

## Freight prices to Brazil: reasons for recent fluctuations and what to expect ahead

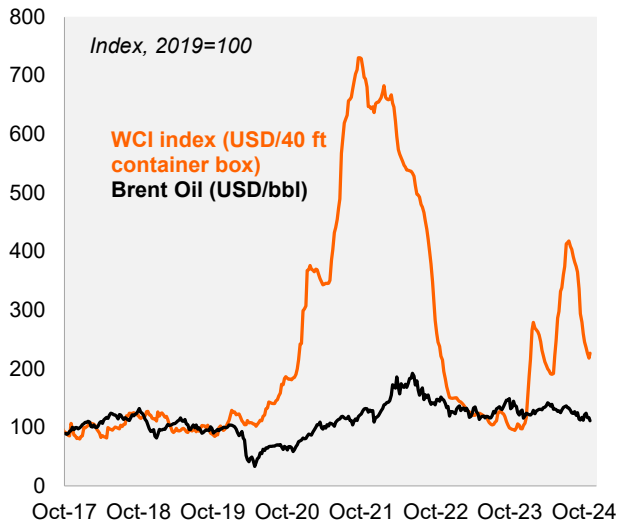
- ▶ After the normalization of international freight prices in the face of shocks between 2020-21, container prices have risen significantly worldwide since the last quarter of 2023 amid new geopolitical, environmental and economic events.
- ▶ In addition to restrictions on routes in the Red Sea since the end of 2023, more recently, there has been a significant increase in the volume of cargo transportation at Chinese ports. Such phenomenon stems from the excess of production capacity of several sectors in China, as well as the anticipation of purchases by importers since the beginning of 2024, in a context of increasing trade barriers and tariffs on Chinese products.
- ▶ From a global inflation perspective, despite freight pressures, such dynamics did not materialize in goods inflation, as Chinese overcapacity contributed to export price deflation, more than offsetting the rise in transportation costs.
- ▶ Freight prices for Brazilian imports rose by around 34% in the three-month average through September 2024 compared to the same period the previous year. Most of these pressures come from Chinese products, particularly electrical and mechanical machines, appliances and equipment, as well as vehicles, with the strong flow of imports of electric and hybrid cars.
- ▶ Looking ahead, freight prices in Brazil are likely to recede, in line with the movement already observed in global container prices. Such dynamics are consistent with the reduction in pressures generated by the anticipation of global trade with China as the materialization of trade barriers by relevant economies potentially reduces the volume exported by the Asian giant.
- ▶ On the other hand, the current restrictions to flow on the main trade routes and the (still) strong relevance of Chinese exports indicate that international freight prices are unlikely to experience a complete normalization to the levels observed in 2023 any time soon, the same being true for freight prices in Brazil.

### 1 – Global context: cargo vessel flow, freight prices and their main determinants

**After the normalization of international freight prices in the face of shocks between 2020-21 (post-pandemic economic effects followed by the Russian invasion of Ukraine), container prices have risen significantly worldwide since the last quarter of 2023 amid new geopolitical, environmental and economic events** (see 1<sup>st</sup> chart). Such freight price dynamics were so intense in these two episodes (2020-21 and currently) that they exceeded the evolution of oil prices in the period by several times, usually considered a determining variable for transportation costs and which had a closer correlation with freight prices until 2019.

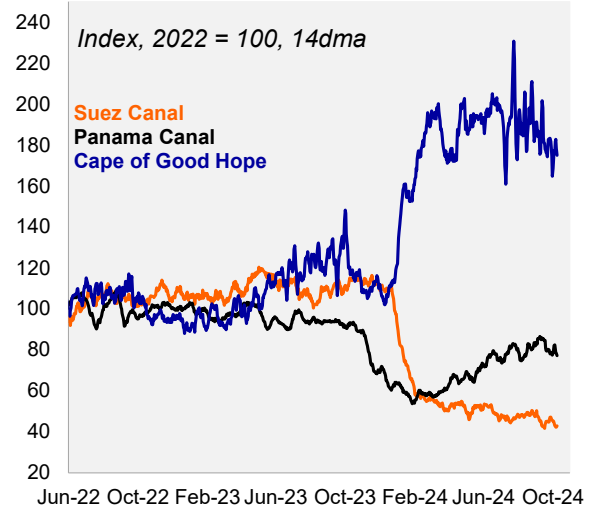
**Among the reasons for this decoupling in maritime freight prices, we assess that, on the supply side, attacks in the Middle East since late 2023 have been hampering the flow of goods on important routes, such as the Suez Canal.** As a result, ships adjusted their routes, for example, going around Africa via the Cape of Good Hope. This led to an increase in the cost of trade routes, among other factors, due to the increase in average travel time. In Central America, the drought in the Panama Canal at the end of last year also stands out, making it more challenging for ships to flow between the Pacific and Atlantic oceans. Despite some normalization, the flow of ships in the region remains around 20% below the 2022 average (see 2<sup>nd</sup> chart).

### Global Container Price Index (WCI) vs Oil



Source: BBG, WCI.

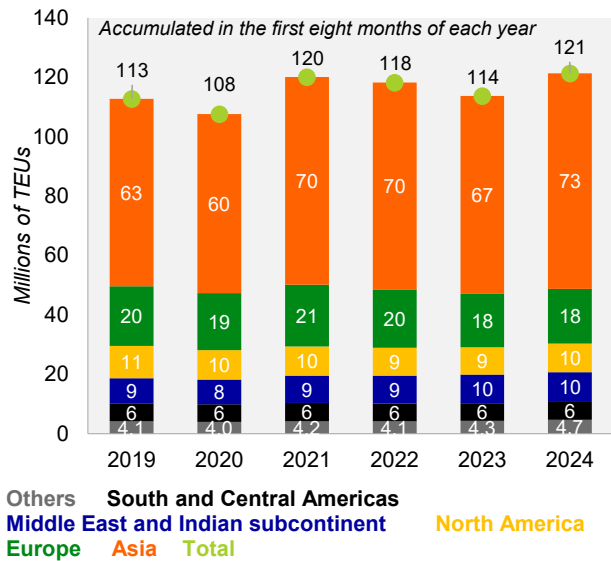
### Ship transit



Source: IMF Port Watch.

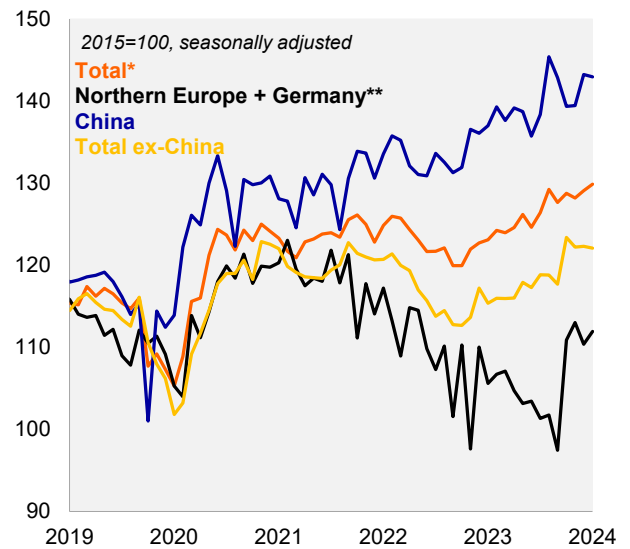
From a demand perspective, the first eight months of 2024 were marked by high volumes in global container transportation, which reached a trade flow of 121 million TEUs<sup>1</sup> in the period, above the previous records of 2021 and 2022. This movement was mainly influenced by the flow of containers from Asia (see 1<sup>st</sup> chart below), particularly China. Although the recent shock in container prices initially reflected supply constraints, these have also come to reflect demand pressures.

### Global container volume transported, by origin



Source: Container Trade Statistics.

### Container throughput index



Source: RWI, ISL, World Trade Organization.

\*Based on container flow from 92 ports, responsible for approximately 64% of global container traffic.

\*\* Summarizes the flow of containers in the ports of Le Havre, Zeebrugge, Antwerp, Rotterdam, Bremen/Bremerhaven and Hamburg.

<sup>1</sup> TEU ("Twenty-foot Equivalent Unit") is a standard unit of measurement used in the shipping industry to describe the carrying capacity of containers. One TEU represents a standard 20-foot long container.

Among the main global ports, there was a significant increase in cargo volume in China (see 2<sup>nd</sup> chart above). There was also a higher volume in European ports, from depressed bases, contributing to exacerbate short-term bottlenecks and their impacts on freight.

Explanations for the higher volume at Chinese ports include the strong performance of Chinese exports amid the government's policy focus on the manufacturing sector, generating excess idle capacity in several sectors, such as electric cars and solar panels, in addition to the anticipation of purchases by importers since the beginning of 2024, in a context of increasing trade barriers and in view of the still present restrictions on the Suez Canal. At the same time, the months of August through October are seasonally pressured, due to the peak season for stockpiling goods by global retailers in anticipation of Black Friday and Christmas sales, contributing to greater demand for freight.

From a global inflation perspective, despite freight pressures, such dynamics did not materialize in goods inflation, as Chinese overcapacity contributed to export price deflation, more than offsetting the rise in transportation costs.

This combination led to an increase in the discrepancy between freight prices that originate in China versus those that have China as their destination. The much higher volumes of cargo transacted by China compared to the rest of the world have contributed to creating an imbalance between the entry and exit of goods in its ports. The ratio of origin vs destination freight prices at Chinese ports has exceeded 11 times and is now above 6 times, still close to the highest levels of 2021.

The price of a container coming from China has reached more than eleven times the price of a container going to China in recent months

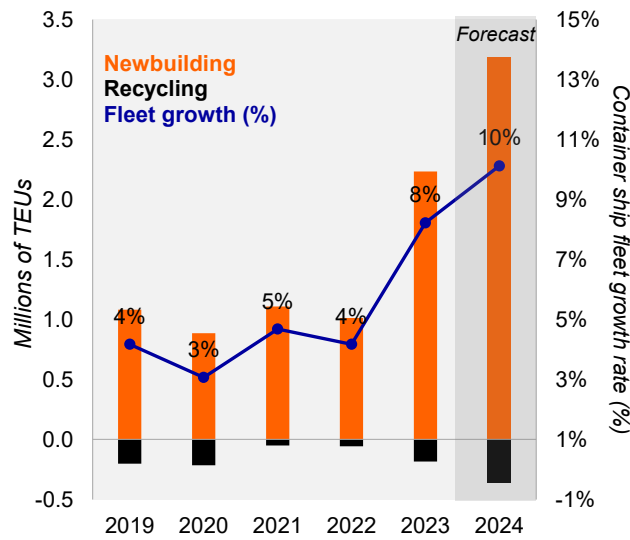


Source: BBG, WCI

\*Average freight price for routes involving Los Angeles and Rotterdam to/from Shanghai.

An additional factor that may explain the pressure on sea freight prices in recent years is fleet renewals and expansions, which, despite contributing to an increase and/or improvement in the efficiency of transportation capacity in the medium term, are accompanied by higher technological costs, amid more restrictive environmental regulations for the sector.

**Container ship fleet development, 2019-2024**

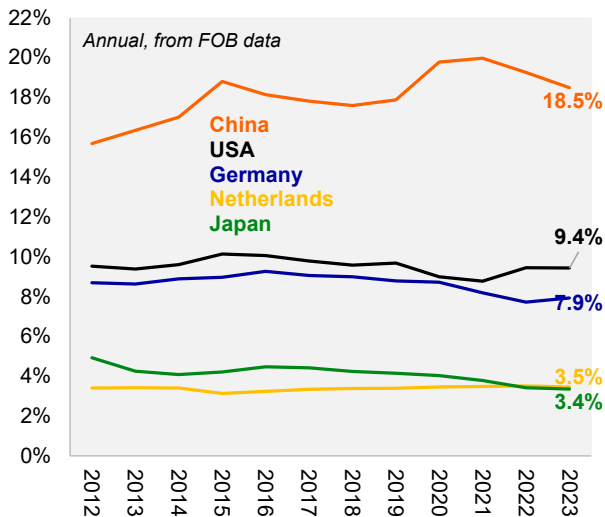


Source: WTO estimates based on BIMCO and Clarksons Research data.

**2 – China: global relevance and exports composition**

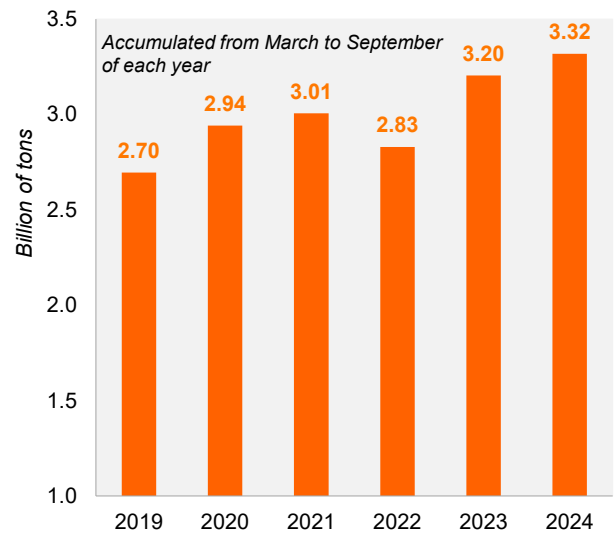
China is the country with the largest share of global exports, and its recent dynamics have been decisive in increasing demand for freight, registering a record volume transported throughout 2024.

**Share of global exports**



Source: UN Comtrade, Itaú.

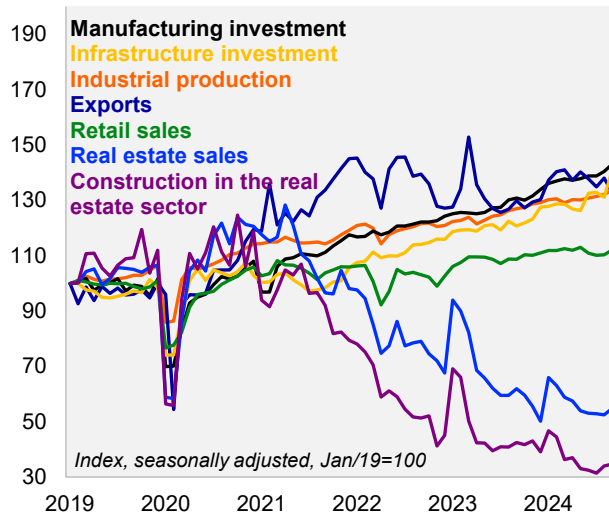
**China: comercial freight volume (EX+IM)**



Source: General Administration of Customs of China, Itaú.

China's economic growth model has had a special focus on investment and export growth, especially in higher-tech products such as electric cars, batteries and solar panels. The country's strategy of being the world's factory, despite being relatively successful is approaching a limit, both for geopolitical reasons, with the imposition of increasing barriers and tariffs on Chinese products, and for domestic reasons, with the weakness of domestic demand requiring subsequent stimulus to activity.

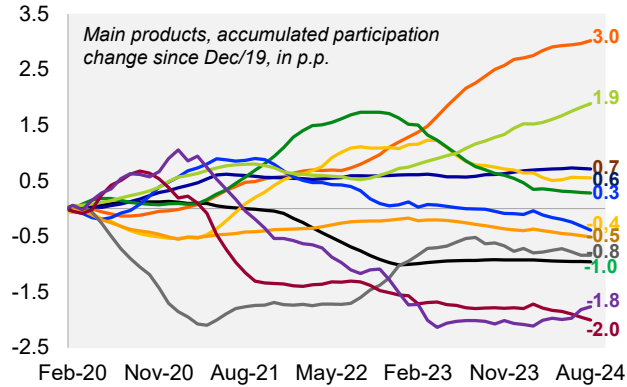
**China: activity indicators by sector**



Source: BBG, Haver, Itaú.

**From the point of view of the composition of Chinese exports, there has been a significant expansion in vehicle sales since 2020.** The share of this sector in the total Chinese exports has doubled since the beginning of the pandemic, growing by 3.0 p.p. in the period. In units, up to August/24, China has already exported around 6.1 million vehicles in the last 12 months – a volume 6 times higher than that observed at the end of 2020 –, with approximately 36% of them having purely electric or hybrid engines.

**Evolution of the Chinese export agenda\***



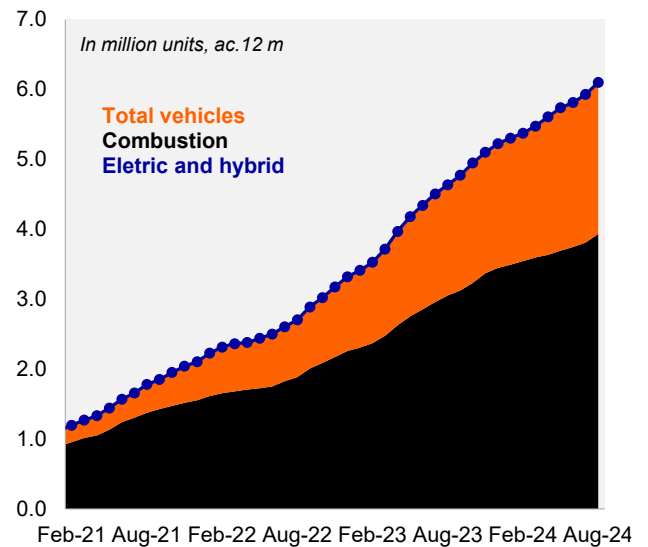
- |   |  |
|---|--|
| <b>Vehicles and its parts</b>               | <b>Special classification**</b>          |
| <b>Plastics and rubbers</b>                 | <b>Base metals</b>                       |
| <b>Chemicals and related</b>                | <b>Miscellaneous industrial articles</b> |
| <b>Footwear and headgear</b>                | <b>Others</b>                            |
| <b>Optical/medical-surgical instruments</b> |  |
| <b>Textiles and their articles</b>          | <b>Electrical machines and equip.</b>    |

Source: General Administration of Customs of China

\* Sectoral composition based on FOB export balances, following SH2 categorization.

\*\* Special classification is a criteria created by China, not considered in the Harmonized System (HS) of international trade classification. It includes products/commodities with simplified customs regime, as well as cross-border e-commerce orders through postal or express service.

**Commercial and passenger vehicles exported by China**



Source: General Administration of Customs of China, Itaú.

**Brazil is already China's fourth largest partner in vehicle trade as of August, very close to Belgium (3rd), after gaining prominence this year.** Russia is now the largest importer of Chinese vehicles, significantly increasing its share since the start of the war with Ukraine, reflecting the effects of trade sanctions imposed on the country. The US is decreasing its share, but remains the second largest individual partner in this category.

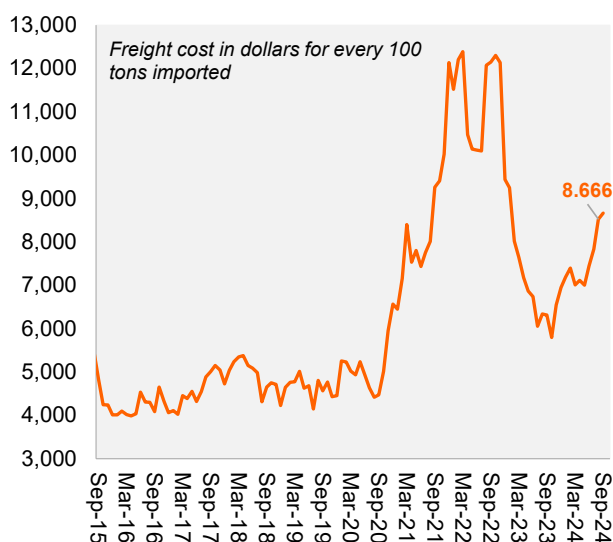
Chinese vehicles export's: main countries					
Category HS 87 - Motor vehicles, FOB, accumulated in the first 8 months of each year					
Countries	2020	2021	2022	2023	2024
Russia	2.8%	3.6%	3.4%	11.3%	11.2%
USA	18.5%	16.0%	14.3%	9.6%	9.6%
Belgium	1.0%	3.1%	3.9%	3.8%	3.8%
Brazil	1.6%	1.8%	1.6%	1.7%	3.6%
United Kingdom	1.2%	1.2%	2.0%	2.5%	3.5%
UAE	2.0%	3.2%	3.4%	4.0%	3.4%
Japan	5.2%	4.5%	3.6%	3.1%	3.0%
Germany	4.0%	4.6%	3.7%	3.1%	3.0%
Australia	2.0%	3.0%	3.1%	3.4%	2.6%
South Korea	3.1%	2.6%	2.3%	2.1%	2.5%
Others	58.7%	56.4%	58.7%	55.2%	53.8%

Source: General Administration of Customs of China

### 3 – How have international freight prices to Brazil evolved, by partners and products?

In Brazil, as in the world, freight prices<sup>2</sup> on its imports had been normalizing throughout 2023 after the shocks of previous years, but with pressure again in 2024, rising about 34% in the three-month average through September compared to the same period last year.

Freight price of Brazilian imports



Source: ComexVis (MDIC), Itau

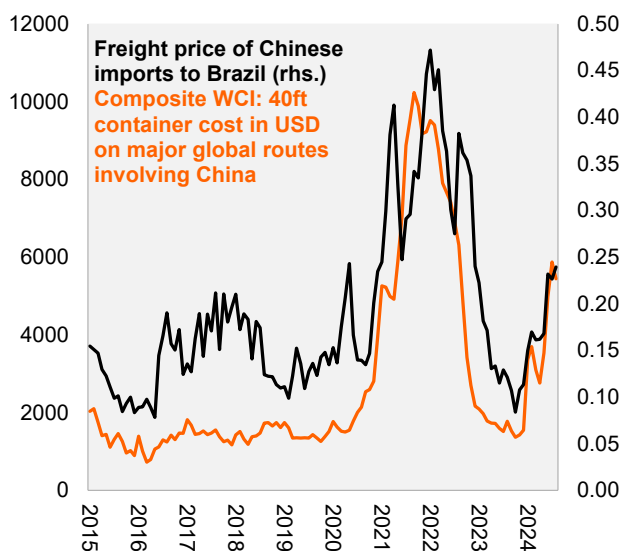
<sup>2</sup> Here defined as the ratio between the freight cost (in US\$) divided by the imported quantity (in kg).

In order to map the origin of these changes, the table below summarizes the evolution in freight prices for Brazilian imports between our main trading partners, ordered by their contribution to price change:

Freight prices change in Brazilian imports		
Main countries, data up to Sep/24		
Countries	YoY, 3mma (Sep/24)	Contribution to total (p.p.)
China	102.6%	33.8%
India	72.0%	1.6%
South Korea	59.6%	0.8%
Thailand	-12.6%	0.6%
Canada	8.9%	0.5%
Mexico	19.0%	0.4%
Spain	14.4%	0.4%
Japan	-34.0%	0.2%
Netherlands	2.6%	0.1%
Argentina	6.0%	0.1%
Italy	-27.3%	-0.2%
France	-45.1%	-0.4%
Germany	-9.6%	-0.5%
Russia	-1.1%	-1.0%
USA	-6.0%	-2.5%
Others	9.7%	0.0%
<b>Total</b>	<b>33.9%</b>	<b>33.9%</b>

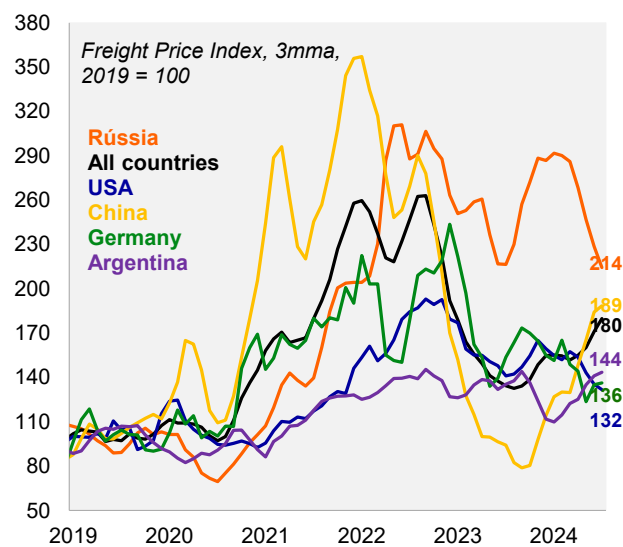
The freight cost of Chinese imports to Brazil rose 102.6% in the three-month average through September compared to the same period last year. Given its weight, this represents the only relevant source of price pressure on freight for Brazilian importers among their trading partners. China's dominant role in the pressure on freight prices for Brazilian imports reflects the evolution of container prices on the main global routes involving the Asian giant. Furthermore, in the case of Russia, freight price pressures to Brazil have been sustained at higher levels (although declining at the margin) since late 2021, reflecting global economic sanctions following the invasion of Ukraine.

Global pressure on container prices has had a direct impact on Brazil's imports from China



Source: ComexVis (MDIC), Itaú.

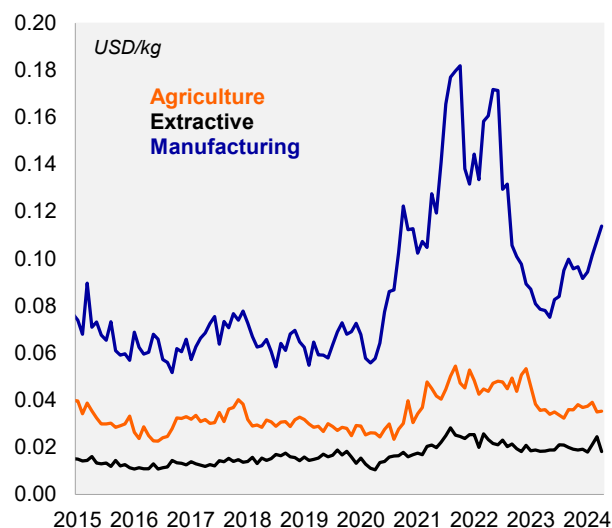
Evolution of freight prices for Brazil's main trading partners



Source: ComexVis (MDIC), Itaú.

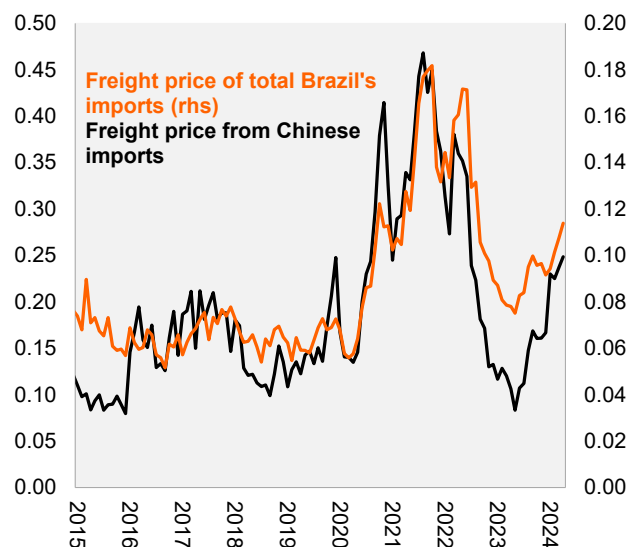
From a product perspective, initially segmenting freight prices into the three main sectoral sections (agriculture, extractive and manufacturing), it is clear that pressures are concentrated on products from manufacturing. The dynamics of freight prices for these products is strongly correlated with the evolution of freight rates for Chinese imports. This conclusion is not surprising, given the high weight that China exerts on the Brazilian import agenda as a whole (25% in the last 12 months up to September/24), and in manufacturing industry items (27%).

Freight price dynamics, according to ISIC classification section



Source: ComexVis (MDIC), Itaú.

Manufacturing industry: freight price comparison between China and Brazil's total imports



Source: ComexVis (MDIC), Itaú.

In general, Chinese products have been gaining prominence in the Brazilian import agenda. In a recent study (see [here](#)), we detailed how this increase has occurred, in terms of volume and prices, as well as in sectoral terms. The increase has been happening due to an increase in volume (quantum), despite a concomitant drop in prices in many cases. The sectors whose products most commonly experienced an increase in imported volume and/or a drop in prices were: chemical products, semi-finished metals, plastics and rubber, textiles and automotive.

#### 4 – Main products and their impacts on freight prices in Brazilian imports

Consistent with China's growing role in our imports, in June the item 'Vehicles and their parts' represented the largest individual contribution (+11 p.p.) to the annual change in Brazil's freight price. One possible explanation for this movement was the Brazilian government's decision to raise the import tax on electric vehicles on July 1, 2024, from 10% to 18%<sup>3</sup>.

As a result, foreign electric and hybrid vehicle manufacturers decided to bring forward their exports to Brazil, putting pressure on freight costs. In passenger vehicle imports, for example, China is currently Brazil's main trading partner, with a 46% share up to September 2024, a figure 32 p.p. higher than that observed in the same period last year, indicating a strong expansion of Chinese vehicles in Brazil in the last year.

<sup>3</sup> According to the government's schedule, the expectation is for a new increase to 25% in one year, reaching the level of 35% from July 2026. Hybrid vehicles and vehicles with plug-in technology are also subject to these tariff increases. Not necessarily the same tariffs as those charged by 100% electric vehicles.



Contribution (in p.p.) to the annual change in freight prices for Brazilian imports, by product									
Products (HS2)	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
Integrated circuits, electrical machines, devices and materials, and their parts	-2.4%	-0.7%	-2.5%	1.5%	0.7%	1.9%	5.5%	6.7%	8.7%
Turbojets, machines, apparatus and mechanical instruments, and their parts	-3.2%	-3.4%	-1.6%	-1.3%	0.2%	1.0%	4.4%	6.9%	8.1%
Organic chemicals	-2.3%	-1.1%	-0.5%	-0.3%	0.0%	0.7%	1.8%	2.0%	3.0%
Rubber and its works	-1.1%	-0.6%	-0.4%	0.1%	0.0%	0.4%	1.4%	2.2%	3.0%
Plastics and their works	-1.3%	-0.8%	-0.7%	0.0%	-0.4%	0.2%	1.8%	2.6%	2.8%
Insecticides, fungicides, herbicides and other chemicals	-0.4%	-0.2%	-0.3%	0.2%	-0.1%	0.4%	1.3%	1.7%	2.7%
Vehicles and its parts	-1.5%	-0.6%	-0.5%	1.3%	1.3%	11.1%	2.0%	3.1%	2.5%
Others	-10.0%	-0.3%	-1.8%	-2.3%	0.3%	-5.0%	11.3%	9.2%	6.4%
<b>YoY change of total freight prices of Brazilian imports</b>	<b>-22.3%</b>	<b>-7.7%</b>	<b>-8.3%</b>	<b>-0.9%</b>	<b>2.0%</b>	<b>10.6%</b>	<b>29.4%</b>	<b>34.5%</b>	<b>37.3%</b>

Source: ComexVis (MDIC), Itaú.

**From July onwards, freight pressures arising from imports of electrical and mechanical machines, equipment and materials gained relevance.** Part of this movement is consistent with evidence of a greater volume of imports of these products resulting from the expansion of Brazilian industrial production in recent months.

**Looking ahead, freight prices in Brazil are likely to recede, in line with the movement already observed in global container prices.** Such dynamics are consistent with the reduction in pressures generated by the anticipation of global trade with China as the materialization of trade barriers by relevant economies potentially reduces the volume exported by the Asian giant.

**On the other hand, the current restrictions vessels flow on the main trade routes and the (still) strong relevance of Chinese exports indicate that international freight prices are unlikely to experience a complete normalization to the levels observed in 2023** any time soon, the same being true for freight prices in Brazil.

**André C. B. Matcin**  
**Fernando M. Gonçalves**

**Macro Research – Itaú**  
**Mario Mesquita – Chief Economist**

To access our reports and forecast visit our website:  
<https://www.itaubba-pt/macroeconomic-analysis>



## Relevant Information

1. This report has been prepared and released by the Macro Research Department of Itaú Unibanco S.A. ("Itaú Unibanco"). This report is not a product of the Equity Research Department of Itaú Unibanco or Itaú Corretora de Valores S.A. and shall not be construed as a research report ("relatório de análise") for the purposes of Article 1 of the CVM Instruction NR. 20, dated 2021.
2. The exclusive purpose of this report is to provide macroeconomics information and it does not constitute and shall not be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial product, or to participate in any particular trading strategy in any jurisdiction. The information herein is believed to be reliable as of the date on which this report was released and it has been obtained from public sources believed to be reliable. However, Itaú Unibanco does not make any explicit or implied representation or warranty as to the completeness, reliability or accuracy of such information, nor does this report intend to be a complete statement or summary of the markets or developments referred to herein. Itaú Unibanco has no obligation whatsoever to update, modify or amend this report and inform the reader accordingly.
3. The opinions contained herein reflect exclusively the personal views of the analyst responsible for this report and were prepared independently and autonomously, including in relation to Itaú Unibanco, Itaú Corretora de Valores S.A. and any other companies within their economic group.
4. This report may not be reproduced or redistributed to any other person, in whole or in part, for any purpose, without the prior written consent of Itaú Unibanco. Additional information on the financial products mentioned in this report may be available upon request. Itaú Unibanco and/or any other company within its economic group is not and shall not be liable for any investment decisions (or otherwise) based on the information provided herein.

**Additional Note:** This material does not take into consideration the objectives, financial situation or specific needs of any particular client. Clients must obtain financial, tax, legal, accounting, economic, credit and market advice on an individual basis, based on their personal characteristics and objectives, prior to making any decision based on the information contained herein. By accessing the material, you represent and confirm that you understand the risks related to the financial instruments described in this material and the laws in your jurisdiction relating to the provision and sale of financial service products. You acknowledge that this material contains proprietary information and you agree to keep this information confidential for your exclusive use.

For inquiries, suggestions, complaints, criticisms and compliments, talk to Itaú's CSCC: 0800 728 0728. Or contact us through our portal <https://www.itaú.com.br/atenda-itaú/para-voce/>. If you are not satisfied with the proposed solution, please contact the Itaú Corporate Ombudsman: 0800 570 0011 (on weekdays from 9 AM to 6 PM) or our PO Box 67.600, São Paulo-SP, Zip Code 03162-971. Hearing impaired, every day, 24h, 0800 722 1722.