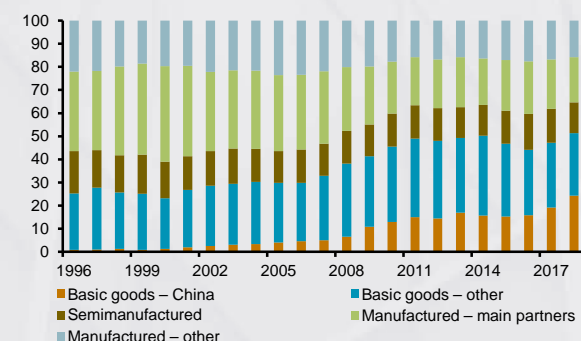


Evolution of the Brazilian list of exports and its determinants

Over the last two decades, there has been a growing participation of emerging countries in the global economy, with significant impacts on trade relations between countries. In particular, a decline in the share of manufactured goods was observed in the international trade during the first decade of the 2000s. Brazil followed the world trend, registering a decline in the share of manufactured products in exports, but in a more intense way than in global terms. This box aims to evaluate the evolution of the Brazilian list of exports over the last ten years and its possible determinants.

During the period analyzed, a relevant change in the Brazilian list of exports was observed¹. In 2008, the share of manufactured products in total exports (48%) was higher than the proportion of commodities (38%) and semi-manufactured goods (14%)². The European Union was the main destination for Brazilian products, and, together with the United States, Argentina and China, accounted for 55% of the country's total foreign sales. This pattern changed in the 10-year period since 2008, as commodities became the leading product in the list of exports in 2018, with a 51% share, while the participation of manufactured products dropped to 35% of the exported value (Figure 1). As far as destinations are concerned, China gained relevance and became the main consumer of Brazilian products, followed by the European Union, the United States and Argentina.

Figure 1 – Exports decomposition^{1/}
As a % of the total



Source: Secex/ME
1/ Main partners: EU, Argentina, USA and Venezuela.

The fall in the share of manufactured goods in exports, after 2008, was not restricted to Brazil. According to data from the World Bank³, the share of manufactured goods in total world exports reached the peak of 78% in 1998 and then followed a downward trajectory until 2011, when it registered the series' minimum value, 66%. The Brazilian data indicate a behavior similar to that observed in the rest of the world, showing, however, more pronounced movements. Between 1998 and 2011, the decrease in the share of Brazilian manufactured goods in total foreign sales reached 0.22 p.p. (12 p.p. in the world). However, the reversal of the trajectory of loss of share of these goods in the flow of world exports, observed since 2012, has not yet materialized in the Brazilian case (Figure 2).

1/ The breakdown of the products that make up Brazil's list of exports followed the Aggregate Factor pattern, which was elaborated by the statistical area of the former Foreign Trade Department (Cacex) of Banco do Brasil, a department previously responsible for the administration of Brazilian foreign trade.

2/ All data used in this box excludes values related to exports of oil platforms and special operations.

3/ World Bank data was obtained from the World Integrated Trade Solution, available at: <https://wits.worldbank.org/>.

Figure 2 – Manufactures' share in total exports ^{1/}



Sources: SECEX/ME and World Bank (WITS)
1/ Last world data: 2017.

Some factors may explain this detachment of Brazil in relation to the rest of the world. These include: i) China's strong growth and growing demand for Brazilian commodities⁴; ii) the low economic growth of important consumer markets of Brazilian manufactured products; and iii) the reduction of the market share of Brazilian manufactures.

In order to infer the impacts of each of these factors, four possible counterfactual scenarios were created. For each of them, the corresponding trajectory of the share of manufactured products in the Brazilian list of exports is simulated, trying to illustrate what could have happened if the factors in question were not in operation. Table 1 summarizes the characteristics and methodology of each scenario.

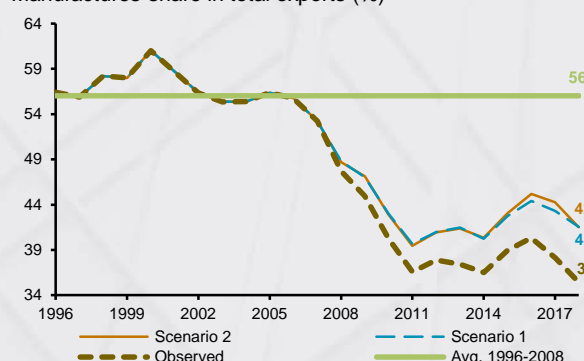
Table 1 – Description of scenarios

Scenarios	Description	Methodology
Scenario 1 – China	Evaluation of the high Chinese growth effect and its growing demand for the Brazilian commodities	<ol style="list-style-type: none"> As of 2008, the IMF's global growth was used as the basis for China's real growth. Then, the official Chinese deflator was used and a new annual value of nominal GDP was obtained; With new nominal GDP value, a new annual value was found for Chinese imports (of Brazilian products), using the official Import/GDP ratio for the respective year; The new value of imports was distributed by aggregate factor using the average share of 1996-2006; The value of Brazilian exports to other countries was maintained and the new composition of the Brazilian list of exports was calculated.
Scenario 2 – Economic slowdown in destination markets of Brazilian manufactured goods	Evaluation of low growth effect in main destinations of Brazilian manufactured goods	<ol style="list-style-type: none"> As of 2008, the IMF's global growth was used as the basis for the European Union, Argentina and Venezuela real growth. Then, the official deflator for these countries was used and a new annual value of nominal GDP was obtained for each of them; With new nominal GDP value, a new annual value was found for imports of these countries (of Brazilian products), using the official Import/GDP ratio for the respective year; The value of Brazilian exports to other countries was maintained and the new composition of the Brazilian list of exports was calculated.
Scenario 3 – Market share loss	Evaluation of the effect of reducing the market share of manufactured products worldwide	<ol style="list-style-type: none"> As of 2008, the 2007 participation of Brazil in the total world exports of manufactured goods was maintained; The new composition of the Brazilian list of exports was calculated.
Scenario 4 – "Optimistic"	Assessment of the effect of China's increased demand for commodities and the market share reduction of manufactured products worldwide. It corresponds to the most optimistic scenario in terms of the participation of manufactures in the list of exports, since, among all the scenarios, considers the lower value for commodities and the greater value for manufactured goods.	<ol style="list-style-type: none"> Commodities and semi-manufactured products data from scenario 1 and manufactured products data from scenario 3 were used, and then the new composition of the list of exports was calculated.

4/ In 2018, commodities accounted for 88% of the total value exported to China.

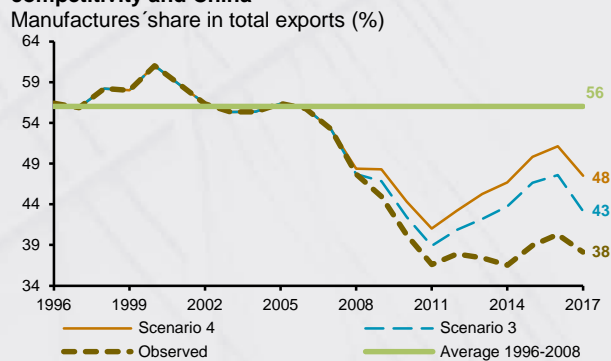
The results (Figures 3 and 4) show that the greatest change in the composition of the Brazilian list of exports derived from the asymmetric effect on commodities exportations in relation to manufactured products, due to the strong growth of the Chinese economy (Scenario 1). Without this effect, the share of manufactured products in the list of exports would be 7 p.p. above that observed in 2018. The reduction of the market share of manufactured products made in Brazil (Scenario 3) appears in second place, in terms of impact on the composition of the Brazilian list of exports⁵. Due to this factor, manufactured goods lost about 5 p.p. of the country's foreign sales in 2017. Finally, the economic slowdown in important destinations of Brazilian manufactured products (Scenario 2) had little effect on the composition of the list. It is also worth noting that even in the optimistic scenario (Scenario 4), the share of manufactured goods would not return to the average level of 1996-2008, thus suggesting that the country lost representation in the world trade of these products.

Figure 3 – Counterfactuals scenarios – Main partners^{1/}
Manufactures' share in total exports (%)



Sources: Secex/ME, IMF and Eurostat

Figure 4 – Counterfactuals scenarios – World competitiveness and China
Manufactures' share in total exports (%)



Sources: Secex/ME, IMF and World Bank (WITS)

In order to identify which countries would have replaced Brazilian manufactured products, we analyzed data available from the World Bank (Table 2) to search for countries that had an increased share in world exports of their manufactured goods.

China was the country with the greatest increase in the participation of manufactured products in the global market in the period, going from 11%, in 2008, to 16% in 2017. It should be noted that countries with greater similarities with Brazil, such as Mexico and India, also gained space in the global exports of these products. One possible explanation for this discrepancy would be the greater level of integration of these countries into international trade flows. According to data from the World Trade Organization (WTO)⁶, while Mexico and India have, respectively, 13 and 9 free trade agreements, Brazil has only 1. It is also possible that the loss of space of manufactured products in the list of exports reflects differences in the evolution of its competitiveness in relation to other exported products.

Table 2 – Main manufactured goods exporters

In 2008		In 2017		Share variation 2008-2017	
Country/Block	Partic. (%)	Country/Block	Partic. (%)	Country/Block	Share partic. (p.p.)
European Union	12.9	China	16.0	China	4.9
China	11.1	European Union	13.0	South Korean	0.9
United States	8.1	United States	8.6	Mexico	0.7
Japan	5.8	Japan	4.6	Hong Kong	0.7
South Korean	3.0	South Korean	3.9	India	0.6

Source: WTIS/World Bank

5/ Almost half of the impact of the loss of market share is concentrated in the United States, the European Union and Argentina.

6/ Available at: https://www.wto.org/english/tratop_e/region_e/rta_participation_map_e.htm.

In summary, the loss of share of manufactured products in export flows between 2008 and 2013 was a global phenomenon, but occurred in a more pronounced way in Brazil – without a reversal of this trend, as observed at a global level. Factors such as the increased China participation in the world economy, as well as the loss of market shares of Brazilian manufactured goods help to explain much of the behavior of the country's list of exports. Finally, countries with similar characteristics to Brazil, specifically Mexico and India, have achieved better insertion in world trade, leading to the increase in the share of global sales of their manufactured goods over the last decade.