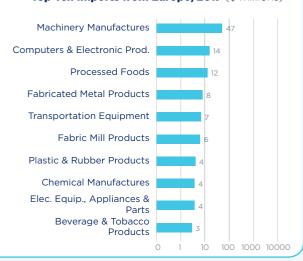
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	28
Italy	15
Spain	12
Netherlands	12
Poland	10

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)







# **Tennessee and Europe**





98,000

Since 2006: +23,300 (31.2%)

European companies account for

**55**%

of foreign affiliate jobs

### **Employment within Tennessee, 2016**

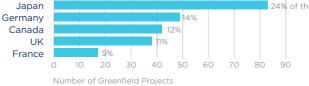
Country	Employment
Japan	48,600
United Kingdom	20,900
France	19,900
Germany	16,600
Netherlands	12,300

On a country basis, U.K. companies operating in Tennessee represented 12% of total foreign affiliate employment in Tennessee, with U.K. multinationals supporting approximately 1,000 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.









Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Tennessee Goods Exports to Europe, 2017**

\$6.7 bn

Miscellaneous and chemical manufactures as well as computers & electronic products make up the bulk of exports.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Belgium	1,350
Netherlands	1,273
Germany	1,063
United Kingdom	937
France	402

\$19.1 bn

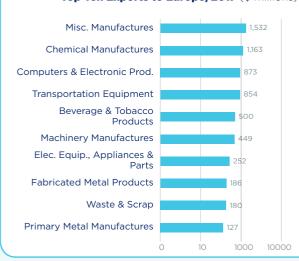
Chemicals dominate the state's imports from Europe.

**Tennessee Goods Imports from Europe, 2017** 

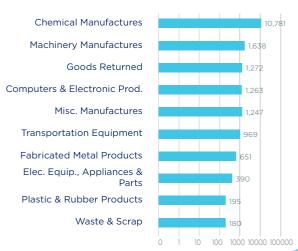
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Ireland	6,925
Germany	3,634
<b>United Kingdom</b>	1,995
Italy	1,684
Switzerland	998

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 





# **Texas and Europe**





367,900

Since 2006: +132,000 (56.0%)

iii

European companies account for

**62**%

of foreign affiliate jobs

Number of Greenfield Projects

### **Employment within Texas, 2016**

Country	Employment
United Kingdom	119,100
France	62,800
Japan	51,300
Canada	46,200
Germany	44,500

On a country basis, U.K. companies operating in Texas represented 20% of total foreign affiliate employment in Texas, with U.K. multinationals supporting approximately 48,500 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.





Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Texas Goods Exports to Europe, 2017**

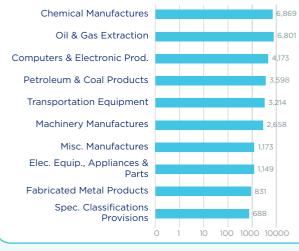
\$33.7 bn

Exports are relatively diverse ranging from chemicals and petroleum to computers and machinery manufactures.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Netherlands	7,026
United Kingdom	5,662
Germany	3,999
Belgium	3,637
France	3,180

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Texas Goods Imports from Europe, 2017**

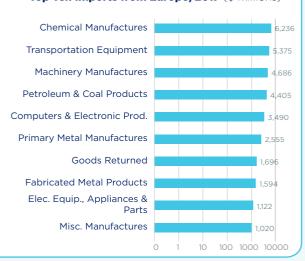
\$36.4 bn

Chemicals and transportation equipment are the top product imports.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	7,003
United Kingdom	4,076
Italy	3,565
France	3,164
Ireland	2,909

### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 





# Utah and Europe





32,600

Since 2006: +5,700 (21.2%)

European companies account for

**68%** 

of foreign affiliate jobs

### **Employment within Utah, 2016**

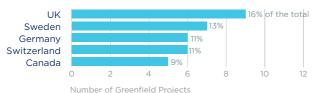
Country	Employment
United Kingdom	8,900
France	5,500
Germany	4,900
Switzerland	3,700
Japan	2,600

On a country basis, U.K. companies operating in Utah represented 19% of total foreign affiliate employment in Utah, with U.K. multinationals supporting approximately 3,100 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Utah Goods Exports to Europe, 2017**

\$4.1 bn

Primary metals dominate the state's exports to

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
<b>United Kingdom</b>	2,319
Netherlands	407
Germany	394
Italy	194
France	181

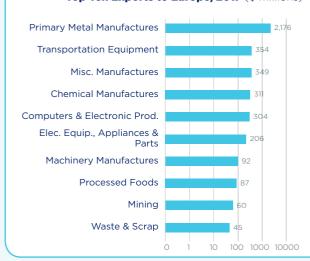
# **Utah Goods Imports from Europe, 2017**

Imports are relatively diversified. Machinery, chemicals and miscellaneous manufactured goods are the state's top product imports from Europe.

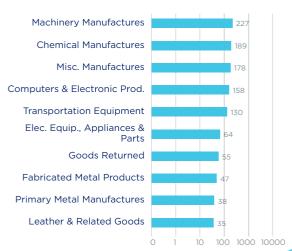
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	215
France	174
<b>United Kingdom</b>	139
Italy	101
Austria	100

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)



# ۵



# **Vermont and Europe**





7,700

Since 2006: +1,000 (14.9%)

European companies account for

**69%** of foreign affiliate jobs

### **Employment within Vermont, 2016**

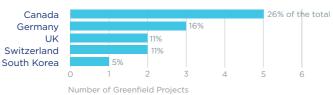
Country	Employment
Canada	2,100
France	1,200
United Kingdom	1,000*
Switzerland	1,000
Netherlands	800

On a country basis, French companies operating in Vermont represented 11% of total foreign affiliate employment in Vermont, with French multinationals supporting approximately 300 more jobs in 2016 than in 2010. \*\*UK employment data supressed to avoid disclosure of individual company data. Range of 1,000 - 2,499 employees was given instead.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Vermont Goods Exports to Europe, 2017**

\$418.1 m

Over 40% of exports consist of computers & electronic products.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Netherlands	85
United Kingdom	80
Germany	70
France	67
Italy	21

# Vermont Goods Imports from Europe, 2017

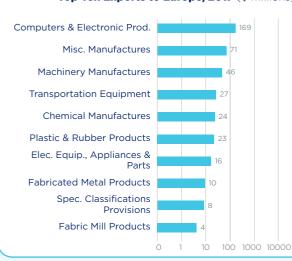
\$454.0 m

Computers & electronics are also the state's top imports from Europe, also taking a 40% share of the total

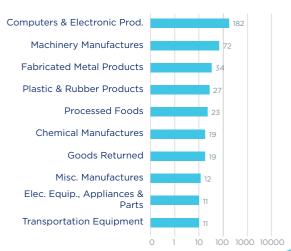
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
France	159
Germany	72
<b>United Kingdom</b>	40
Italy	28
Russia	22

### **Top Ten Exports to Europe, 2017** (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)







# **Virginia and Europe**





137,100

Since 2006: +24,800 (22.1%)

European companies account for

73%

of foreign affiliate jobs

### **Employment within Virginia, 2016**

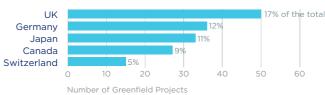
Country	Employment
United Kingdom	38,700
Germany	15,800
France	14,900
Japan	14,800
Netherlands	14,000

On a country basis, U.K. companies operating in Virginia represented 21% of total foreign affiliate employment in Virginia, with U.K. multinationals supporting approximately 10,400 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### Sources of Greenfield Foreign Direct Investment (FDI)





296
Greenfield Projects
(October 2008 September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### Virginia Goods Exports to Europe, 2017

\$4.9 bn

Top exports include chemicals and minerals.

### Virginia Goods Imports from Europe, 2017

\$9.2 bn

Transportation equipment is the largest import from Europe, making up 29% of total imports.

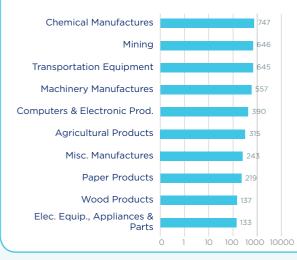
### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
United Kingdom	920
Germany	818
Belgium	573
Netherlands	436
Switzerland	263

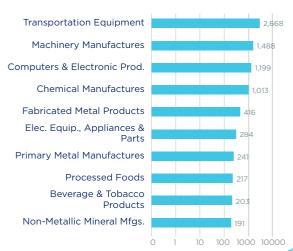
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	2,509
Austria	1,192
Italy	900
France	885
United Kingdom	699

### Top Ten Exports to Europe, 2017 (\$ millions)



### **Top Ten Imports from Europe, 2017** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 





# **Washington and Europe**





68,100

Since 2006: +11,700 (20.7%)

European companies account for

**59%** of foreign affiliate jobs

# **Employment within Washington, 2016**

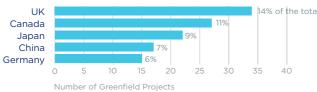
Country	Employment
United Kingdom	19,700
Canada	17,200
Japan	15,900
Germany	15,600
France	9,800

On a country basis, U.K. companies operating in Washington represented 17% of total foreign affiliate employment in Washington, with U.K. multinationals supporting approximately 5,800 more jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**





244 Greenfield Projects (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Washington Goods Exports to Europe, 2017**

# \$15.2 bn

Transportation equipment dominates Washington's exports to Europe, making up over 75% of total exports.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)
Norway	2,154
Russia	1,846
Ireland	1,791
United Kingdom	1,775
Netherlands	1,631

### Washington Goods Imports from Europe, 2017

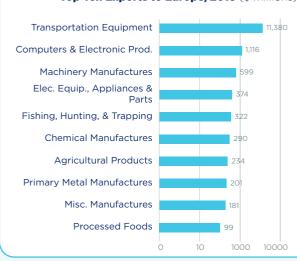
# \$4.7 bn

Imports from Europe are less concentrated than exports. The state's top import, transportation equipment, makes up only 17% of total imports from Europe

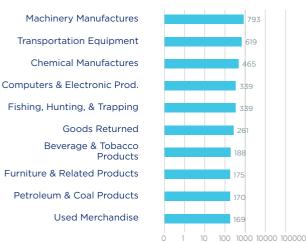
### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Russia	882
Germany	735
France	581
Italy	464
United Kingdom	449

### Top Ten Exports to Europe, 2016 (\$ millions)



### **Top Ten Imports from Europe, 2016** (\$ millions)



 $Sources: Bureau \ of \ Economic \ Analysis; \ U.S. \ Census \ Bureau; \ U.S. \ Department \ of \ Commerce; \ Select USA.$ 

# West Virginia and Europe





15,100

account for

Since 2006: +2,800 (22.8%)

# **Employment within West Virginia, 2016**

Country	Employment		
United Kingdom	4,300		
Canada	4,000		
Japan	4,000		
Germany	2,000		
Netherlands	2,000		

On a country basis, U.K. companies operating in West Virginia represented 15% of total foreign affiliate employment in West Virginia, with U.K. multinationals supporting approximately 100 fewer jobs in 2016 than in 2010.

**52%** 

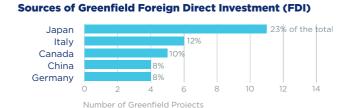
European companies

of foreign affiliate jobs

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.







**Greenfield Projects** (October 2008 -September 2018)



### **West Virginia Goods Exports to Europe, 2017**

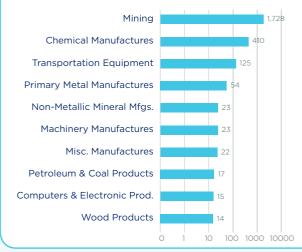
\$2.5 bn

Mining products such as minerals and ores accounted for 70% of exports to Europe in 2017.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)		
Ukraine	461		
Netherlands	389		
Italy	252		
Belgium	248		
France	237		

### Top Ten Exports to Europe, 2017 (\$ millions)



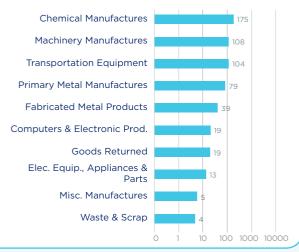
### **West Virginia Goods Imports from Europe, 2017**

Chemicals and machinery are West Virginia's top

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)
Germany	174
Italy	96
France	83
United Kingdom	45
Poland	36

### **Top Ten Imports from Europe, 2017** (\$ millions)







# **Wisconsin and Europe**





63,700

Since 2006: -400 (-0.6%)

# **Employment within Wisconsin, 2016**

Country	Employment		
United Kingdom	15,400		
Canada	15,100		
Germany	9,800		
France	8,800		
Switzerland	8,800		

On a country basis, U.K. companies operating in Wisconsin represented 16% of total foreign affiliate employment in Wisconsin, with U.K. multinationals supporting approximately 4,100 more jobs in 2016 than in 2010.

**65%** 

European companies

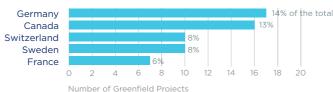
account for

of foreign affiliate jobs

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other



### **Sources of Greenfield Foreign Direct Investment (FDI)**





**Greenfield Projects** (October 2008 -September 2018)

Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Wisconsin Goods Exports to Europe, 2017**

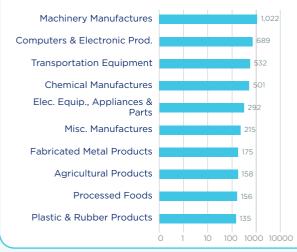
\$4.2 bn

Machinery and computers & electronic products are the state's top exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)	
<b>United Kingdom</b>	737	
Germany	692	
France	455	
Netherlands	408	
Belgium	363	

### **Top Ten Exports to Europe, 2017** (\$ millions)



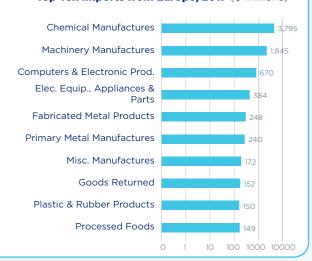
### **Wisconsin Goods Imports from Europe, 2017**

Chemicals and machinery accounted 46% and 22% of total imports, respectively.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)		
Ireland	3,405		
Germany	1,540		
Italy	716		
France	457		
United Kingdom	388		

### **Top Ten Imports from Europe, 2017** (\$ millions)



# **\$**



# **Wyoming and Europe**





4,200

Since 2006: -700 (-14.3%)

European companies account for

**58%** 

of foreign affiliate jobs

### **Employment within Wyoming, 2016**

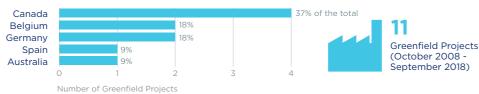
Country	Employment		
United Kingdom	1,500		
Canada	600		
France	600		
Germany	300		
Netherlands	300		

On a country basis, U.K. companies operating in Wyoming represented 21% of total foreign affiliate employment in Wyoming, with U.K. multinationals supporting approximately 200 fewer jobs in 2016 than in 2010.

Jobs directly supported by European investment. Total European-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.



### **Sources of Greenfield Foreign Direct Investment (FDI)**



Number of projects does not directly translate to value of projects or jobs added. Greenfield FDI is investment in new assets.



### **Wyoming Goods Exports to Europe, 2017**

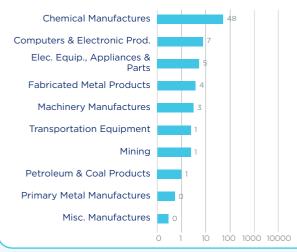
\$71.9 m

Chemicals account for two-thirds of Wyoming's exports to Europe.

### **Top European Export Markets, 2017**

Country	Exports (\$ millions)		
<b>United Kingdom</b>	27		
Belgium	10		
Netherlands	9		
Germany	8		
Denmark	6		

### **Top Ten Exports to Europe, 2017** (\$ millions)



### **Wyoming Goods Imports from Europe, 20167**

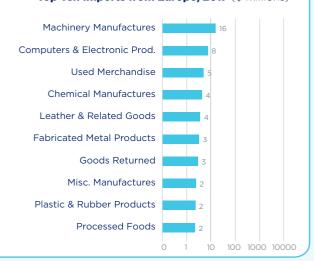
\$56.3 m

Machinery and computers & electronic products are Wyoming's top imports from Europe.

### **Top European Import Markets, 2017**

Country	Imports (\$ millions)	
Germany	14	
Italy	6	
United Kingdom	6	
Austria	5	
Sweden	4	

### **Top Ten Imports from Europe, 2017** (\$ millions)



# **Appendix B**

# U.S. Commerce and Europe: A Country-by-Country Comparison



# **Austria and the United States**

United States in Austria



Austria in the United States

48,960

16,728

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$7.8 bn

Foreign Direct Investment (FDI), 2017



\$12.3 bn

### Foreign Direct Investment (FDI), 2017

America's direct investment position in Austria continued to rebound after a sharp decline starting in 2014. Austria's investment stake in the U.S. now exceeds America's investment in Austria. However, American affiliates employed roughly three times as many workers in Austria than Austrian firms employed in the U.S., according to 2017 estimates.





Foreign direct investment position, historic-cost basis, 2000-2017.

Trade in

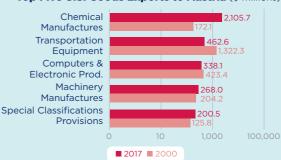
# \$4.3 bn

### U.S. Goods Exports to Austria, 2017

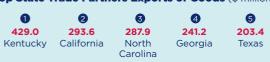
2.4% The U.S. supplied 2.4% of Austria's total imports...

10.8% ...but the U.S. share increases to 10.8% when intra-EU trade is excluded from the

### Top Five U.S. Goods Exports to Austria (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**

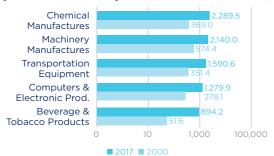


# \$11.7 bn

### U.S. Goods Imports from Austria, 2017

The U.S. received 6.3% of the total goods Austria exported to the world... 21.8% ...but the U.S. share increases to 21.8% when intra-EU trade is excluded from the total

### Top Five U.S. Goods Imports from Austria (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



**3 4 1,115.4** 875.4
 South Pennsyl-Carolina vania

**5 800.8** - Georgia

\$1.6 bn

U.S. Services Exports to Austria, 2017



\$1.8 bn

U.S. Services Imports from Austria, 2017

# **Belgium and the United States**

United States in Belgium



Belgium in the United States

128,214

148,308

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$55.0 bn

Foreign Direct Investment (FDI), 2017

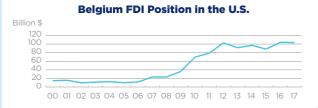


\$103.5 bn

Foreign Direct Investment (FDI), 2017

U.S. direct investments in Belgium are heavily concentrated in manufacturing, specifically in the chemicals manufacturing industry which makes up almost one-third of U.S. FDI in Belgium. Meanwhile, the manufacturing sector accounts for half of Belgium's FDI stock in the U.S. Belgian affiliates employed an estimated 20,000 more workers in the U.S. than U.S. affiliates employed in Belgium. However, value added by U.S. affiliates in Belgium was an estimated \$26.5 billion in 2017, 58% more than that of Belgian affiliates in the U.S.





FDI position based on a historic-cost basis, 2000-2016.

Trade in

# \$29.9 bn

### **U.S. Goods Exports to Belgium, 2017**

7.1% The U.S. supplied 7.1% of Belgium's total imports...

19.9% ...but the U.S. share increases to 19.9% when intra-EU trade is excluded from the

### Top Five U.S. Goods Exports to Belgium (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**

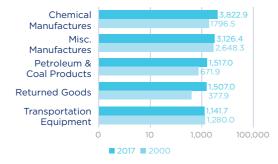
0	2	3	4	6
3,637.1	3,389.3	3,184.2	1,665.2	1,349.8
Texas	New York	California	Illinois	Tennessee

# \$15.0 bn

### U.S. Goods Imports from Belgium, 2017

.9% The U.S. received 4.9% of the total goods Belgium exported to the world... 17.5% ...but the U.S. share increases to 17.5% when intra-EU trade is excluded from the

### Top Five U.S. Goods Imports from Belgium (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$5.5 bn

U.S. Services Exports to Belgium, 2017

Trade in Services

\$5.4 bn

U.S. Services Imports from Belgium, 2017



# **Bulgaria and the United States**

United States in Bulgaria



Bulgaria in the United States

9,996

102

Jobs directly supported by majority-owned affiliates. Estimates for 2016. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$848 m



\$29 m

Foreign Direct Investment (FDI), 2017 Foreign Direct Investment (FDI), 2017

America's investment base in Bulgaria is relatively small, and foreign affiliate sales totaled just \$2.4 billion in 2017, according to estimates. U.S. affiliates in Bulgaria employed approximately 10,000 workers, according to 2017 estimates, placing Bulgaria 6th among the EU13 in terms of U.S. firms' employment abroad.

# 



Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

Trade in

# \$382 m

### U.S. Goods Exports to Bulgaria, 2017

O.8% The U.S. supplied O.8% of Bulgaria's total imports...

2.1%

...but the U.S. share increases to 2.1% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Bulgaria** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**

0	2	3	4	6
116.2	63.8	29.4	17.1	15.1
California	Texas	Connecticut	Illinois	lowa

# \$659 m

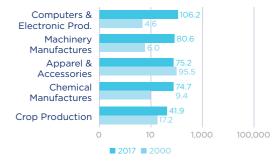
### U.S. Goods Imports from Bulgaria, 2017

75% The U.S. received 1.5% of the total goods
8 Bulgaria exported to the world...

4.0%

...but the U.S. share increases to 4.0% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Bulgaria** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$469 m

U.S. Services Exports to Bulgaria, 2017

Trade in Services

\$406 m

U.S. Services Imports from Bulgaria, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.

# Croatia and the United States

United States in Croatia



### Croatia in the United States

1,836

< 50

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$33.4 bn

**Inward FDI from World, 2017** 

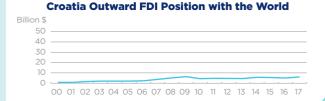


\$6.1 bn

### **Outward FDI to World, 2017**

On a global level, Croatia's total outward direct investment position is about one-fifth the size of its inward FDI position. U.S. firms have a small investment base in Croatia, with an estimated \$900 million of assets in 2017. U.S. foreign affiliates in Croatia employed an estimated 1,836 workers in 2017, ranking 25th among the 28 EU countries. Meanwhile, Croatian investment in the U.S. is rather small, with roughly \$4 million in foreign affiliate assets in the U.S. in 2017. Croatian foreign direct investment in the U.S. directly supported fewer than 50 jobs.

# **World FDI Position in Croatia** Billion \$ 40 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017. Note: Due to lack of available data for U.S.-Croatia FDI trend, global outward and inward FDI stock were used.

> Trade in Goods

# \$448 m

### **U.S. Goods Exports to Croatia, 2017**

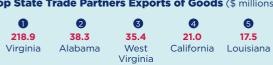
0.6% The U.S. supplied 0.6% of Croatia's total imports...

2.9% ...but the U.S. share increases to 2.9% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Exports to Croatia (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**



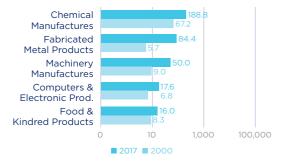
# \$437 m

### **U.S. Goods Imports from Croatia, 2017**

The U.S. received 3.8% of the total goods Croatia exported to the world...

10.6% ...but the U.S. share increases to 10.6% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Imports from Croatia (\$ millions)**



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$382 m

**U.S. Services Exports to Croatia, 2017** 

Trade in

\$314 m

**U.S. Services Imports from Croatia, 2017** 





# **Cyprus and the United States**

United States in Cyprus



### Cyprus in the United States

1,632

2,652

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

# \$1.7 bn



**\$0.7 bn** 

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

Given the country's small market, Cyprus has not attracted much U.S. foreign direct investment relative to other EU members. U.S. investment in Cyprus reached a peak of \$2.8 billion in 2014. Although FDI has declined to \$1.7 billion in 2017, the U.S. investment position in Cyprus is still larger than it was a decade ago. Cyprus's FDI in the U.S. also declined significantly in the past couple of years, though companies from Cyprus continued to support roughly 1,000 more jobs in the U.S. than American corporations supported in Cyprus.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

rade in

### \$82 m

### **U.S. Goods Exports to Cyprus, 2017**

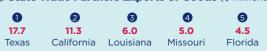
The U.S. supplied 1.0% of Cyprus's total imports...

2.4% ...but the U.S. share increases to 2.4% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Exports to Cyprus** (\$ millions)



### Top State Trade Partners Exports of Goods (\$ millions)



# \$47 m

### U.S. Goods Imports from Cyprus, 2017

The U.S. received 1.5% 2.3% of the total goods Cyprus exported to the world...

...but the U.S. share increases to 2.3% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Imports from Cyprus** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$235 m

**U.S. Services Exports to Cyprus, 2017** 

Trade in

\$158 m

U.S. Services Imports from Cyprus, 2015\*

# Czech Republic and the United States

United States in Czech Republic

Czech Republic in the United States



84,864

< 50

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$5.4 bn



**\$0.1 bn** 

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2016\*

America's investment base in the Czech Republic is small but has risen by one-third over the past ten years to \$5.4 billion in 2017. This is down from a peak of \$6.4 billion in 2013, but still is significantly larger than investment by Czech Republic firms in the U.S. Affiliate employment by U.S. multinationals in the Czech Republic fell sharply in 2016, from 94,000 employees to 83,000, yet this is estimated to have picked up slightly in 2017 to almost 85,000 workers.

### **U.S. FDI Position in Czech Republic**



### **Czech Republic FDI Position in the U.S.**



Foreign direct investment position, historic-cost basis, 2000-2017. \*Latest year of available data.

Trade in

# \$2.3 bn

### U.S. Goods Exports to Czech Republic, 2017

1.7% The U.S. supplied 1.7% of Czech Republic's total imports...

7.2% ...but the U.S. share increases to 7.2%

\$4.6 bn

### U.S. Goods Imports from Czech Republic, 2017

when intra-EU trade is excluded from the The U.S. received 2.1% of the total goods Czech Republic exported to the world...

12.7% ...but the U.S. share increases to 12.7% when intra-EU trade is excluded from the

### Top Five U.S. Goods Exports to Czech Republic (\$ millions)



# **Top Five U.S. Goods Imports from Czech Republic (\$ millions)**



### Top State Trade Partners Exports of Goods (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$1.3 bn

**U.S. Services Exports to Czech Republic, 2017** 

\$1.4 bn

U.S. Services Imports from Czech Republic, 2017

Trade in

# **Denmark and the United States**

United States in Denmark



Denmark in the United States

41,106

39,372

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$13.9 bn

Foreign Direct Investment (FDI), 2017

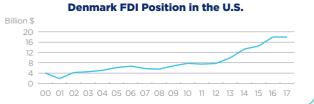


\$18.0 bn

### Foreign Direct Investment (FDI), 2017

Bilateral investment between the U.S. and Denmark was relatively equal in 2016, with Denmark investing only \$1 billion more in the U.S. than what the U.S. invested in Denmark. However, in 2017 the investment gap widened as U.S. investment in Denmark declined, while Denmark's investment in the U.S. remained relatively flat. In 2017, affiliate sales in the U.S. market were an estimated \$28.4 billion while U.S. foreign affiliate sales in Denmark were \$19.6 billion. However, the affiliate employment balance favors Denmark, with U.S. affiliates in Denmark employing roughly 1,700 more people than Danish affiliates employ in the U.S., according to estimates.





Foreign direct investment position, historic-cost basis, 2000-2017.

Trade in

# \$2.2 bn

### U.S. Goods Exports to Denmark, 2017

2.6% The U.S. supplied 2.6% of Denmark's total imports...

8.7%

...but the U.S. share increases to 8.7% when intra-EU trade is excluded from the

### Top Five U.S. Goods Exports to Denmark (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



4 102.9 Florida

6 102.4 Virginia

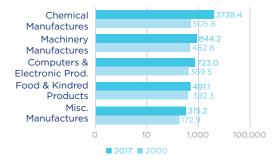
# \$7.7 bn

### U.S. Goods Imports from Denmark, 2017

The U.S. received 8.1% of the total goods Denmark exported to the world...

24.3% ...but the U.S. share increases to 24.3% when intra-EU trade is excluded from the

### Top Five U.S. Goods Imports from Denmark (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$5.5 bn

U.S. Services Exports to Denmark, 2017

Trade in

\$3.1 bn

U.S. Services Imports from Denmark, 2017

# Estonia and the United States

United States in Estonia



Estonia in the United States

3,570

< 50

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

# \$0.1 bn



\$0.0 bn

### Foreign Direct Investment (FDI), 2017 Foreign Direct Investment (FDI), 2015\*

America's direct investment base in Estonia is one of the smallest of the EU13. U.S. affiliates employed an estimated 3,570 people in 2017, placing Estonia 8th among the EU13 in terms of employment. Business conditions are favorable for U.S. companies in Estonia, with the country ranking 16th out of 190 economies listed in the World Bank's Ease of Doing Business Index. Estonia's advanced digital economy also offers some attraction for U.S. companies.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

\*Latest year of available data.

Trade in

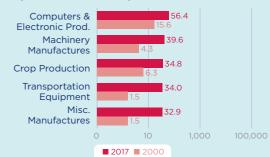
# \$274 m

### U.S. Goods Exports to Estonia, 2017

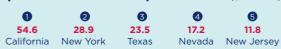
0.9% The U.S. supplied 0.9% of Estonia's total imports...

4.8% ...but the U.S. share increases to 4.8% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Exports to Estonia (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**



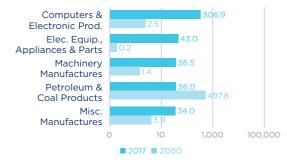
# \$604 m

### U.S. Goods Imports from Estonia, 2017

The U.S. received 2.9% of the total goods Estonia exported to the world...

10.1% ...but the U.S. share increases to 10.1% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Imports from Estonia (\$ millions)**



### **Top State Trade Partners Imports of Goods (**\$ millions)



\$207 m

U.S. Services Exports to Estonia, 2017

Trade in Services

\$133 m

U.S. Services Imports from Estonia, 2017

# Finland and the United States

United States in Finland



Finland in the United States

20,808

23,868

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$3.3 bn



\$6.5 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

The direct investment balance favors the United States, with Finnish investment in the U.S. totaling \$6.5 billion in 2017 versus just \$3.3 billion of U.S. investment in Finland. However, the affiliate employment balance favors Finland by roughly 3,000 jobs. Finnish direct investment in the U.S. is heavily concentrated in the wholesale trade industry, representing 42% of total FDI, and the manufacturing sector, 36% of the total.

# U.S. FDI Position in Finland 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

rade in

# \$1.5 bn

### U.S. Goods Exports to Finland, 2017

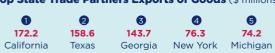
1.9% The U.S. supplied 1.9% of Finland's total imports...

6.8% ...but the U.S. share increases to 6.8% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Finland** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



# \$5.9 bn

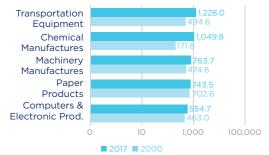
### U.S. Goods Imports from Finland, 2017

7.0% of the total goods Finland exported to the world...

17.0%

...but the U.S. share increases to 17.0% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Finland** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$2.2 bn

**U.S. Services Exports to Finland, 2017** 

Trade in Services

\$1.8 bn

**U.S. Services Imports from Finland, 2017** 

# France and the United States

United States in France



France in the United States

491,028

743,070

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$85.6 bn

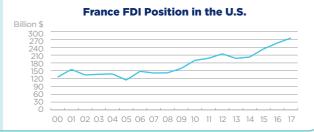


\$275.5 bn

### Foreign Direct Investment (FDI), 2017 Foreign Direct Investment (FDI), 2017

The direct investment balance favors the U.S., with U.S. investment in France (\$85.6 billion) just 31% of total French investment in the U.S. in 2017 (\$275.5 billion). The U.S. is a significant market for French firms, with U.S. affiliates of French firms recording an estimated \$309 billion in sales during 2017. The manufacturing sector makes up almost half, or \$135 billion, of French FDI in the U.S. In terms of jobs, U.S. and French affiliates combined employed over 1.2 million workers, with the employment balance favoring the U.S. by about 250,000 jobs, according to 2017 estimates. The Paris region was ranked by fDi markets as the top region in Europe for attracting foreign direct investment.





Foreign direct investment position, historic-cost basis, 2000-2017.

# \$33.6 bn

### **U.S. Goods Exports to France, 2017**

5.2% The U.S. supplied 5.2% of France's total imports...

17.4% ...but the U.S. share increases to 17.4% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to France (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**



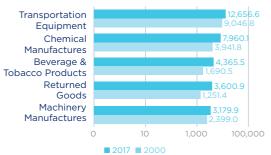
# \$48.9 bn

### U.S. Goods Imports from France, 2017

The U.S. received 7.2% of the total goods France exported to the world...

17.5% ...but the U.S. share increases to 17.5% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Imports from France (\$ millions)



### **Top State Trade Partners Imports of Goods (**\$ millions)



\$19.2 bn

**U.S. Services Exports to France, 2017** 



\$17.5 bn

U.S. Services Imports from France, 2017



# **Germany and the United States**

**United States in Germany** 



Germany in the United States

715,326

706,044

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

# \$136.1 bn

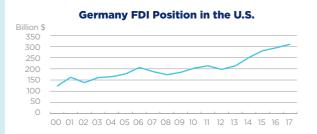


\$310.2 bn

### Foreign Direct Investment (FDI), 2017 Foreign Direct Investment (FDI), 2017

The investment balance favors the U.S., with U.S. investment in Germany, totaling \$136.1 billion in 2017, less than half the size of Germany's \$310.2 billion investment in the U.S. The value added by U.S. affiliates operating in Germany (\$84.3 billion) was only slightly less than that of German affiliates in the United States (\$109.0 billion), according to 2017 estimates. The employment picture is also relatively balanced, with affiliates of both countries employing a combined workforce of over 1.4 million employees, according to 2017 estimates.





Foreign direct investment position, historic-cost basis, 2000-2017.

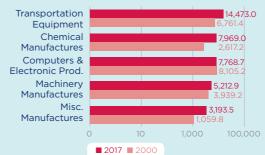
# \$53.9 bn

### U.S. Goods Exports to Germany, 2017

4.5% The U.S. supplied 4.5% of Germany's total imports...

13.3% ...but the U.S. share increases to 13.3% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Germany** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



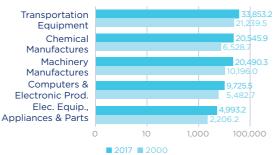
# \$117.6 bn

### U.S. Goods Imports from Germany, 2017

The U.S. received 8.8% of the total goods Germany exported to the world...

21.1% ...but the U.S. share increases to 21.1% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Imports from Germany (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$32.7 bn

**U.S. Services Exports to Germany, 2017** 



\$35.4 bn

**U.S. Services Imports from Germany, 2017** 

# Greece and the United States

United States in Greece



Greece in the United States

16,014

2.754

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

# \$1.2 bn



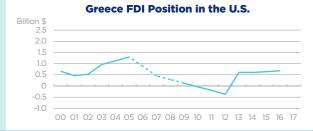
**\$0.7 bn** 

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2016\*

Greece's economic woes were reflected in its foreign direct investment links to the U.S., but investment ties are on the rebound. In 2017, America's foreign direct investment position in Greece was \$1.2 billion, a slight increase from the prior year. Greece's FDI position in the U.S. has also improved since the recession to \$682 million in 2016, the latest year of available data. Estimated U.S. affiliate sales in Greece of just \$5.5 billion in 2017 ranked among the lowest in the EU.

# **U.S. FDI Position in Greece** 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

\*Latest year of available data.

# \$1.0 bn

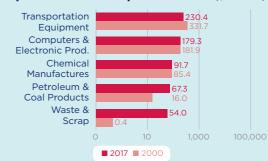
### U.S. Goods Exports to Greece, 2017

The U.S. supplied 1.5% of Greece's total imports...

1.5%

...but the U.S. share 3.1% increases to 3.1% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Exports to Greece (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



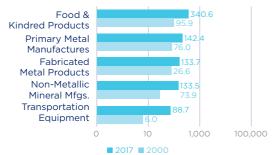
# \$1.3 bn

### U.S. Goods Imports from Greece, 2017

The U.S. received 4.7% of the total goods Greece exported to the world...

...but the U.S. share increases to 9.2% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Greece (\$ millions)**



### **Top State Trade Partners Imports of Goods (\$ millions)**



111.8 North Carolina

\$1.1 bn

**U.S. Services Exports to Greece, 2017** 



\$3.3 bn

U.S. Services Imports from Greece, 2017

# Hungary and the United States

**United States in Hungary** 



Hungary in the United States

68,748

102

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

# \$7.1 bn

Foreign Direct Investment (FDI), 2017



\$12.9 bn

### Foreign Direct Investment (FDI), 2017

America's investment base in Hungary amounted to \$7.1 billion on a historic-cost basis in 2017, down from its peak position of \$7.6 billion in 2015. Affiliate employment in Hungary ranked fourth among EU13 countries. Value added by U.S.-owned affiliates totaled \$3.9 billion in 2017, according to estimates. Meanwhile, Hungarian investment in the U.S. was \$12.9 billion in 2017, far below its peak of \$70.7 billion in 2009.





Foreign direct investment position, historic-cost basis, 2000-2017.

Trade in Goods

# \$1.9 bn

### U.S. Goods Exports to Hungary, 2017

1.7% The U.S. supplied 1.7% of Hungary's total imports...

7.3% ...but the U.S. share increases to 7.3% when intra-EU trade is excluded from the total

### **Top Five U.S. Goods Exports to Hungary** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**

1 2 3 4 5 271.7 186.8 164.6 134.4 131.4 California Texas Ohio Georgia Indiana

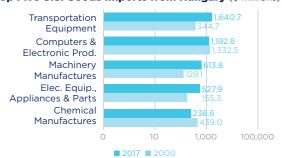
# \$5.1 bn

### U.S. Goods Imports from Hungary, 2017

The U.S. received 2.3% of the total goods Hungary exported to the world

12.4% ...but the U.S. share increases to 12.4% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Hungary** (\$ millions)



### **Top State Trade Partners Imports of Goods (**\$ millions)

555.1 516.8 445.9
California South Texas
Carolina

15.9 440.2 exas Georgia

2 337.1 iia Michigan

\$1.1 bn

U.S. Services Exports to Hungary, 2017

Trade in Services

\$1.0 bn

**U.S. Services Imports from Hungary, 2017** 

# I Ireland and the United States

United States in Ireland



Ireland in the United States

123,420

268,566

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$446.4 bn

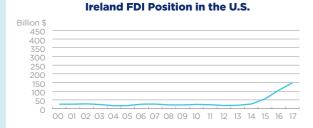


\$147.8 bn

### Foreign Direct Investment (FDI), 2017 Foreign Direct Investment (FDI), 2017

The investment balance favors Ireland, with U.S. investment in Ireland totaling some \$446.4 billion in 2017 versus \$147.8 billion of Ireland's investment in the U.S. Value added by U.S. affiliates in Ireland totaled an estimated \$94.0 billion in 2017, more than double the gross product of affiliates of Irish firms operating in the U.S. However, affiliate employment favored the United States, with Ireland's affiliates employing over 100,000 more Americans than affiliates of U.S. firms employed in Ireland, according to estimates.





FDI position based on a historic-cost basis, 2000-2016.

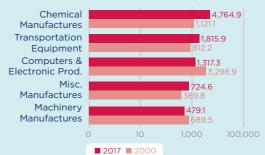
# \$10.7 bn

### U.S. Goods Exports to Ireland, 2017

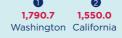
19.6% The U.S. supplied 19.6% of Ireland's total imports...

56.1% ...but the U.S. share increases to 56.1% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Exports to Ireland (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**









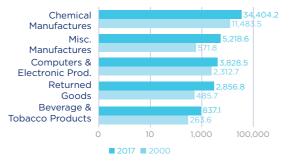
# \$48.8 bn

### U.S. Goods Imports from Ireland, 2017

27.1% The U.S. received 27.1% of the total goods Ireland exported to the world...

55.0% ...but the U.S. share increases to 55.0% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Ireland (\$ millions)**



### **Top State Trade Partners Imports of Goods (**\$ millions)

0	2	3	4	5
<b>8,208.0</b> Indiana	6,925.2 Tennessee	<b>3,565.4</b> Ohio	<b>3,404.7</b> Wisconsin	<b>2,909.2</b> Texas

\$49.8 bn

U.S. Services Exports to Ireland, 2017



\$20.1 bn

U.S. Services Imports from Ireland, 2017

# **Italy and the United States**

United States in Italy



Italy in the United States

228,072

79,764

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$30.7 bn

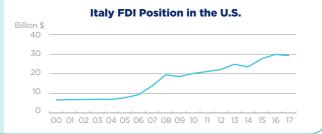


\$29.3 bn Foreign Direct Investment (FDI), 2017

### Foreign Direct Investment (FDI), 2017

While America's FDI position in Italy has stalled since the start of the century, Italian investment in the U.S. has been climbing steadily, up almost 350% since 2000. However, Italy benefited more with regards to affiliate sales, assets, value added and employment. For example, value added by U.S. affiliates in Italy was three times the amount that affiliates of Italian companies contributed in the U.S. Also, affiliates of U.S.owned companies supported about 150,000 more jobs in Italy than affiliates of Italian multinationals provided in the U.S, according to 2017 estimates.

**U.S. FDI Position in Italy** Billion \$ 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

# \$18.4 bn

### U.S. Goods Exports to Italy, 2017

The U.S. supplied 3.7% 3.7% of Italy's total imports...

...but the U.S. share increases to 9.4% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Italy (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**

2,076.7 1,647.5 1.357.1 1,155.3 858.4 Texas California Indiana Michigan New York

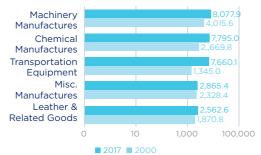
# \$49.9 bn

### U.S. Goods Imports from Italy, 2017

The U.S. received 9.0% of the total goods Italy exported to the world...

...but the U.S. share 20.3% increases to 20.3% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Italy (\$ millions)**



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$9.3 bn

U.S. Services Exports to Italy, 2017



\$12.4 bn

U.S. Services Imports from Italy, 2017

# Latvia and the United States

United States in Latvia



### Latvia in the United States

1,326

< 50

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$71 m



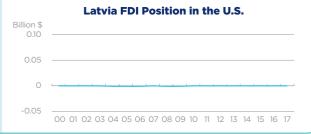
**\$0 m** 

### Foreign Direct Investment (FDI), 2017

### Foreign Direct Investment (FDI), 2017

The small country of roughly 2 million people has yet to attract significant foreign direct investment from the United States. However, investment linkages are expected to gradually expand over the next decade. U.S. affiliates supported 1,326 jobs according to 2017 estimates. Although U.S. affiliate employment in Latvia is the lowest in the EU, jobs supported by American firms have increased nearly 90% since 2013. Not surprisingly, Latvia's inward FDI stock from the U.S. exceeds its outward investment in the U.S.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

# \$382 m

### U.S. Goods Exports to Latvia, 2017

5.5%

1.2% The U.S. supplied 1.2% of Latvia's total imports...

...but the U.S. share increases to 5.5% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Latvia** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



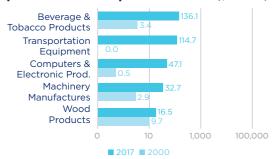
# \$453 m

### U.S. Goods Imports from Latvia, 2017

2.6% The U.S. received 2.6% of the total goods Latvia exported to the world...

...but the U.S. share increases to 7.6% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Latvia (\$ millions)**



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$196 m

U.S. Services Exports to Latvia, 2017



\$85 m

U.S. Services Imports from Latvia, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.



# **Lithuania and the United States**

United States in Lithuania



### Lithuania in the United States

2,244

0

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$17.6 bn



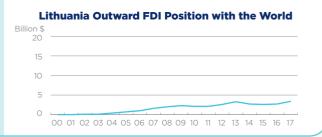
\$3.4 bn

### **Inward FDI from World, 2017**

**Outward FDI to World, 2017** 

Lithuania has yet to attract significant levels of U.S. foreign direct investment. U.S. affiliates employed an estimated 2,244 workers in Lithuania in 2017, adding only about 400 more workers since the end of the financial crisis. On a global basis, Lithuania's inward stock of foreign direct investment totaled \$17.6 billion, versus its outward investment stock of just \$3.4 billion.

# World FDI Position in Lithuania Billion \$ 20 15 10 5 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Due to lack of available data for U.S.-Lithuania FDI trend, global outward and inward FDI stock were used.

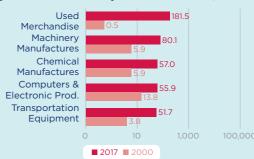
# \$0.6 bn

### **U.S. Goods Exports to Lithuania, 2017**

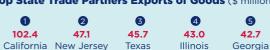
1.3% The U.S. supplied 1.3% of Lithuania's total imports...

4.4% ...but the U.S. share increases to 4.4% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Lithuania** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



# \$1.5 bn

### U.S. Goods Imports from Lithuania, 2017

The U.S. received 5.2% of the total goods Lithuania exported to the world...

12.4% ...but the U.S. share increases to 12.4% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Lithuania** (\$ millions)



### **Top State Trade Partners Imports of Goods (**\$ millions)



\$0.3 bn

U.S. Services Exports to Lithuania, 2017



\$0.6 bn

U.S. Services Imports from Lithuania, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis; United Nations.

# Luxembourg and the United States

United States in Luxembourg



Luxembourg in the United States

22,950

6,528

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$676.4 bn

Foreign Direct Investment (FDI), 2017



\$410.7 bn

### Foreign Direct Investment (FDI), 2017

Investment between the U.S. and Luxembourg is skewed in favor of Luxembourg. Estimated U.S. foreign affiliate sales in Luxembourg were about 16 times greater than sales of Luxembourg affiliates in the U.S. Although direct investment in the U.S. by Luxembourg-based companies has been trending upward, total affiliate employment has been fallen from a peak of 38,300 in 2010 to an estimated 6,528 in 2017. This is in contrast to the 39% rise in U.S. affiliate employment in Luxembourg since 2010, and explains the large shift in the employment balance from the start of the decade.

### **U.S. FDI Position in Luxembourg**





Foreign direct investment position, historic-cost basis, 2000-2017.

Trade in

# \$1.1 bn

### **U.S. Goods Exports to Luxembourg, 2017**

5.6% supplied 5.6% of Luxembourg's total imports...

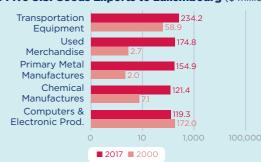
33.4% ...but the U.S. share increases to 33.4% when intra-EU trade is excluded from the total.

### The U.S. received 2.7% of the total goods Luxembourg

exported to the world...

...but the U.S. share 16.2% increases to 16.2% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Luxembourg (\$ millions)**



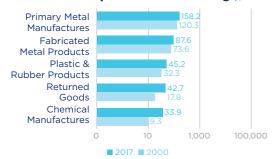
### Top State Trade Partners Exports of Goods (\$ millions)

•		-	* '		
0	2	3	4	6	
215.6	194.2	169.4	95.5	63.8	
New York	Florida	California	Texas	Virginia	

### Top Five U.S. Goods Imports from Luxembourg (\$ millions)

**\$0.5 bn** 

U.S. Goods Imports from Luxembourg, 2017



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$6.7 bn

**U.S. Services Exports to Luxembourg, 2017** 

Trade in

\$1.9 bn

**U.S. Services Imports from Luxembourg, 2017** 

# Malta and the United States

United States in Malta



### Malta in the United States

1,530

612

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$0.6 bn



# \$1.6 bn

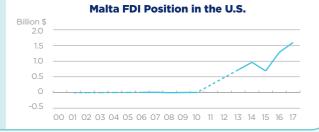
### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

Despite the country's tiny population (just 433,000 people), Malta has attracted a relatively large amount of foreign direct investment from the U.S. The investment position of the U.S. in Malta amounted to \$601 million in 2017. In addition, American investment supported jobs for roughly 1,530 workers, according to estimates. Meanwhile, Malta's direct investment position in the U.S. totaled \$1.6 billion as of 2017, which is markedly higher from its near-zero levels of investment prior to 2010.

U.S. FDI Position in Malta

Billion \$
2.0
1.5
1.0
0.5
0
-0.5
00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

5.7%

# \$293 m

### U.S. Goods Exports to Malta, 2017

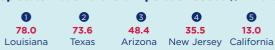
4.3% The U.S. supplied 4.3% of Malta's total imports...

11.3% ...but the U.S. share increases to 11.3% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Exports to Malta (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**

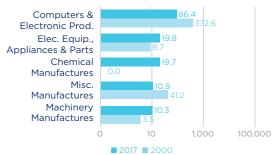


# \$163 m

### U.S. Goods Imports from Malta, 2017

The U.S. received 5.7% of the total goods Malta exported to the world... 11.4% ...but the U.S. share increases to 11.4% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Malta** (\$ millions)



### **Top State Trade Partners Imports of Goods (**\$ millions)

0	2	3	4	6
72.3	13.2	9.1	7.9	7.6
California	Florida	Illinois	Texas	Michigan

\$208 m

U.S. Services Exports to Malta, 2017

Trade in Services

\$700 m

U.S. Services Imports from Malta, 2017

# Netherlands and the United States

United States in Netherlands



Netherlands in the United States

255,816

484,704

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$936.7 bn

Foreign Direct Investment (FDI), 2017



\$367.1 bn

### Foreign Direct Investment (FDI), 2017

Investment between the U.S. and the Netherlands is skewed toward the latter, with America's investment stake in the Netherlands more than double the amount of Dutch investment in the U.S. Still, the U.S. is a prime foreign destination for Dutch firms, which recorded an estimated \$358.7 billion in affiliate sales in the U.S. during 2017. The employment balance clearly favors the U.S. with the gap as wide as 228,000 jobs, according to estimates. Amsterdam was ranked by fDi Markets in 2018 as the 3rd most attractive city in Europe for foreign direct investment.





Foreign direct investment position, historic-cost basis, 2000-2017.

Trade in

# \$41.5 bn

### **U.S. Goods Exports to Netherlands, 2017**

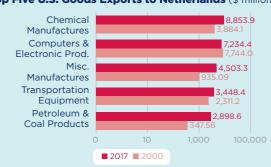
6.9% supplied 6.9% of Netherlands's total imports...

12.7% ...but the U.S. share increases to 12.7% when intra-EU trade is excluded from the total.

The U.S. received 3.6% of the total goods Netherlands exported to the world...

...but the U.S. share 14.3% increases to 14.3% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Exports to Netherlands (\$ millions)



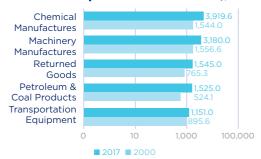
### **Top State Trade Partners Exports of Goods (\$ millions)**

4 7.026.2 5.785.3 2.506.9 1,711.2 1,630.9 California Louisiana Illinois Washington

### **Top Five U.S. Goods Imports from Netherlands (\$ millions)**

\$17.8 bn

U.S. Goods Imports from Netherlands, 2017



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$17.3 bn

U.S. Services Exports to Netherlands, 2017



\$11.2 bn

U.S. Services Imports from Netherlands, 2017

# **Norway and the United States**

**United States in Norway** 



Norway in the United States

42,840

7.038

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, ioint ventures, or other deals.

\$29.2 bn



\$26.0 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

The investment balance favors Norway, with U.S. direct investment totaling \$29.2 billion in 2017, but the gap in investment is narrowing. America's investment position in Norway is now only 12% more than Norwegian direct investment in the U.S. Still, the employment balance is heavily skewed in favor of Norway, with U.S. foreign affiliates employing almost 43,000 Norwegian workers, according to 2017 estimates, a significant figure compared to the 7,038 workers on the payrolls of Norwegian companies in the U.S.

**U.S. FDI Position in Norway** Billion \$ 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

# \$5.5 bn

### **U.S. Goods Exports to Norway, 2017**

The U.S. supplied 7.0% 7.0% of Norway's total imports...

18.2% ...but the U.S. share increases to 18.2% when trade with the EU is excluded from the total

### **Top Five U.S. Goods Exports to Norway (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**



616.2 Texas

335.4 South

Carolina

213.5 Pennsvlvania

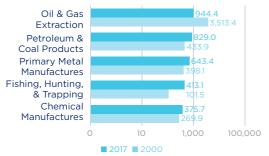
# \$5.1 bn

### U.S. Goods Imports from Norway, 2017

The U.S. received 4.5% of the total goods Norway exported to the world...

23.4% ...but the U.S. share increases to 23.4% when trade with the EU is excluded from the total.

### **Top Five U.S. Goods Imports from Norway** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**

6596 Pennsylvania

568 9 Texas 546.2

484 4

371.2 Louisiana New Jersey California

\$3.1 bn

**U.S. Services Exports to Norway, 2017** 

\$3.0 bn

U.S. Services Imports from Norway, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.

Trade in

# Poland and the United States

United States in Poland



### Poland in the United States

196,248

918

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$12.6 bn



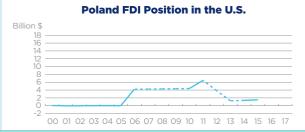
\$1.5 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2015\*

As one of the largest markets in central Europe, Poland has attracted significant sums of market-seeking U.S. foreign direct investment. At an estimated \$63.7 billion, the U.S. asset base in Poland is significantly larger than America's asset base in some developed nations (Finland, Portugal, Greece, Austria). The estimated U.S. affiliate workforce of roughly 200,000 workers ranks number one among EU13 countries by a wide margin. U.S. companies added an estimated 3,800 Polish workers to their payrolls in 2017. Polish affiliates in the U.S. have yet to make significant investments in the country.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

\*Latest year of available data.

# \$4.5 bn

### U.S. Goods Exports to Poland, 2017

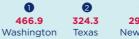
2.0% The U.S. supplied 2.0% of Poland's total imports...

6.9% ...but the U.S. share increases to 6.9% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Exports to Poland (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**







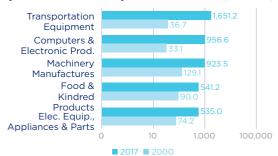
# \$7.1 bn

### **U.S. Goods Imports from Poland, 2017**

The U.S. received 2.6% of the total goods Poland exported to the world...

13.2% ...but the U.S. share increases to 13.2% when intra-EU trade is excluded from the total.

### Top Five U.S. Goods Imports from Poland (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$3.1 bn

**U.S. Services Exports to Poland, 2017** 



\$2.3 bn

U.S. Services Imports from Poland, 2017

# Portugal and the United States

United States in Portugal



### Portugal in the United States

31,212

714

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

# \$2.1 bn

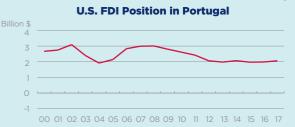


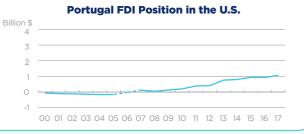
## \$1.1 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

The investment balance is favored towards Portugal. U.S. direct investment in Portugal totaled \$2.1 billion in 2017, which is largely concentrated in manufacturing, wholesale trade, and financial services. U.S. affiliates employed an estimated 31,212 Portuguese workers in 2017 compared to Portugal's affiliate employment of just 714 Americans. Portugal's direct investment in the U.S. has increased more than eight-fold since 2009, albeit from a small base, and is at a record high of \$1.1 billion.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

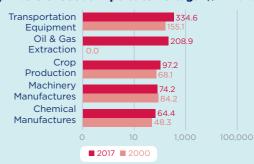
# \$1.2 bn

### **U.S. Goods Exports to Portugal, 2017**

1.4% The U.S. supplied 1.4% of Portugal's total imports...

6.1% ...but the U.S. share increases to 6.1% when intra-EU trade is excluded from the total

### **Top Five U.S. Goods Exports to Portugal (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**

-		· · · · · · · · · · · · · · · · · · ·		
0	2	3	4	6
118.4	90.5	77	70.9	65
220.6	97.6	91.4	87.6	79.5

# \$3.5 bn

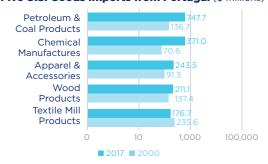
### U.S. Goods Imports from Portugal, 2017

5.2% The U.S. received 5.2% of the total goods Portugal exported to the

world...

19.3% ...but the U.S. share increases to 19.3% when intra-EU trade is excluded from the total

### **Top Five U.S. Goods Imports from Portugal** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**

0	2	3	4	6
686.9	342.2	302.2	252.6	239.4
New Jersey	California	New York	Tennessee	Texas

\$1.2 bn

**U.S. Services Exports to Portugal, 2017** 

Trade in Services

\$2.1 bn

U.S. Services Imports from Portugal, 2017

# Romania and the United States

United States in Romania



Romania in the United States

74,256

< 50

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$3.6 bn

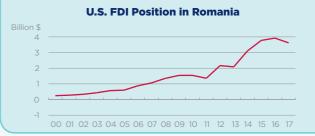


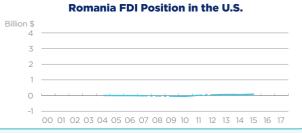
\$0.1 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2015\*

While America's asset base in Romania is small relative to other EU members, with assets totaling an estimated \$16.9 billion in 2017, U.S. investment ties with Romania have deepened over the decade. U.S. affiliates added an estimated 1,500 Romanian workers to their payrolls in 2017, employing roughly 74,000 employees and placing Romania 3rd among the EU13 countries in terms of jobs supported. Meanwhile, Romania's investment in the U.S. is relatively small at just \$85 million in 2015, the latest year of available data. Romanian multinationals employed fewer than 50 employees in the U.S. in 2017.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

\*Latest year of available data.

Trade in Goods

# \$1.0 bn

### **U.S. Goods Exports to Romania, 2017**

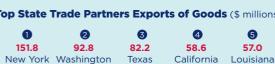
The U.S. supplied 1.4% 1.4% of Romania's total imports...

...but the U.S. share increases to 6.0% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Exports to Romania (\$ millions)**



### **Top State Trade Partners Exports of Goods (\$ millions)**



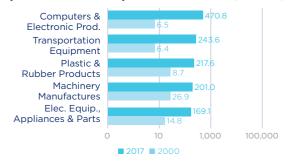
# \$2.2 bn

### U.S. Goods Imports from Romania, 2017

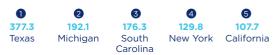
The U.S. received 1.8% of the total goods Romania exported to the world...

...but the U.S. share increases to 7.3% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from Romania** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$0.9 bn

U.S. Services Exports to Romania, 2017

Trade in

\$1.1 bn

U.S. Services Imports from Romania, 2017



# **Slovakia and the United States**

United States in Slovakia



### Slovakia in the United States

< 50

44,064

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals





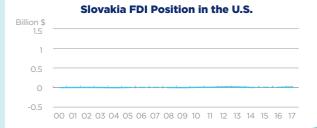
\$14 m Foreign Direct Investment (FDI), 2017

### Foreign Direct Investment (FDI), 2017

America's asset base in Slovakia is small but expanding — total assets of U.S. affiliates reached \$9.7 billion in 2017, while foreign affiliate sales amounted to \$8.6 billion, according to estimates. In the heart of central Europe, the nation is well positioned to capture U.S. investment in areas such as distribution, transportation, wholesale trade and other service-like activities. U.S. foreign affiliates in Slovakia added almost 900 workers

to their payrolls in 2017, employing an estimated 44,064 workers overall, the 5th largest among the EU13 countries. Meanwhile, Slovakia's direct investment position in the U.S. was relatively small in 2017, or \$14 million, and affiliate employment amounted to fewer than 50 workers.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

# \$0.3 bn

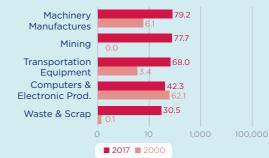
### U.S. Goods Exports to Slovakia, 2017

0.6% The U.S. supplied 0.6% of Slovakia's total imports...

...but the U.S. share 3.0% increases to 3.0% when intra-EU trade is excluded from the

total

### Top Five U.S. Goods Exports to Slovakia (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



416 Pennsylvania

36.3 Alabama

279 California

228 Michigan

# \$3.0 bn

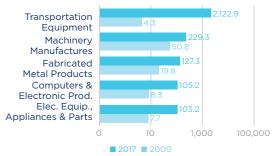
### U.S. Goods Imports from Slovakia, 2017

The U.S. received 2.8% of the total goods Slovakia

exported to the world...

19.3% ...but the U.S. share increases to 19.3% when intra-EU trade is excluded from the total

### **Top Five U.S. Goods Imports from Slovakia** (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



486 2 Texas

421 O Virginia

408 5 California

301 O Florida

\$0.4 bn

U.S. Services Exports to Slovakia, 2017

Trade in

**\$0.1 bn** 

U.S. Services Imports from Slovakia, 2015\*

# Slovenia and the United States

United States in Slovenia



### Slovenia in the United States

5,406

< 50

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$16.0 bn



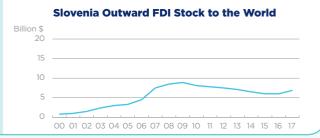
\$6.9 bn

### Global Inward FDI to Slovenia, 2017

Global Outward FDI from Slovenia, 2017

On a global basis, worldwide foreign direct investment in Slovenia totaled \$16.0 billion in 2017, a record high. Meanwhile, Slovenia's outward FDI position was less than half that figure, or \$6.9 billion. U.S. direct investment in Slovenia supported over 5,000 jobs, while Slovenian investment had a relatively small impact on the employment situation in the U.S. Estimated U.S. foreign affiliate sales in Slovenia were \$928 million, compared with less than \$500,000 worth of foreign affiliate sales made by Slovenian firms in the U.S.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Due to lack of available data for U.S.-Slovenia FDI trend, global outward and inward FDI stock were used.

Trade in Goods

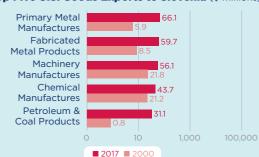
# \$372 m

### U.S. Goods Exports to Slovenia, 2017

The U.S. supplied 1.3% 1.3% of Slovenia's total imports...

...but the U.S. share 4.2% increases to 4.2% when intra-EU trade is excluded from the

### Top Five U.S. Goods Exports to Slovenia (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**





42.6

37.8

18.9

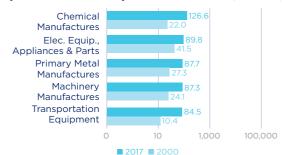
The U.S. received 1.7% of the total goods Slovenia exported to the world...

...but the U.S. share increases to 6.9% when intra-EU trade is excluded from the

### **Top Five U.S. Goods Imports from Slovenia (\$ millions)**

\$761 m

U.S. Goods Imports from Slovenia, 2017



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$180 m

U.S. Services Exports to Slovenia, 2017

Trade in

\$85 m

U.S. Services Imports from Slovenia, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis; United Nations.

# **Spain and the United States**

United States in Spain



Spain in the United States

179,214

81,906

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

# \$33.1 bn



\$74.7 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

Since 2011, the investment balance shifted in favor of the U.S., as Spain's economy was squeezed by a severe recession and resulting austerity measures. Since then, U.S. direct investment in Spain has slightly recovered, amounting to \$33.1 billion in 2017. Originally not a strategic priority to Spanish firms, the U.S. has seen foreign direct investment stock almost triple over the last ten years. Spanish investment in the U.S. has increased every year since 2002. U.S. affiliates based in Spain added roughly 3,500 workers to their payrolls in 2017, and employ about 2.2 times as many workers as Spanish affiliates employ in the U.S., according to estimates.





Foreign direct investment position, historic-cost basis, 2000-2017.

### \$11.1 bn

### U.S. Goods Exports to Spain, 2017

9.2%

The U.S. supplied 3.7% 3.7% of Spain's total imports...

...but the U.S. share increases to 9.2% when intra-EU trade is excluded from the total

### Top Five U.S. Goods Exports to Spain (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**



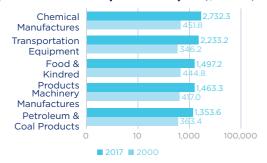
# \$15.6 bn

### U.S. Goods Imports from Spain, 2017

The U.S. received 4.5% 4.5% of the total goods Spain exported to the world...

...but the U.S. share increases to 12.7% when intra-EU trade is excluded from the total

### **Top Five U.S. Goods Imports from Spain (\$ millions)**



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$7.0 bn

**U.S. Services Exports to Spain, 2017** 

Trade in

\$7.0 bn

U.S. Services Imports from Spain, 2017

# **Sweden and the United States**

United States in Sweden



Sweden in the United States

73,134

216,138

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$34.6 bn

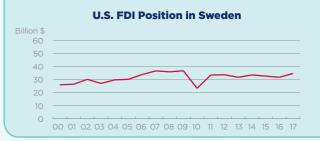
Foreign Direct Investment (FDI), 2017



\$50.9 bn

### Foreign Direct Investment (FDI), 2017

The investment balance favors the U.S., with Swedish direct investment in the U.S. totaling \$50.9 billion, while U.S. firms invested \$34.6 billion in Sweden in 2017. The value added of Swedish affiliates in the U.S. also exceeded that of U.S. foreign affiliates. The employment balance is heavily skewed in favor of the United States, with Swedish estimated to have employed over 200,000 workers in the U.S. in 2017.





Foreign direct investment position, historic-cost basis, 2000-2017.

Trade in Goods

# \$3.7 bn

### U.S. Goods Exports to Sweden, 2017

2.5% The U.S. supplied 2.5% of Sweden's total imports...

...but the U.S. share increases to 8.5% when intra-EU trade is excluded from the total

### **Top Five U.S. Goods Exports to Sweden** (\$ millions)



## **Top State Trade Partners Exports of Goods** (\$ millions)











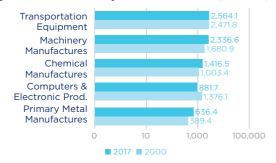
# \$10.7 bn

### U.S. Goods Imports from Sweden, 2017

The U.S. received 6.9% of the total goods Sweden exported to the world...

16.7% ...but the U.S. share increases to 16.7% when intra-EU trade is excluded from the total

### Top Five U.S. Goods Imports from Sweden (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$5.6 bn

U.S. Services Exports to Sweden, 2017

\$3.2 bn

U.S. Services Imports from Sweden, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.

Trade in

# Switzerland and the United States

United States in Switzerland



Switzerland in the United States

104,754

480,420

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

# \$250.0 bn



\$309.4 bn

### Foreign Direct Investment (FDI), 2017

### Foreign Direct Investment (FDI), 2017

The investment balance favors the U.S.—direct investment in Switzerland totaled \$250.0 billion in 2017 versus \$309.4 billion of Swiss investment in the U.S. Switzerland has one of the largest asset bases in the U.S. of any nation at \$1.2 trillion (mainly from industries such as insurance and financial services). Estimates show the employment balance significantly favors the United States, and that both U.S. affiliates in Switzerland and Swiss affiliates in the U.S. each added thousands of additional workers to their payrolls in 2017.

# U.S. FDI Position in Switzerland 320 280 240 200 160 120 80 40 0 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17



Foreign direct investment position, historic-cost basis, 2000-2017.

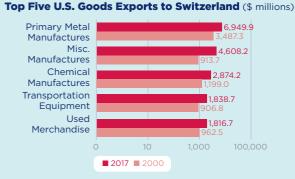
Trade in Goods

# \$21.7 bn

### **U.S. Goods Exports to Switzerland, 2017**

7.9% The U.S. supplied 7.9% of Switzerland's total imports...

19.7% ...but the U.S. share increases to 19.7% when trade with the EU is excluded from the total



### **Top State Trade Partners Exports of Goods (\$ millions)**

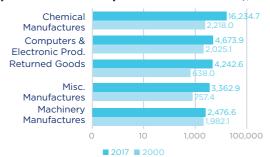
0	2	3	4	6
5,592.8	4,735.8	1,988.2	1,363.0	1,118.8
New York	Nevada	California	Florida	Massachu- setts

# \$36.0 bn

### U.S. Goods Imports from Switzerland, 2017

12.3% The U.S. received 12.3% of the total goods Switzerland exported to the world 22.5% ...but the U.S. share increases to 22.5% when trade with the EU is excluded from the total

### **Top Five U.S. Goods Imports from Switzerland (\$ millions)**



### **Top State Trade Partners Imports of Goods (**\$ millions)



\$37.3 bn

U.S. Services Exports to Switzerland, 2017



\$26.9 bn

U.S. Services Imports from Switzerland, 2017

# Turkey and the United States

United States in Turkey



Turkey in the United States

52,020

3,750

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals.

\$4.3 bn



\$2.0 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

The investment balance favors Turkey — the U.S. had \$4.3 billion of foreign direct investment in Turkey in 2017 versus Turkey's \$2.0 billion of investment in the U.S. According to 2017 estimates, affiliates of U.S. multinationals had assets of \$21.9 billion in Turkey compared to Turkey's affiliate asset base of only \$4.3 billion. U.S. affiliate employment in Turkey declined slightly in 2015, but soon rebounded in 2016 and 2017.





Foreign direct investment position, historic-cost basis, 2000-2017.

Note: Dotted line indicates that data has been suppressed for a particular year to avoid disclosure of individual company data.

# \$9.7 bn

### **U.S. Goods Exports to Turkey, 2017**

The U.S. supplied 5.1% 5.1% of Turkey's total imports...

...but the U.S. share increases to 8.0% when trade with the EU is excluded from the total.

### **Top Five U.S. Goods Exports to Turkey** (\$ millions)



### **Top State Trade Partners Exports of Goods (\$ millions)**











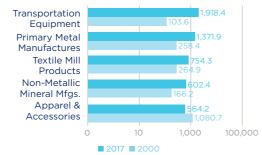
\$9.4 bn

### U.S. Goods Imports from Turkey, 2017

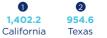
The U.S. received 5.5% of the total goods Turkey exported to the world...

10.4% ...but the U.S. share increases to 10.4% when trade with the EU is excluded from the total.

### Top Five U.S. Goods Imports from Turkey (\$ millions)



### **Top State Trade Partners Imports of Goods (\$ millions)**





878.1 New York New Jersey



\$3.0 bn

U.S. Services Exports to Turkey, 2017

\$1.8 bn

U.S. Services Imports from Turkey, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.

Trade in

# United Kingdom and the United States

United States in United Kingdom



United Kingdom in the United States

1,502,868

1,262,250

Jobs directly supported by majority-owned affiliates. Estimates for 2017, Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

# \$747.6 bn



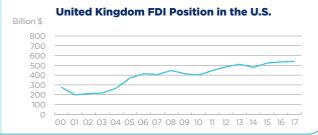
\$540.9 bn

### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

In terms of the U.S.-U.K. investment balance, the U.S. had a larger net cross-border impact in 2017. U.S. foreign direct investment in the United Kingdom totaled a record \$747.6 billion in 2017, and the U.K.'s foreign direct investment in the U.S. increased to \$540.9 billion. Estimated sales of American and British affiliates totaled more than \$1.2 trillion in 2017, with over 20,000 workers added to the payrolls of affiliate firms in each country. According to estimates for 2017, U.S. affiliates employed over 1.5 million workers in the U.K. while U.K. affiliates employed roughly 1.3 million Americans.





\$53.1 bn

U.S. Goods Imports from United Kingdom, 2017

Foreign direct investment position, historic-cost basis, 2000-2017.

# \$56.3 bn

**Top Five U.S. Goods Exports to United Kingdom** (\$ millions)

### U.S. Goods Exports to United Kingdom, 2017

The U.S. supplied 9.5% 9.5% of United Kingdom's total imports...

> Transportation Equipment

Manufactures

Primary Metal

Manufactures

Computers &

Manufactures

Machinery

Electronic Prod.

Chemical

19.5% ...but the U.S. share increases to 19.5% when intra-EU trade is excluded from the total

6 644 7

5,806.5

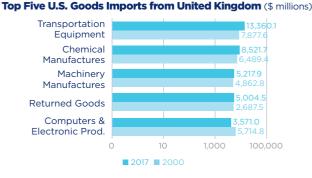
5.024.0

3 6811

### 13.3% of the total goods United Kingdom exported to the world...

13.3% The U.S. received

...but the U.S. share increases to 25.3% when intra-EU trade is excluded from the total.



### **Top State Trade Partners Exports of Goods (\$ millions)**

**■ 2017 ■** 2000



### **Top State Trade Partners Imports of Goods (\$ millions)**



\$69.6 bn

Trade in U.S. Services Exports to United Kingdom, 2017

\$56.9 bn

U.S. Services Imports from United Kingdom, 2017

Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.

# The EU and the United States

United States in the EU



The EU in the United States

4,373,964

4,085,406

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$3.2 tn

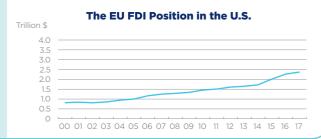


### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

In terms of the U.S.-EU investment balance, the U.S. had a larger net cross-border impact in 2017. U.S. foreign direct investment in the EU totaled a record \$3.2 trillion in 2017, and the EU's foreign direct investment in the U.S. rose to \$2.4 trillion. According to estimates for 2017, U.S. affiliates employed almost 4.4 million workers in the EU while EU affiliates employed roughly 4.1 million Americans.





Foreign direct investment position, historic-cost basis, 2000-2017.

# \$283.3 bn

### U.S. Goods Exports to the EU, 2017

The U.S. supplied 5.0% 5.0% of the EU's total imports...

13.8% ...but the U.S. share increases to 13.8% when intra-EU trade is excluded from the total

### Top Five U.S. Goods Exports to the EU (\$ billions)





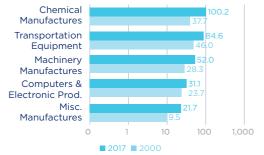
# \$434.6 bn

### U.S. Goods Imports from the EU, 2017

The U.S. received 7.2% of the total goods the EU exported to the world...

20.0% ...but the U.S. share increases to 20.0% when intra-EU trade is excluded from the total.

### **Top Five U.S. Goods Imports from the EU** (\$ billions)



### **Top State Trade Partners Imports of Goods (\$ billions)**



\$243.4 bn

U.S. Services Exports to the EU, 2017



\$192.0 bn

U.S. Services Imports from the EU, 2017

# **Europe and the United States**

United States in Europe



Europe in the United States

4,809,912

4,585,104

Jobs directly supported by majority-owned affiliates. Estimates for 2017. Total U.S.-related jobs are likely to be higher, because these figures do not include jobs created by trade flows, indirect employment effects through distributors or suppliers, or via non-equity arrangements such as strategic alliances, joint ventures, or other deals

\$3.6 tn

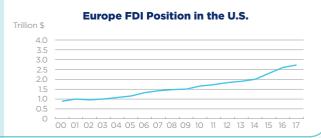


### Foreign Direct Investment (FDI), 2017

Foreign Direct Investment (FDI), 2017

In terms of the U.S.-Europe investment balance, the U.S. had a larger net cross-border impact in 2017. U.S. foreign direct investment in Europe totaled a record \$3.6 trillion in 2017, and Europe's foreign direct investment in the U.S. rose to \$2.7 trillion. According to estimates for 2017, U.S. affiliates employed over 4.8 million workers in Europe while European affiliates employed almost 4.6 million Americans.





Foreign direct investment position, historic-cost basis, 2000-2017.

7.0%

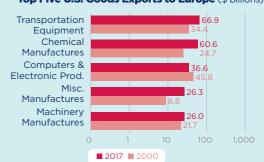
# \$332.7 bn

### U.S. Goods Exports to Europe, 2017

The U.S. supplied 5.1% 5.1% of Europe's total imports...

...but the U.S. share increases to 17.7% when intra-Europe trade is excluded from the total.

### Top Five U.S. Goods Exports to Europe (\$ billions)



### **Top State Trade Partners Exports of Goods (\$ billions)**



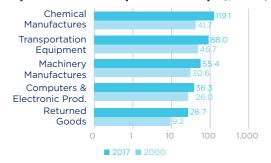
# \$506.3 bn

### U.S. Goods Imports from Europe, 2017

The U.S. received 7.0% of the total goods Europe exported to the world...

...but the U.S. share 24.1% increases to 24.1% when intra-Europe trade is excluded from the total

### **Top Five U.S. Goods Imports from Europe** (\$ billions)



### **Top State Trade Partners Imports of Goods (\$ billions)**



\$298.0 bn

**U.S. Services Exports to Europe, 2017** 

Trade in Services

\$232.4 bn

U.S. Services Imports from Europe, 2017

"Europe" refers to all 28 members of the European Union plus Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Gibraltar, Greenland, Iceland, Kazakhstan, Kosovo, Kyrgyzstan, Macedonia, Malta, Moldova, Monaco, Montenegro, Norway, Russia, Serbia, San Marino, Switzerland, Turkey, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Vatican.
Sources: Bureau of Economic Analysis; U.S. Commerce Department; International Monetary Fund; Office of Trade and Economic Analysis.

# Notes on Terms, Data and Sources

### Employment, Investment, and Trade Linkages for the 50 U.S. States and Europe

Jobs data are from the U.S. Commerce Department's Bureau of Economic Analysis (BEA). BEA employment by state is only available for Canada, France, Germany, Japan, the Netherlands, Switzerland, and the United Kingdom; for this reason, other countries may not be listed in this jobs section. Data on investment is from SelectUSA, a program led by the U.S. Department of Commerce, using data from fDi Markets. The data show number of Greenfield FDI projects announced over the span of ten years; this does not directly translate to the value of projects or jobs added. Trade data comes from the U.S. Census Bureau's USA Trade Online database as well as the International Trade Administration at the U.S. Commerce Department. Europe includes Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Faroe Islands, Finland, France, Georgia, Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kosovo, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Serbia, Slovakia, Slovenia, Spain, Svalbard, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan, Vatican City. The top ten exports and imports bar charts employ a logarithmic scale to facilitate cross-state comparisons.

### Investment and Trade for the EU 28, Norway, Switzerland, Turkey and the U.S.

Investment and jobs data are from the Bureau of Economic Analysis, with employment figures representing author estimates for 2017. For certain countries where there was no discernable FDI position trend between the European country and the U.S., data on global outward and inward stock was used from the United Nations Conference on Trade and Development (UNCTAD) database. Data on exports and imports of goods and services are from the U.S. Commerce Department. The bar charts employ logarithmic scales to facilitate cross-country comparisons. Data on trade exports and imports by state were extracted from the U.S. Census Bureau's USA Trade Online database. The data representing the United States' share of imports and exports were constructed using data from the International Monetary Fund's Direction of Trade Statistics database.

### **Digital Services**

Information and communications technology (ICT) services, or digital services, are services used to facilitate information processing and communication. The BEA defines digital services as including three categories of international trade in services: telecommunications services, computer services, and charges for the use of intellectual property associated with computer software. Digitally enabled services, or potentially ICT-enabled services, are services that can be, but not necessarily are, delivered remotely over ICT networks. These include the three categories defined above for digital services plus: insurance services, financial services, all charges for the use of intellectual property, information services, research and development, professional and management consulting, architectural and engineering services, industrial engineering, training services, and other business services not included elsewhere.

Services figures in Chapter 3 are sourced from the OECD International Trade in Services Statistics database, which can vary from the corresponding U.S.-EU bilateral trade figures reported by the U.S. Bureau of Economic Analysis. Differences can occur in how services are measured, classified, and attributed to partner countries, resulting in asymmetries in the two data sources. For more information on these asymmetries, please see Eurostat report, "Transatlantic Trade in Services: Investigating Bilateral Asymmetries in EU-US Trade Statistics, 2017 edition," https://ec.europa.eu/eurostat/documents/7870049/8544118/KS-GQ-17-016-EN-N.pdf/eaf15b03-5dcf-48dd-976f-7b4169f08a9e.

### **E-Commerce**

Most estimates of e-commerce do not distinguish whether such commerce is domestic or international. In addition, many metrics do not make it clear whether they cover all modes of e-commerce or only the leading indicators of business-to-business (B2B) and business-to-consumer (B2C) e-commerce. Finally, there are no official data on the value of cross-border e-commerce sales broken down by mode; official statistics on e-commerce are sparse and usually based on surveys rather than on real data. The U.S. International Trade Commission (ITC) defines global e-commerce as the sale of goods and services over the internet.

### **Terms**

Throughout this report, the term "EU" refers to all 28 member states of the European Union. The term EU15 refers to older EU member states: United Kingdom, Ireland, Belgium, Luxembourg, the Netherlands, Austria, Spain, Italy, Greece, France, Germany, Portugal, Sweden, Finland, and Denmark. The term EU13 refers to newer EU member states: Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Malta, Cyprus, Romania and Bulgaria, and Croatia.

In addition to the above, the term "Europe" in this report refers to the following: all 28 members of the European Union plus Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Gibraltar, Greenland, Iceland, Kazakhstan, Kosovo, Kyrgyzstan, Macedonia, Malta, Moldova, Monaco, Montenegro, Norway, Russia, Serbia, San Marino, Switzerland, Turkey, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, and Vatican City.

# About the Authors

Daniel S. Hamilton and Joseph P. Quinlan have been producing *The Transatlantic Economy* annual survey since 2004. They have authored and edited a series of award-winning books and articles on the modern transatlantic economy, including *Atlantic Rising: Changing Commercial Dynamics in the Atlantic Basin; Germany and Globalization; France and Globalization; Globalization and Europe: Prospering in a New Whirled Order; Sleeping Giant: Awakening the Transatlantic Services Economy; Protecting Our Prosperity: Ensuring Both National Security and the Benefits of Foreign Investment in the United States; Deep Integration: How Transatlantic Markets are Leading Globalization; and Partners in Prosperity: The Changing Geography of the Transatlantic Economy. Together they were recipients of the 2007 Transatlantic Leadership Award by the European-American Business Council and the 2006 Transatlantic Business Award by the American Chamber of Commerce to the European Union.* 



Daniel S. Hamilton is the Austrian Marshall Plan Foundation Professor and Senior Fellow at the Foreign Policy Institute Johns Hopkins University's Paul H. Nitze School of Advanced International Studies. He was the Founding Director of the SAIS Center for Transatlantic Relations and for 15 years he served as Executive Director of the American Consortium on EU Studies. He has been a consultant for Microsoft and an advisor to the U.S. Business Roundtable, the Transatlantic Business Dialogue, and the European-American Business Council. Recent books include *Turkey in the North Atlantic* 

Marketplace: Creating a North Atlantic Marketplace: Three Paths, One Detour, A U-Turn and the Road to Nowhere; The Transatlantic Digital Economy 2017; Rule-Makers or Rule-Takers? Exploring the Transatlantic Trade and Investment Partnership, edited with Jacques Pelkmans; Domestic Determinants of Foreign Policy in the European Union and the United States, edited with Teija Tiilikainen; Forward Resilience: Protecting Society in an Interconnected World; The Geopolitics of TTIP; Transatlantic 2020: A Tale of Four Futures, and Europe 2020: Competitive or Complacent? He has served in a variety of senior positions in the U.S. State Department, including as Deputy Assistant Secretary of State.



Joseph P. Quinlan is Senior Fellow at the Center for Transatlantic Relations, with extensive experience in the U.S. corporate sector. He is a leading expert on the transatlantic economy and well-known global economist/strategist on Wall Street. He specializes in global capital flows, international trade and multinational strategies. He lectures at Fordham University, and his publications have appeared in such venues as Foreign Affairs, the Financial Times and the Wall Street Journal. He is the author of The Last Economic Superpower: The Retreat of Globalization, the End of American Dominance,

and What We Can Do About It (New York: McGraw Hill, 2010).

# TRANSATLANTIC ECONOMY 2019

Annual Survey of Jobs, Trade and Investment between the United States and Europe

Daniel S. Hamilton and Joseph P. Quinlan

The Transatlantic Economy 2019 annual survey offers the most up-to-date set of facts and figures describing the deep economic integration binding Europe and the United States. It documents European-sourced jobs, trade and investment in each of the 50 U.S. states, and U.S.-sourced jobs, trade and investment in each member state of the European Union and other European countries. It reviews key headline trends and helps readers understand the distinctive nature of transatlantic economic relations.

Key sectors of the transatlantic economy are integrating as never before, underpinning a multi-trillion-dollar economy that generates millions of jobs on both sides of the Atlantic and is registering heightened growth opportunities, despite a whirlwind of political uncertainty about the direction of U.S., EU and UK policies.

The Transatlantic Economy 2019 explains

- what trade spats and Brexit mean for the transatlantic economy
- how U.S.-European commercial relations compare with those each has with China and other rising powers
- how the digital economy is powering economic relations, and
- how decision-makers and business leaders can address current opportunities and challenges.

The Transatlantic Economy 2019 provides key insights about the United States and Europe in the global economy, with often counterintuitive connections with important implications for policymakers, business leaders, and local officials.





### Supporting partners













Foreign Policy Institute
The Paul H. Nitze School of Advanced International Studies
The Johns Hopkins University
1717 Massachusetts Ave., NW, 8th floor
Washington, DC 20036
Tel: +1 202-663-5880

Fax: +1 202-663-5879

http://transatlanticrelations.org

