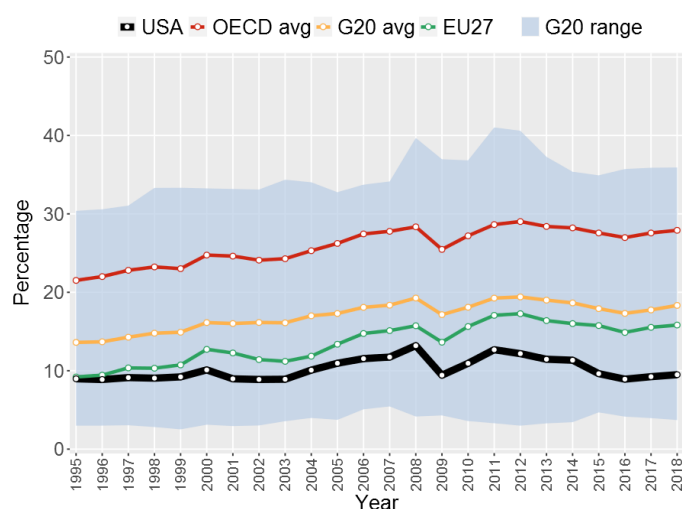


Trade in Value Added (TiVA) indicators offer new insights into the commercial relations among economies and provide a broad view of where value is created along each stage of global value chains (GVCs). Painting a more complete picture than gross trade measures alone, the TiVA approach better reflects the significantly higher contribution made by services in GVCs, the role of imports in export performance, and the true nature of economic interdependencies. The 2021 version of the TiVA database covers 66 economies and 45 industrial sectors, for the years 1995 to 2018, and brings together indicators based on the value-added origins (both country and industry) of exports, imports and final demand. This note highlights the trade patterns in value-added terms for the United States, with a view to informing policy making for a range of areas including trade, innovation, and investment.

Key findings

- ▶ The foreign content of exports by the United States steadily declined between 2008 and 2018, from 13.2% to 9.5% (Figure 1). This decline was partly driven by increasing exports of services, with relatively high domestic value-added content (Figure 3b and 7). However, the foreign value added in exports also declined in several manufacturing industries, with the largest falls observed in *Coke and refined petroleum products* and *ICT and electronics* (Figure 3a).
- ▶ The most export-oriented industries in the United States are found in the manufacturing sector with *Other transport equipment* (which includes *Shipbuilding, Air and spacecraft* and *Railroad equipment*) being the economic activity with the highest share (40.5%) of domestic value added in foreign final demand (Figure 2). Over the last decade, some sectors became more domestic-oriented, such as *Motor vehicles* and *Machinery and equipment*.
- ▶ While the European Union, Canada and Mexico were the largest export markets for the United States in gross terms in 2018, China was the second largest final destination for United States value added (Figure 5). This is the result of United States' value-added arriving in China indirectly, via exports to other countries.
- ▶ The integration of US supply chains with production in Mexico and Canada is reflected by high shares of US domestic value added embodied in US manufactured imports coming from these two economies (Figure 6).
- ▶ Services content accounts for a large share of gross exports by the United States (62.5% in 2018); services are also essential for its manufacturing competitiveness, contributing 31.4% of value added in gross exports of manufactured goods in 2018 (Figure 7).

Figure 1. Foreign value added content of gross exports
As a percent of total gross exports, 1995 to 2018



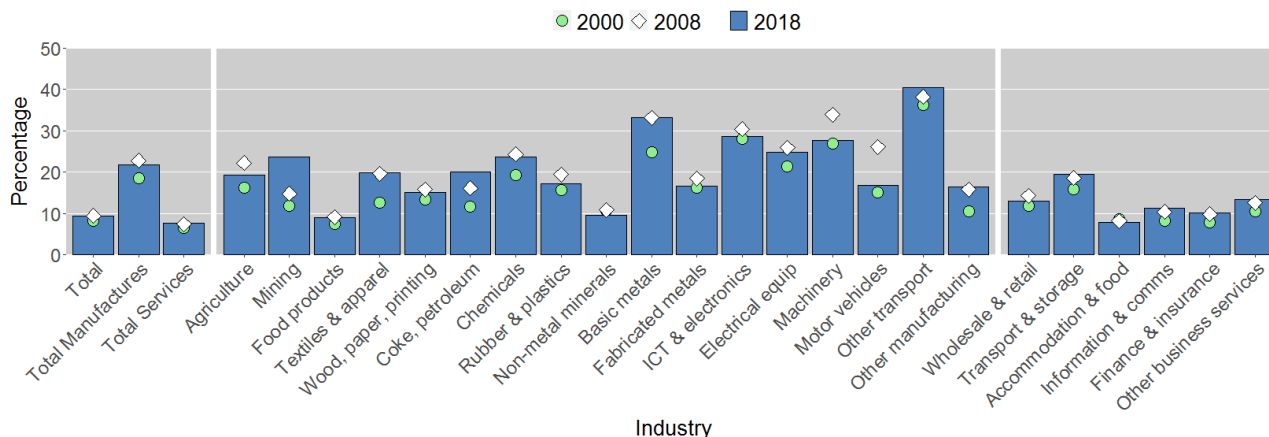
At the global level, the new TiVA indicators confirm that there has been a slowdown in GVC integration since the Financial Crisis in 2008-2009 (Figure 1). However, in general, foreign value added in trade increased between 2016 and 2018.

Between 2008 and 2018, the foreign content of US exports is estimated to have decreased from 13.2% to 9.5% - significantly below the OECD average of 27.9%. Compared to 2008, the foreign content of exports in 2018 was 3.7 percentage points lower.

The role of foreign final demand in domestic production

Overall, in 2018, 9.4% of US domestic value added was driven by foreign final demand. By industry, the shares ranged from *Other transport equipment* (40.5%) and *Basic metals* (33.2%) at the higher end to *Accommodation and food services* (7.7%) at the lower end.

Figure 2. United States - domestic value added in foreign final demand
As a percent of value added, by industry, 2000, 2008 and 2018



The importance of imports for exports

The industries with the most foreign value-added contents in their exports (Figure 3a) were *Coke and refined petroleum products* (27.4%), *Motor vehicles* (25%) and *Basic metals* (19.4%). *Wholesale and retail trade* generated the greatest source of domestic value-added content of exports in 2018, accounting for 12.9% of gross exports (Figure 3b), followed by *Other business services* (9%) and *Transport and storage* (6.8%). The most foreign content in total exports came from *Coke and refined petroleum products* (1.2%).

Figure 3a. United States - foreign value-added content of gross exports
As a percent of gross exports, by industry, 2000, 2008 and 2018

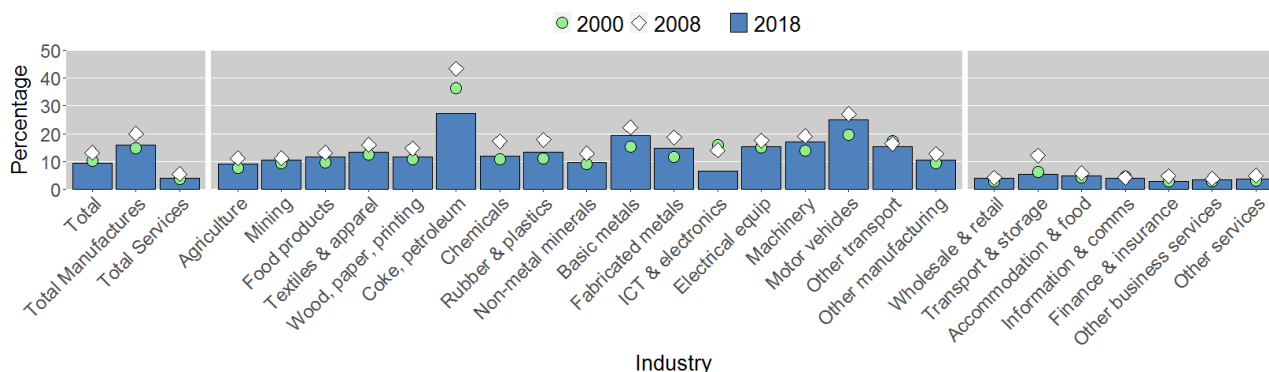
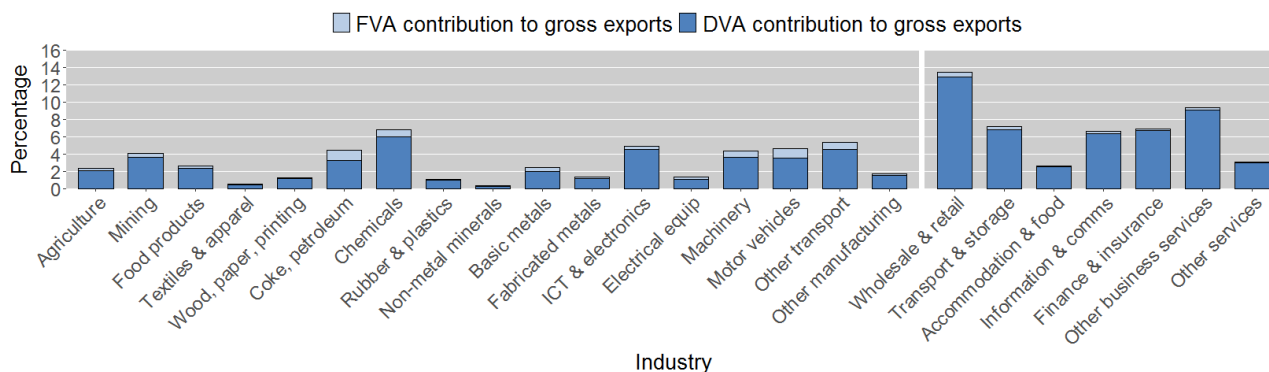
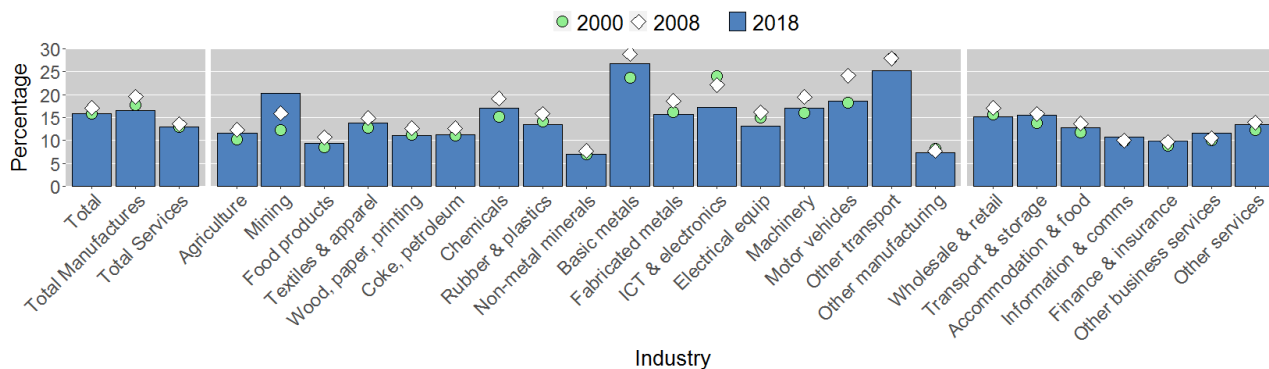


Figure 3b. United States - industry share of domestic and foreign value-added content of gross exports
As a percent of total gross exports, 2018



Of the total value of US imports of intermediate goods and services in 2018, 15.9% was subsequently embodied in exports, significantly below the OECD average of 47.9%, and close to the share in 2008 (17.1%). The originating industries with the highest shares of intermediate imports used in US exports were *Basic metals* (26.8%), *Other transport equipment* (25.3%) and *Mining and quarrying* (20.3%).

Figure 4. United States - imported intermediate inputs used for exports, by industry-origin of imports
As a percent of intermediate imports, 2000, 2008 and 2018



United States: international flows of goods and services, main players

In gross terms, the European Union (19.9%), Canada (12.6%) and Mexico (10.5%) were the three most important American export market destinations in 2018. The top three final destinations for US value added were the European Union (19.6%), China (12.1%) and Canada (10.4%).

For imports in gross terms, the United States' top three partners in 2018 were the European Union (19.1%), China (16.9%) and Mexico (11.7%), while in value-added terms, the top three were the European Union (20.2%), China (17.8%) and Canada (9%).

Figure 5 United States - exports and imports: main partners
As a percent of total gross and value-added exports and imports, 2018

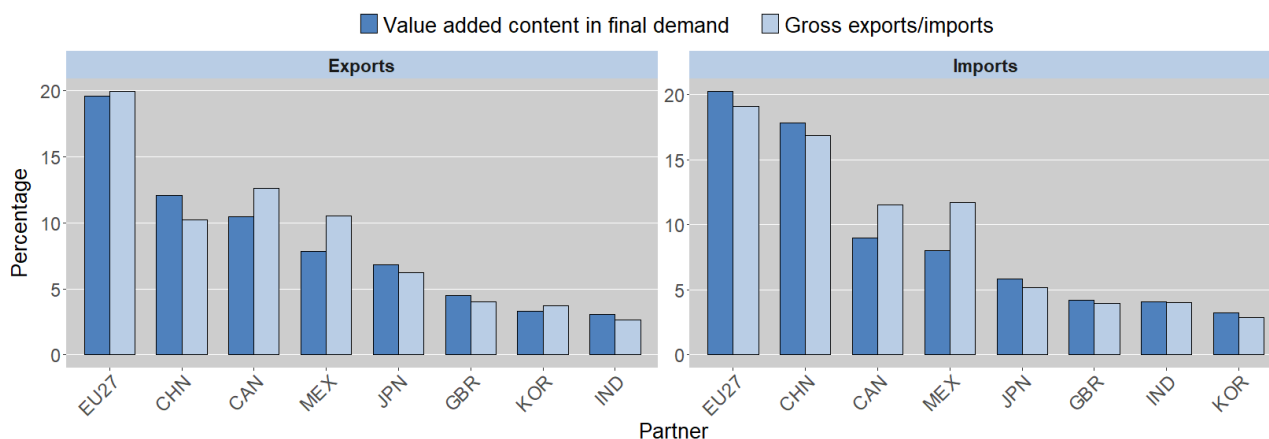
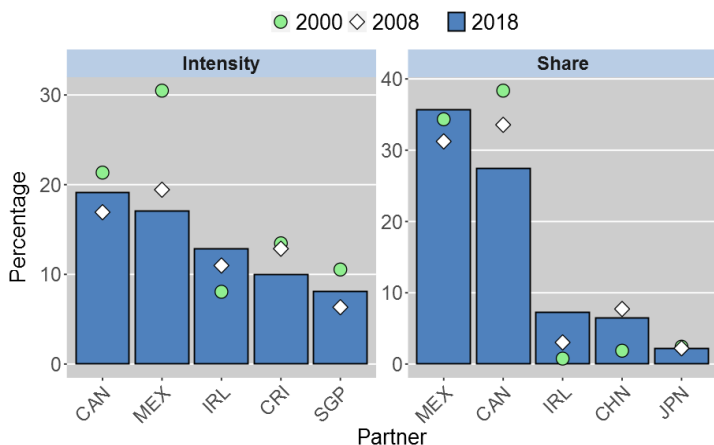


Figure 6. US domestic value-added content of manufactured imports, top 5 partners

As a share of total US value added embodied in US imports (right) and as a percent of total imports by partner (left)



In 2018, the highest shares of US domestic value added embodied in US manufactured imports (Figure 6, right) came from Mexico (35.7%), Canada (27.4%) and Ireland (7.2%).

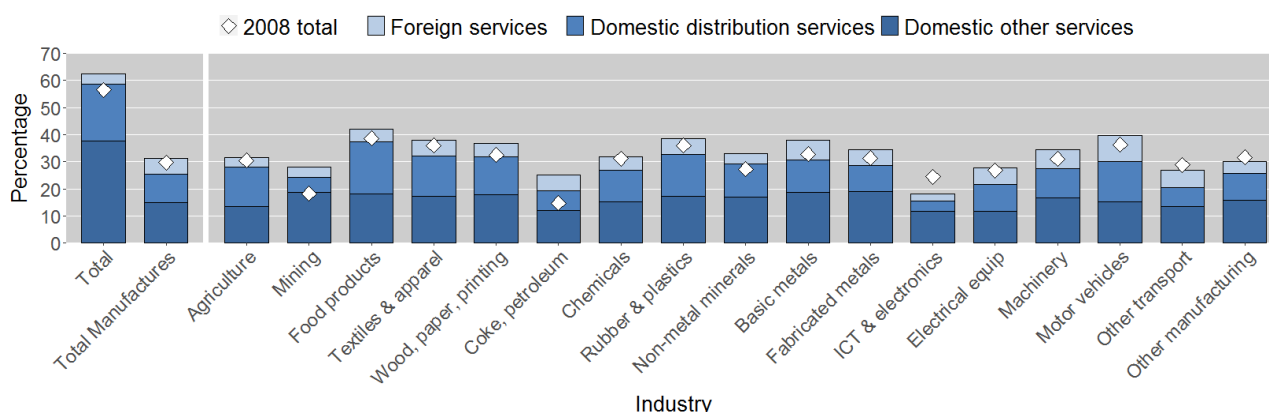
The trading partners with the highest shares of US value added in their exports of manufactures to the United States (Figure 6, left) in 2018 were Canada (19.1%), Mexico (17%) and Ireland (12.8%).

The importance of services in international trade

Services are a major contributor to US economy, accounting for 62.5% of US gross exports in 2018 (Figure 7) - above the OECD average of 55.7%. Foreign services contributed 3.8% to the value of total gross exports. For manufactures, services value-added content was 31.4% of gross exports, with the highest shares in *Food and beverages* (42.1%), *Motor vehicles* (39.8%) and *Rubber and plastics products* (38.4%).

Figure 7. United States - services content of gross exports

As a percent of gross exports by industry, 2018



Further information is available to supplement this country note:

- ▶ Access the data at: <http://oe.cd/tiva>
- ▶ Guide to TiVA 2021 Country Notes: www.oecd.org/sti/ind/tiva-2021-guide-to-country-notes.pdf
- ▶ TiVA indicators are based on the 2021 version of ICIO tables: <http://oe.cd/icio>
- ▶ Related indicators of Trade in Employment <http://oe.cd/io-emp> and Trade in Embodied CO2 <http://oe.cd/io-co2>
- ▶ Trade policy implications of global value chains: <http://www.oecd.org/trade/topics/global-value-chains-and-trade/documents/trade-in-value-added-2021.pdf>

Note: This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.