

## Box 2.3

### Imported Input Share of Exporting Firms in the Manufacturing Industry

In order to understand the effects of exchange rate changes on exporters, it is necessary to consider the usage of imported inputs by these firms. A higher ratio may limit the positive effect of a depreciation in the Turkish lira on exporter firms. In this box, imported input shares of exporting manufacturing incorporated firms are given on a sectoral basis for the year 2020, with averages of the 2009-2020 period.

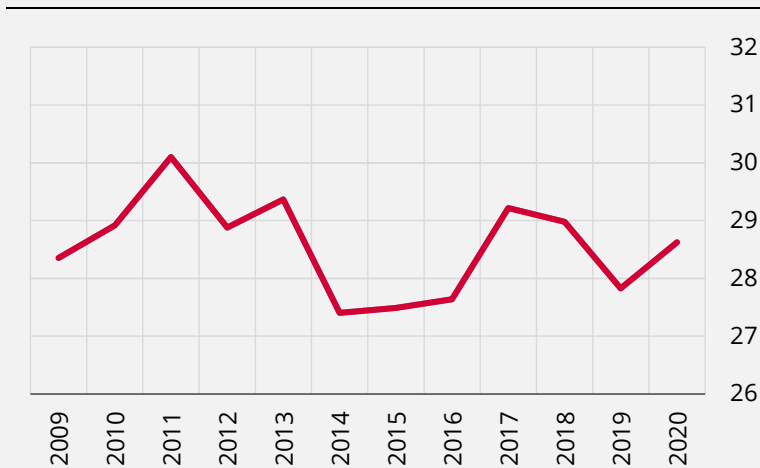
The imported input share of a firm is the ratio of the purchases made by this firm directly from foreign firms (firm import) to the total purchases made by this firm directly from domestic and foreign firms.<sup>1</sup>

$$\text{Imported Input Share} = \frac{\text{Firm Import}}{\text{Firm Import} + \text{Firm's Purchases from Domestic Firms}}$$

Micro level data on a firm's financial statements (balance sheet and income statements), firm-to-firm sales and foreign trade are used to calculate the firm level imported input share. Sectoral and yearly averages are weighted with the net sales of firms.<sup>2</sup>

In the 2009-2020 period, the average imported input share of exporting manufacturing incorporated firms is 28.50%. This ratio shows that 28.50% of the purchases made from domestic and foreign firms are made through imports from foreign firms (Chart 1). At 28.63%, this rate remained close to the historical average in 2020.

**Chart 1: Imported Input Share of Exporting Firms in the Manufacturing Industry (%)**



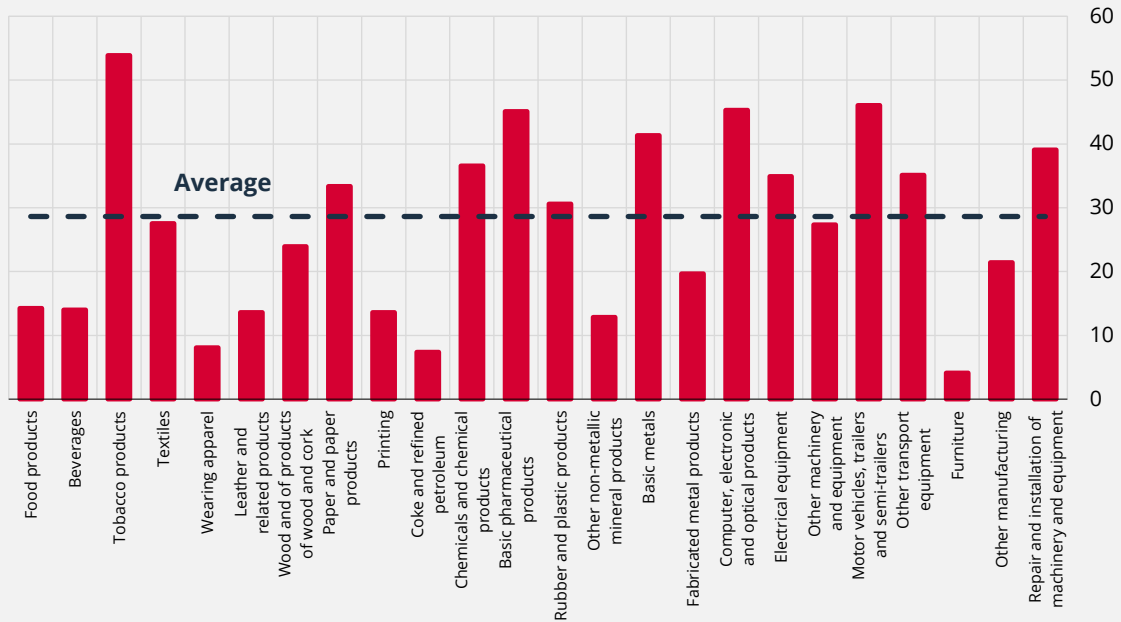
Sources: Financial Statements, Firm-to-Firm Sales and Foreign Trade.

<sup>1</sup> Imported input share is calculated over direct purchases of firms. Taking into account the supply chains of firms and the use of imported inputs by their suppliers, the share of imported input reaches approximately 45% (Akgündüz and Fendoğlu, 2019).

<sup>2</sup> Alternatively, the share of imported input is calculated by dividing firm import by the cost of production. In addition, the weighting process for sectoral averages includes total input (import + purchase from domestic firms) as an alternative to net sales, and has delivered similar findings.

A sector-based analysis of the imported input share of firms for 2020 shows that the manufacturing of tobacco products, motor vehicles, computers, electronics and optical products, and basic pharmaceutical products and the basic metals industry account for the largest imported input share with more than 40% (Chart 2).

**Chart 2: Imported Input Share by Sectors in 2020 (%)**



Sources: Financial Statements, Firm-to-Firm Sales and Foreign Trade.

## References

Akgündüz, Y. E. & Fendoğlu, S. (2019). Exports, Imported Inputs, and Domestic Supply Networks, CBRT Working Paper Series, No: 19/08.