

# TRADE IN VALUE ADDED: CHINA

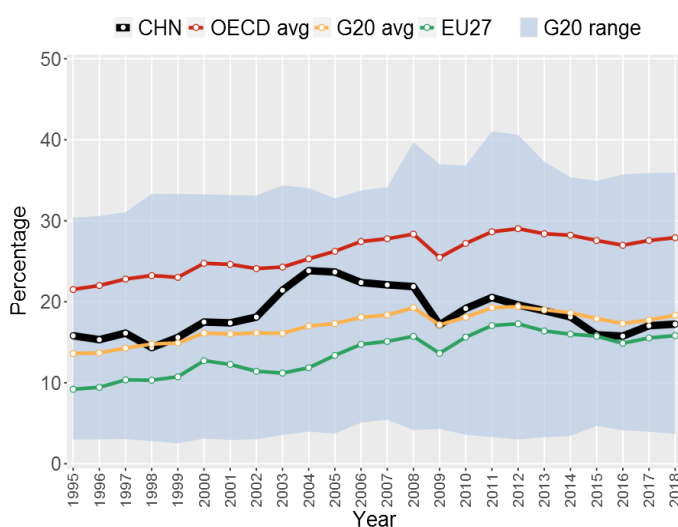
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Trade in Value Added (TiVA) indicators offer new insights into the commercial relations among economies and provide a broad view of where value is created along each stage of global value chains (GVCs). Painting a more complete picture than gross trade 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 China, with a view to informing policy making for a range of areas including trade, innovation, and investment.

## Key findings

- ▶ The foreign value-added content of China's exports declined by 4.6 percentage points between 2008 and 2018, from 21.9% to 17.2% (Figure 1). Leading the way, the share of foreign content in the *ICT and electronics* sector (China's largest export industry) fell from 34.9% to 27.1% in 2018 (Figure 3a), suggesting a shift towards domestic sourcing of intermediate inputs.
- ▶ The share of China's domestic value-added content driven by foreign final demand fell from 23.7% in 2008 to 14.4% in 2018 (Figure 2), while at the same time, the share of imported intermediate inputs subsequently embodied in exports decreased from 37.7% to 26.2% (Figure 4), suggesting a shift away from production to meet foreign final demand towards domestic consumption.
- ▶ While the United States, the European Union and Japan are China's most important trading partners, in both gross and value-added terms (Figure 5), the intensity of China's integration with some of its regional trading partners (such as Viet Nam or Cambodia) has increased substantially over the last decade (Figure 6).
- ▶ The services content of China's gross exports increased from 34.3% in 2008 to 37.8% in 2018, of which foreign value added contributed 6.1 percentage points. Services are also growing increasingly important to China's manufacturing competitiveness, contributing 29.4% of value added in gross manufactures exports in 2018, up from 26.4% in 2008 (Figure 7).

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



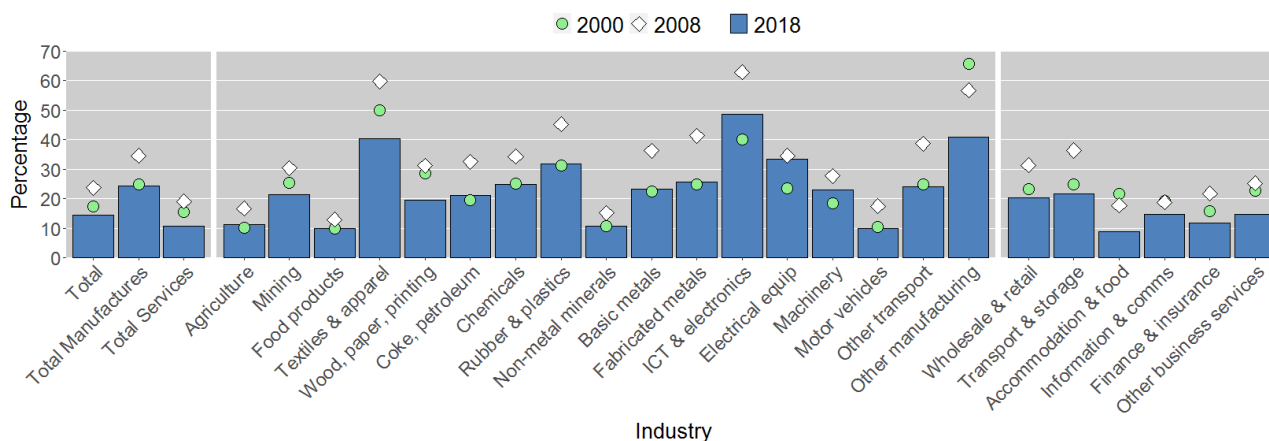
At the global level, the new TiVA indicators confirm that there has been a slowdown in GVC integration since the Financial Crisis in 2008-2009 (Figure 1). However, in general, foreign value added in trade increased between 2016 and 2018.

Between 2008 and 2018, the foreign content of China's exports is estimated to have decreased from 21.9% to 17.2% - significantly below the OECD average of 27.9%. Compared to 2008, the foreign content of exports in 2018 was 4.6 percentage points lower.

## The role of foreign final demand in domestic production

Overall, in 2018, 14.4% of China's domestic value added was driven by foreign final demand, down from 23.7% in 2008. By industry, the shares ranged from *ICT and electronics* (48.6%) and *Manufacturing nec* (41%) at the higher end to *Accommodation and food services* (8.8%) at the lower end.

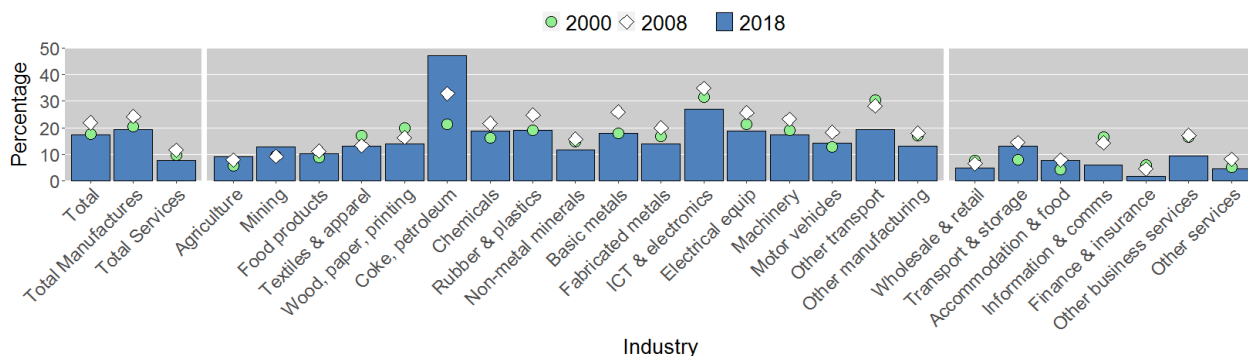
**Figure 2. China - domestic value added in foreign final demand**  
As a percent of value added, by industry, 2000, 2008 and 2018



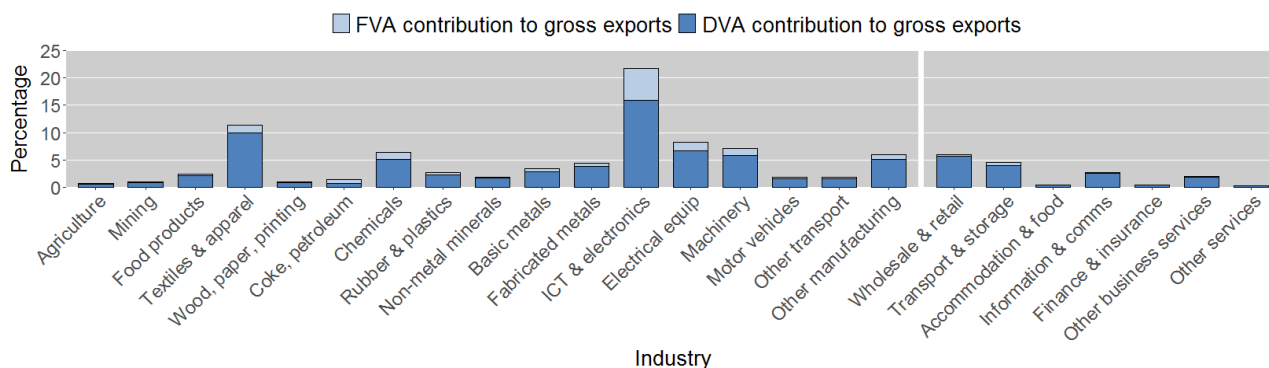
## The importance of imports for exports

The industries with the most foreign value-added contents in their exports (Figure 3a) were *Coke and refined petroleum products* (47.1%), *ICT and electronics* (27.1%) and *Other transport equipment* (19.4%). *ICT and electronics* generated the greatest source of domestic value-added content of exports in 2018, accounting for 15.9% of gross exports (Figure 3b), followed by *Textiles and apparel* (9.9%) and *Electrical equipment* (6.7%). The most foreign content in total exports came from *ICT and electronics* (5.9%).

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

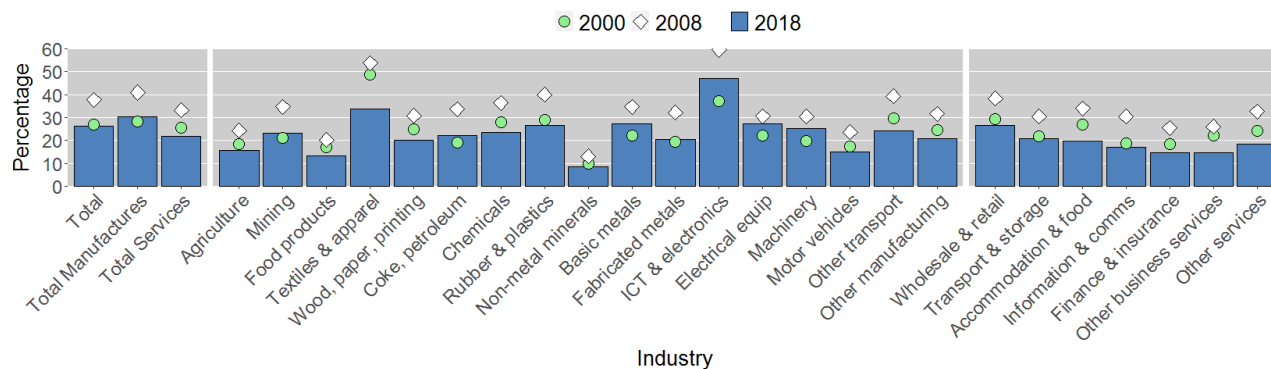


**Figure 3b. China - industry share of domestic and foreign value-added content of gross exports**  
As a percent of total gross exports, 2018



Of the total value of China's imports of intermediate goods and services in 2018, 26.2% was subsequently embodied in exports, significantly below the OECD average of 47.9%, and significantly below the share in 2008 (37.7%). The originating industries with the highest shares of intermediate imports used in China's exports were *ICT and electronics* (46.9%), *Textiles and apparel* (33.7%) and *Electrical equipment* (27.3%).

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

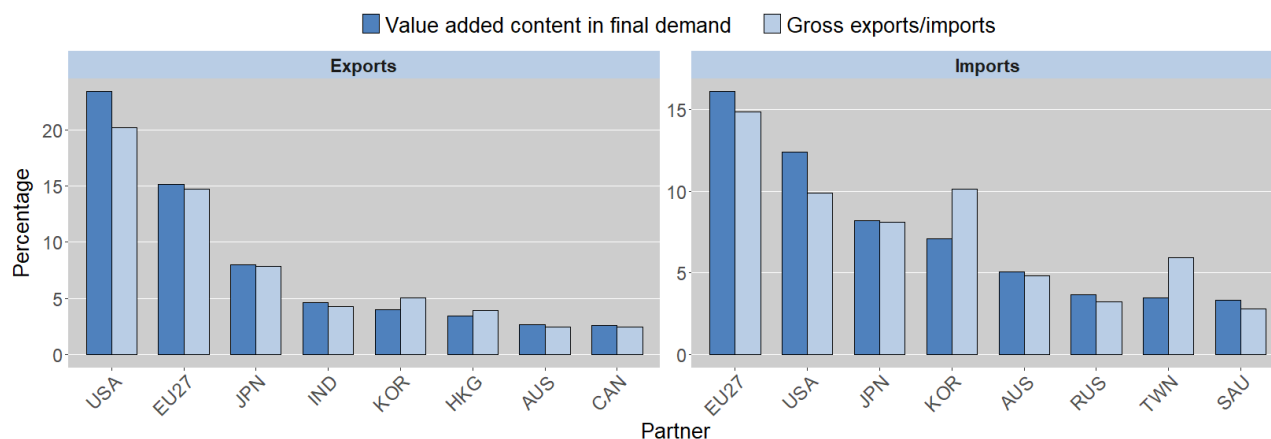


### China: international flows of goods and services, main players

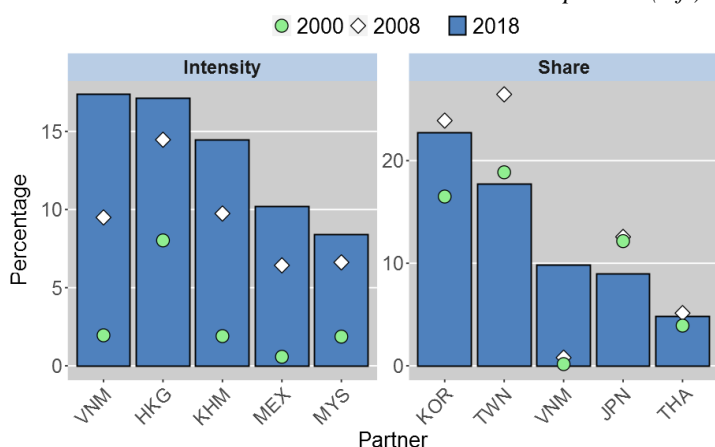
In gross terms, the United States (20.2%), the European Union (14.7%) and Japan (7.9%) were the three most important Chinese export market destinations in 2018. The top three final destinations for China's value added were the United States (23.4%), the European Union (15.1%) and Japan (8%).

For imports in gross terms, China's top three partners in 2018 were the European Union (14.8%) and Korea (10.1%), the United States (9.9%), while in value-added terms, the top three were the European Union (16.1%), the United States (12.4%) and Japan (8.2%).

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



**Figure 6. China's domestic value-added content of manufactured imports, top 5 partners**  
*As a share of total China's value added embodied in China's imports (right) and as a percent of total imports by partner (left)*



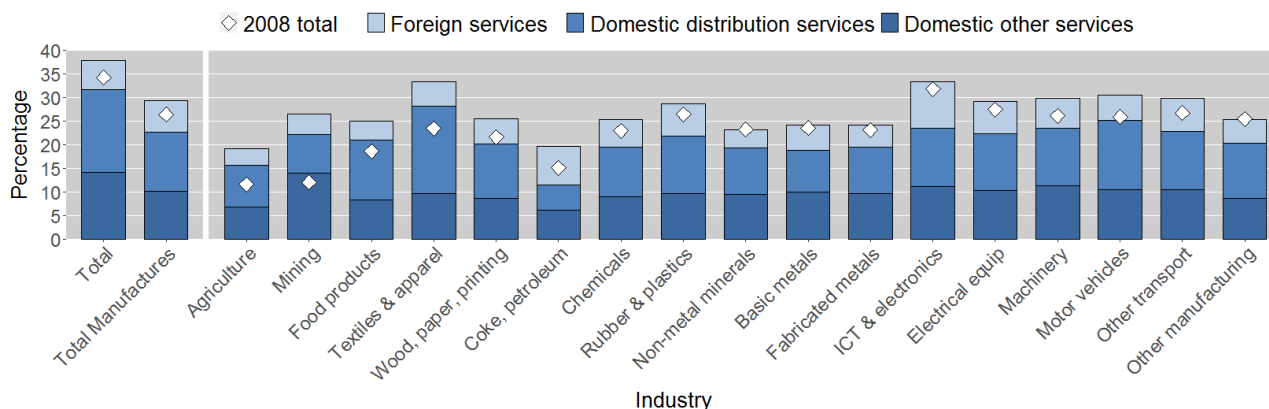
In 2018, the highest shares of China's domestic value added embodied in China's manufactured imports (Figure 6, right) came from Korea (22.7%), Chinese Taipei (17.7%) and Viet Nam (9.8%).

The trading partners with the highest shares of China's value added in their exports of manufactures to China (Figure 6, left) in 2018 were Viet Nam (17.4%), Hong Kong (17.1%) and Cambodia (14.5%).

### The importance of services in international trade

Services are a significant contributor to China's economy, accounting for 37.8% of China's gross exports in 2018 (Figure 7) - significantly below the OECD average of 55.7%. Foreign services contributed 6.1% to the value of total gross exports. For manufactures, services value-added content was 29.4% of gross exports, with the highest shares in *Textiles and apparel* (33.3%), *ICT and electronics* (33.3%) and *Motor vehicles* (30.5%).

**Figure 7. China - 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](http://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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