

TRADE IN VALUE ADDED: TURKEY

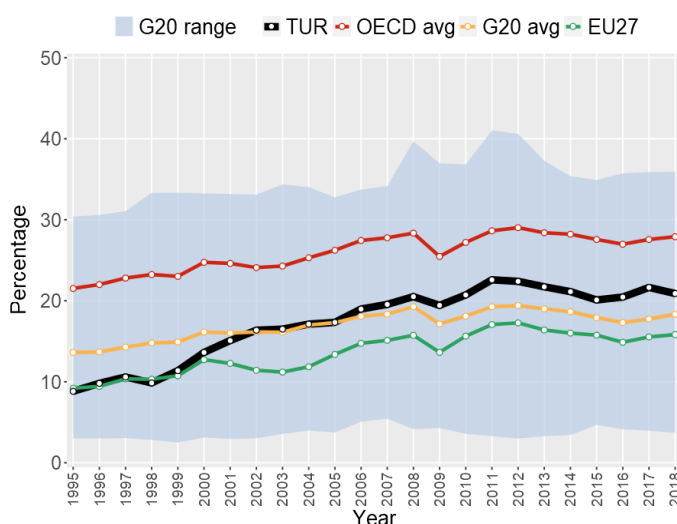
February 2022

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 Turkey, with a view to informing policy making for a range of areas including trade, innovation and investment.

Key findings

- ▶ The foreign content of Turkey's exports peaked in 2011 at 22.6% and has since followed mostly a downward trend to approximately 21% in 2018, similar to the level a decade ago. Although these shares are consistently below the OECD average of 27.9%, since 2002 they are above the G20 average (Figure 1). Industries with relatively high foreign content in their exports included *Coke and refined petroleum products* (64.3%), *Electrical equipment* (35.2%) and *Motor vehicles* (31.6%) (Figure 3a).
- ▶ In 2018, Turkey's domestic share of value added meeting foreign final demand was highest in the sectors of *Motor vehicles* (74.6%) and *Basic metals* (60.3%). This share for the Turkish manufacturing was 41.7%, up from 33.8% in 2008 (Figure 2).
- ▶ Both in gross and value-added terms, the European Union is Turkey's largest export and import partner by a large margin. Together with the United States and the United Kingdom, it represents over 50% of foreign final demand for Turkish value added. Conversely, the top three import partners in value-added terms (the European Union, China and the United States) also concentrate over 51% of foreign value added meeting Turkish final demand (Figure 5).
- ▶ The services content of Turkey's gross exports stood at 47.8% in 2018, slightly below 2008 levels (49.2%) and the OECD average of 55.7%. The services content of gross exports fell for nearly all manufacturing industries, particularly in *ICT and electronics*, decreasing by 9.4 percentage points (Figure 7).

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



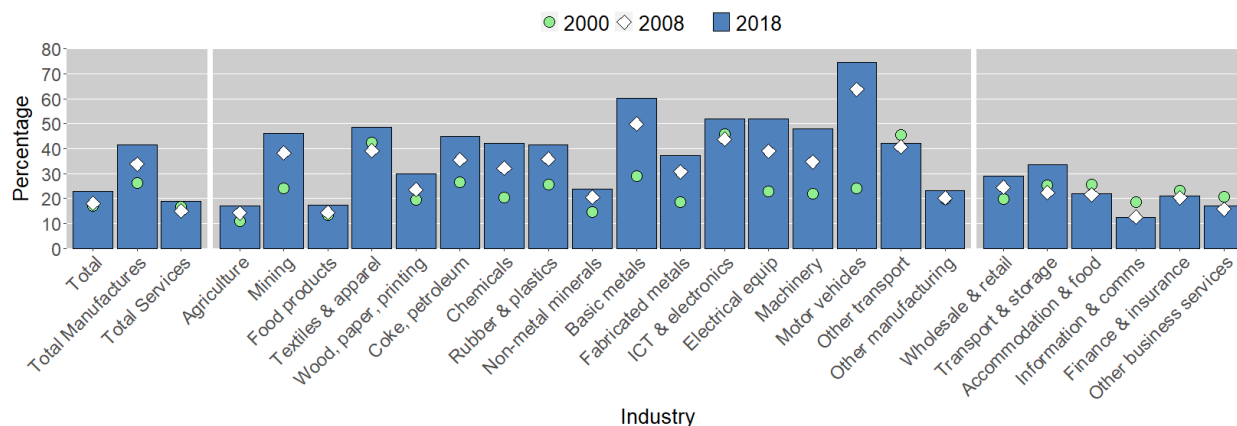
At the global level, the new TiVA indicators confirm that there has been a slowdown in GVC integration since the Financial Crisis in 2008-2009 (Figure 1). However, in general, foreign value added in trade increased between 2016 and 2018.

Between 2008 and 2018, the foreign content of Turkey's exports is estimated to have increased from 20.5% to 20.9% - below the OECD average of 27.9%. Compared to 2008, the foreign content of exports in 2018 was 0.4 percentage points higher.

The role of foreign final demand in domestic production

Overall, in 2018, 22.8% of Turkey's domestic value added was driven by foreign final demand, up from 18% in 2008. By industry, the shares ranged from *Motor vehicles* (74.6%) and *Basic metals* (60.3%) at the higher end to *Information and communication* (12.6%) at the lower end.

Figure 2. Turkey - 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* (64.3%), *Electrical equipment* (35.2%) and *Motor vehicles* (31.6%). *Wholesale and retail trade* generated the greatest source of domestic value-added content of exports in 2018, accounting for 10.7% of gross exports (Figure 3b), followed by *Transport and storage* (10.3%) and *Textiles and apparel* (9.9%). The most foreign content in total exports came from *Motor vehicles* (3%).

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

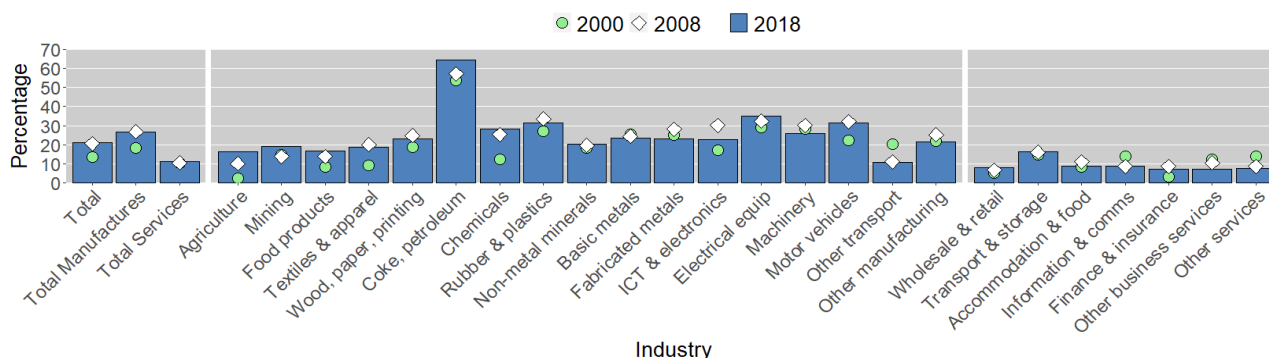
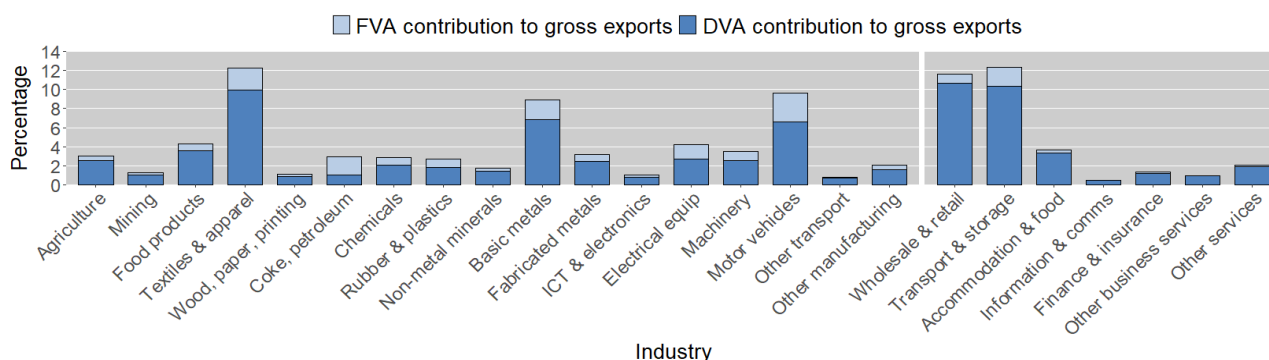
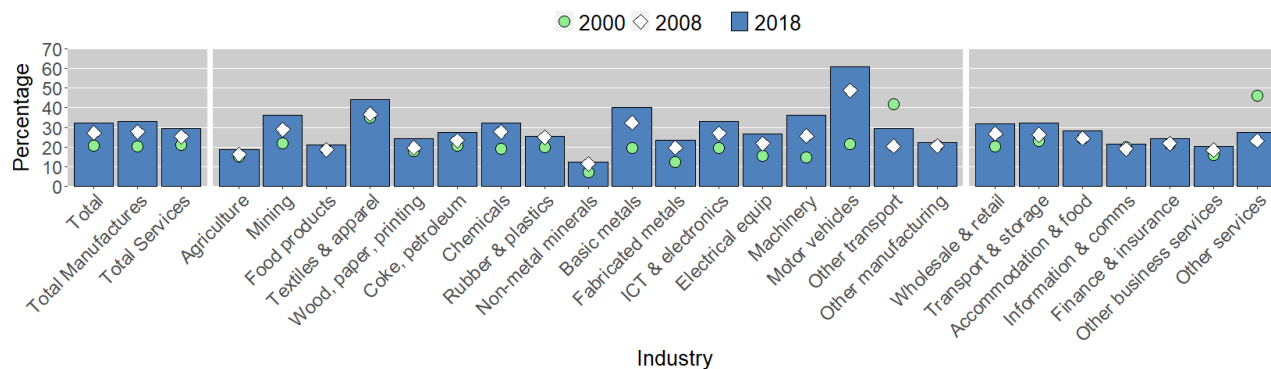


Figure 3b. Turkey - industry share of domestic and foreign value-added content of gross exports
As a percent of total gross exports, 2018



Of the total value of Turkey's imports of intermediate goods and services in 2018, 32.2% was subsequently embodied in exports, significantly below the OECD average of 47.9%, and above the share in 2008 (27.1%). The originating industries with the highest shares of intermediate imports used in Turkey's exports were Motor vehicles (60.7%), Textiles and apparel (44.3%) and Basic metals (40.2%).

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



Turkey: international flows of goods and services, main players

In gross terms, the European Union (40.2%), the United States (6.6%) and the UK (5.2%) were the three most important Turkish export market destinations in 2018. The top three final destinations for Turkey's value added were the European Union (36.3%), the United States (8.3%) and the UK (5.4%).

For imports in gross terms, Turkey's top three partners in 2018 were the European Union (36.6%), China (9.2%) and the Russian Federation (7.1%), while in value-added terms, the top three were the European Union (33.2%), China (10%) and the United States (7.8%).

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

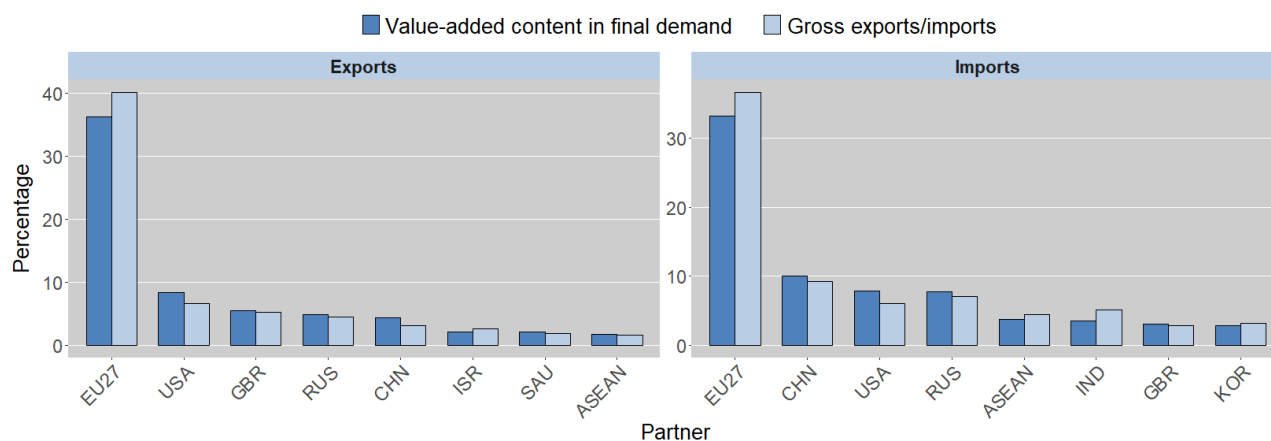
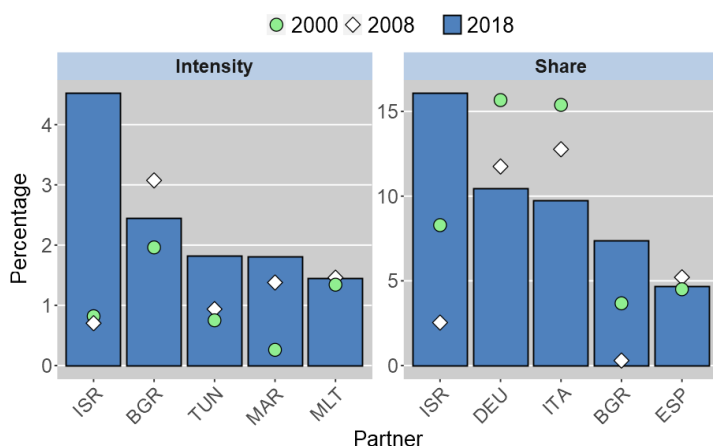


Figure 6. Turkey's domestic value-added content of manufactured imports, top 5 partners

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



In 2018, the highest shares of Turkey's domestic value added embodied in Turkey's manufactured imports (Figure 6, right) came from Israel (16.1%), Germany (10.4%) and Italy (9.7%).

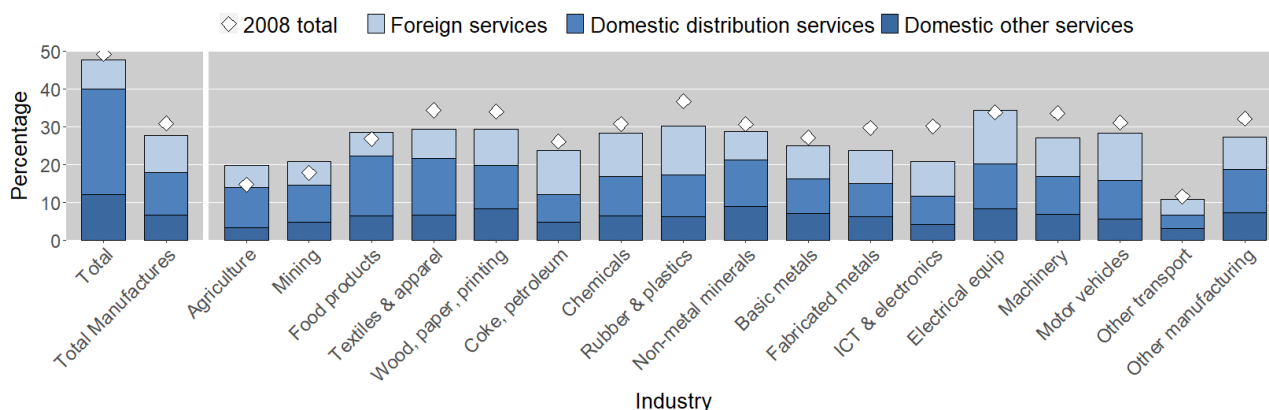
The trading partners with the highest shares of Turkey's value added in their exports of manufactures to Turkey (Figure 6, left) in 2018 were Israel (4.5%), Bulgaria (2.4%) and Tunisia (1.8%).

The importance of services in international trade

Services are a significant contributor to Turkey's economy, accounting for 47.8% of Turkey's gross exports in 2018 (Figure 7) - below the OECD average of 55.7%. Foreign services contributed 7.8% to the value of total gross exports. For manufactures, services value-added content was 27.7% of gross exports, with the highest shares in *Electrical equipment* (34.5%), *Rubber and plastics products* (30.2%) and *Wood and paper products* (29.4%).

Figure 7. Turkey - 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>

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