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FACILITATION OF TRANSPORT AND TRADE IN **LATIN AMERICA AND THE CARIBBEAN**

Port report 2023–2024: mixed signals in trade and ports and new disruptions to international container shipping logistics

Introduction

The previous edition of the port report addressed the major impact that the coronavirus disease (COVID-19) pandemic and the conflict between the Russian Federation and Ukraine had on shipping. Both events distorted global supply chains and caused bottlenecks owing to shutdowns, port congestion →

This report analyses the state of international maritime trade and port activity for the period 2023–2024. It highlights recovery trends, structural challenges and new disruptions impacting the sector. Consistent with the analysis in the previous report, this report examines the effects of global events, such as the coronavirus disease (COVID-19) pandemic and persistent geopolitical tensions, the repercussions of which continue to impact supply chains. It also identifies emerging trends in logistics management and factors behind fluctuations in port activity and provides an analysis of the maritime trade outlook marked by uncertainty and volatility. The overarching aim is to provide tools to enable actors in the sector to adapt and enhance their capacity to respond to challenges and transformations in the global environment.

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and container shortages. The main consequences included lower demand for goods, delays in shipments and a considerable increase in transport costs, which led to various trade distortions and caused inflation worldwide. The report also noted the persistence of supply chain pressures, as measured by the Global Supply Chain Pressure Index, which peaked in December 2021, largely as a result of the conflict in Europe. Although there was an improvement in these indicators in 2023, new events have rekindled tensions in global logistics chains.

In this context, on the basis of available information, the analysis shows that international shipping, which transports around 80% of global trade in goods by volume, and 70% by value (UNCTAD, 2018), continues to face major disruptions. The significant recovery that occurred in 2022 was followed by a year of fluctuations in 2023. The report assesses the main maritime sector indicators, including port rankings for Latin America and the Caribbean. Many ports have managed to surpass pre-pandemic activity levels, but some have yet to regain those volumes.

Uncertainty and volatility remain constants and are perhaps the most apt descriptors of the state of international maritime trade in recent years. Despite some signs of recovery, the sector still faces significant challenges —some persistent, others more recent.

I. Analysis of the main variables in international shipping

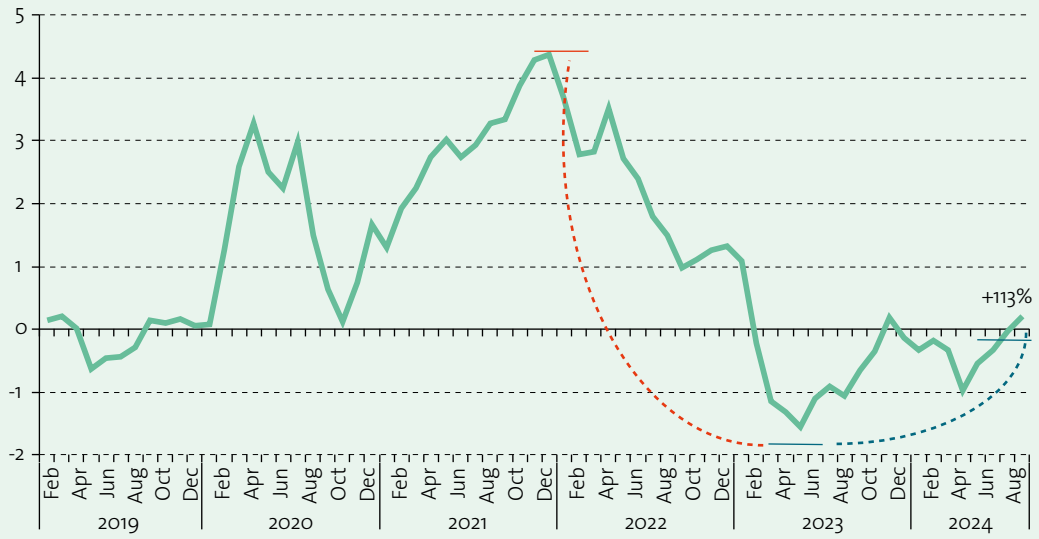
Increasingly intertwined with the ups and downs of the international economy, in particular trade, shipping remains the life blood of international logistics and is thus subject to a variety of global phenomena, from geostrategic and security issues to natural events linked to climate change. Sanchez and Cipoletta Tomassian (2024) have grouped these events into six main categories: (i) financial and economic crises; (ii) health crises; (iii) technological and cybernetic issues; (iv) geostrategic and international security conflicts; (v) extreme natural events; and (vi) high-impact national events. Added to these categories are the shipping industry's own trends.

Among these events, between 2023 and 2024, the drought that affected traffic through the Panama Canal and the main South American waterways stands out, as do geopolitical tensions, including conflicts in Ukraine, the Middle East, the Red Sea and the Suez Canal. These factors, together with industry-specific trends, led to new disruptions (or outright interruptions) to major shipping lanes, which significantly affected global supply chains. The well-known disruptions that increasingly affected international shipping between November 2020 and December 2021 were followed by a period of normalization that lasted until mid-2023. This had an impact on maritime freight rates, with record highs and

high variability. However, a new phase beginning in mid-2023 was marked by increasing instability and growing disruptions, which repeatedly affected freight rates and the reliability of international transport services.

To measure and assess the global economic impact of such disruptions, the Research Group of the Federal Reserve Bank of New York, through the Applied Macroeconomics and Econometrics Centre, developed the **Global Supply Chain Pressure Index** (see figure 1). The index combines data on transport costs and manufacturing sector indicators. A score of 0 indicates that the index is at its mean value; positive values represent the number of standard deviations above that mean; and negative values represent the inverse.

Figure 1
Global Supply Chain Pressure Index, February 2019–August 2024
(Standard deviations from historical average since 1997)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Federal Reserve Bank of New York.

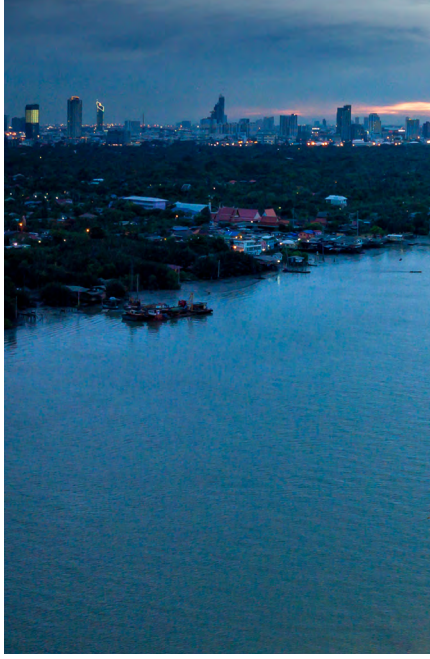
It is worth noting that, after a sharp contraction in the Global Supply Chain Pressure Index to May 2023, there was a significant increase by end-August 2024.

While this bulletin does not attempt to exhaustively review all the factors impacting international container shipping (owing largely to the diversity of those factors), some of the more important ones are reviewed below by way of example. Thus, as has happened in similar situations in the past, one effect of the disruptions relates to **port congestion and loss of reliability in maritime services**.

Other key indicators in monitoring disruptions to international shipping include the **reliability of container shipping services**,[1] **the average number of days of delay in the arrival of vessels at their destination**[2] **and the level of port congestion**. As figure 2 shows, at the height of the pandemic, the reliability of container ship arrivals reached its lowest point in January 2022. Thereafter, there was a gradual improvement, in line with the easing of supply chain pressures.

However, this positive trend was interrupted in June 2023, when the drought in the Panama Canal and geopolitical tensions in Europe and Asia affected major shipping routes. These events increased operational uncertainty and logistics costs, which created fresh challenges for international trade.

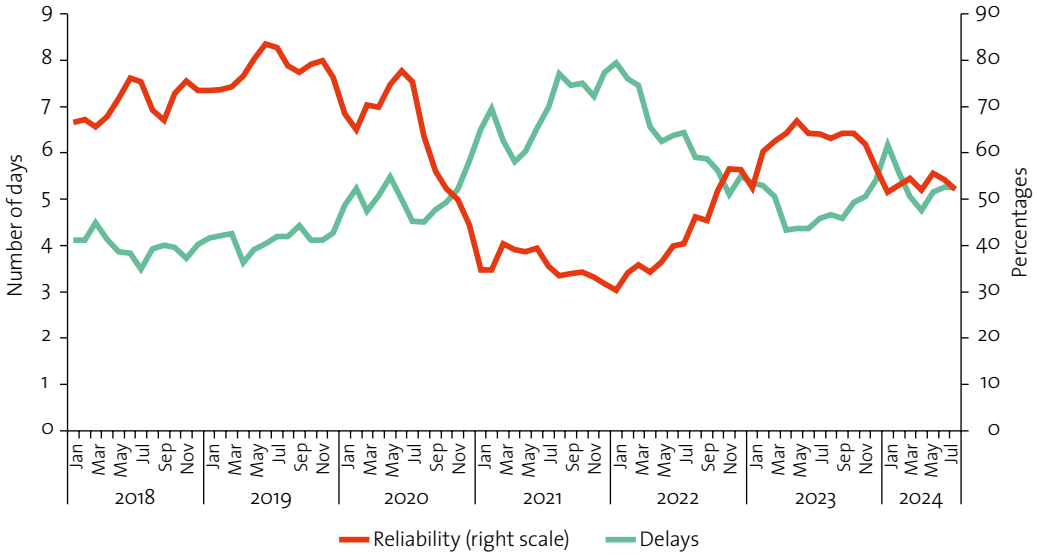
[1] The reliability of sailing schedules is calculated across 34 different trade lanes.
[2] To estimate the average number of days of delay, Sea-Intelligence measures more than 12,000 vessel arrivals per month.



At the same time, the average number of days of delay in the arrival of vessels at their destination has tracked the reliability index trend. In January 2022, delays peaked at approximately eight days. Thereafter, they began to decline gradually as supply chain pressures eased and logistics conditions improved.

However, from April 2023, geopolitical tensions and the climate crisis interrupted that recovery and further increased delays. The impact was seen mainly on routes that pass through the Panama Canal, where drought-related restrictions significantly impacted vessel traffic, with a knock-on effect on shipping as a whole.

Figure 2
Shipping schedule reliability and global delays due to late vessel arrivals, monthly averages, January 2018–July 2024
(Number of days and percentages)



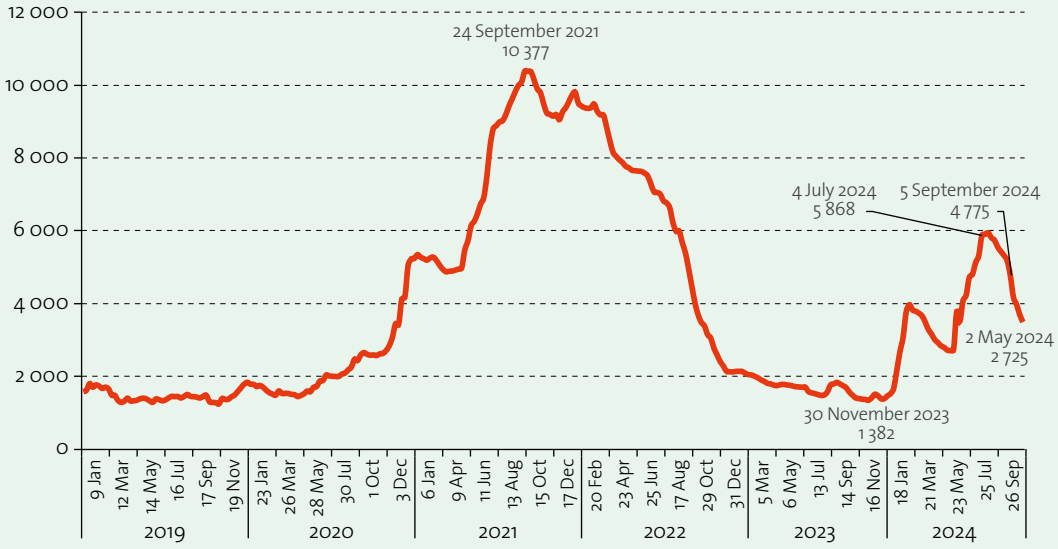
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Sea-Intelligence, "Global schedule reliability", September 2024 [online] https://sea-intelligence.com/press-room/283-global-schedule-reliability-drops-by-2-1-percentage-points-in-july.

Peak port congestion was reached in April 2022, when almost 4.2 million twenty-foot equivalent units (TEUs) were delayed worldwide. This situation particularly impacted North American ports, although significant delays were also seen in Asia and Northern Europe. It subsequently improved but failed to recover its pre-pandemic performance and hovered around 2 million TEUs. The lowest congestion was recorded in March 2024, with 1.42 million TEUs delayed. However, it began increasing again thereafter, reaching 2.55 million TEUs in early September 2024. While the greatest impact was felt in North Asia, South America was the world's second most affected region with approximately 382,000 TEUs delayed (15% of the world total) compared to 100,000 TEUs in the last week of April 2022. Phenomena that have impacted the state of international shipping include **problems in shipping lanes**, such as the drought in the Panama Canal, and diversions in the Suez Canal due to regional conflicts and related security concerns.

In the Suez Canal, monthly transits fell from 2,315 in January 2024 to 1,300 in April of that same year, while in the Panama Canal they slumped from a peak of 1,380 at end-2021 to just 650 in April 2024. Taking 2022 as a benchmark, January 2024 saw 30% fewer transits year-on-year; however, by August 2024, the difference had shrunk to 14%. Despite the minimal values recorded at the beginning of 2024, the recovery in water supply to the Panama Canal enabled traffic gradually to be restored and operations eventually to normalize.

The combined factors that have affected the international shipping industry since the beginning of the pandemic have had a significant impact on maritime freight rates. In the case of container shipping, figure 3 shows how rates have behaved as a result of developments in the overall container market, illustrating the trends in individual markets. From February 2021 onward, rates rose steadily and exceeded all-time highs. After reaching pre-pandemic levels during the second half of 2023, prices trended sharply upward starting in 2024, peaking in July before declining again.

Figure 3
Index of average weekly composite ocean container spot freight rates, January 2019–September 2024
(Index: January 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of *Drewry World Container Index*.

Market concentration

As several studies, including one by ECLAC (2024), have shown, since March 2020 the global shipping market has seen increased concentration. However, this is a longer-term trend that has gathered pace over the past four years. Thus, in 2022, three major shipping alliances accounted for 82% of international container trade (see table 1).

Table 1
Estimated shares of world container shipping, by carrier or alliance, 2012, 2019, 2022, 2023 and the first quarter of 2024
(Percentages)

2012		2019		2022		2023		2024 (first quarter)	
CKYH-The Green Alliance	17.4	Ocean Alliance (CMA CGM/APL, Cosco and Evergreen)	26.3	2M (Maersk and MSC)	33.8	2M (Maersk and MSC)	33.7	2M (Maersk and MSC)	34.2
MSC	15.9	2M (Maersk and MSC)	24.3	Ocean Alliance (CMA CGM/APL, Cosco and Evergreen)	30.1	Ocean Alliance (CMA CGM/APL, Cosco and Evergreen)	29.8	Ocean Alliance (CMA CGM/APL, Cosco and Evergreen)	28.8
Maersk Line	14.7	The Alliance (Hapag-Lloyd, Yang Ming, ONE and HMM)	15.5	The Alliance (Hapag-Lloyd, Yang Ming, ONE and HMM)	18.5	The Alliance (Hapag-Lloyd, Yang Ming, ONE and HMM)	18.2	The Alliance Hapag-Lloyd, Yang Ming, ONE and HMM)	18.8
Grand Alliance	10.2								
New World Alliance	7.7								
CMA CGM	6.8								
Evergreen Line	6.1								
G6 Alliance	5.8								
Cosco	4.4								
ZIM	3.8	ZIM	1.3	ZIM	2.0	ZIM	2.4	ZIM	2.5
Hamburg-Sud	2.6								
Non-alliance carriers	58.9		32.6		15.6		15.9		15.7

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from Blue Water Reporting from 2012 to 2019; Alphaliner Top 100 for 2022 onward.
Note: The sum of the percentages for each year is 100.

However, new developments have recently been announced that will reshape the landscape of shipping alliances going forward, including the following:

- The non-renewal of the 2M alliance, entailing the separation of Maersk and MSC.
- The creation of a new form of collaboration between Maersk and Hapag Lloyd called "Gemini Cooperation".
- Consolidation of the Ocean Alliance, involving CMA-CGM, Cosco, Evergreen and OOCL.
- The creation of a new alliance called the "Premier Alliance" that brings together Yang Ming, ONE and HMM and has strategic alliances with MSC for the Asia-Europe and Asia-Mediterranean routes. At the same time, ZIM and MSC have entered into a strategic alliance for the trans-Pacific route.

These are non-strategic forms of trade cooperation aimed at optimizing routes and services, which are strictly monitored by competition or shipping authorities in some of more developed countries.

In summary, within the broad array of events affecting international maritime trade logistics, the fluctuation of the indicators analysed shows that, although the impact of these factors was already in evidence before the pandemic, it increased during and after the pandemic. The following sections analyse the evolution of container trade both globally and in Latin America and the Caribbean.

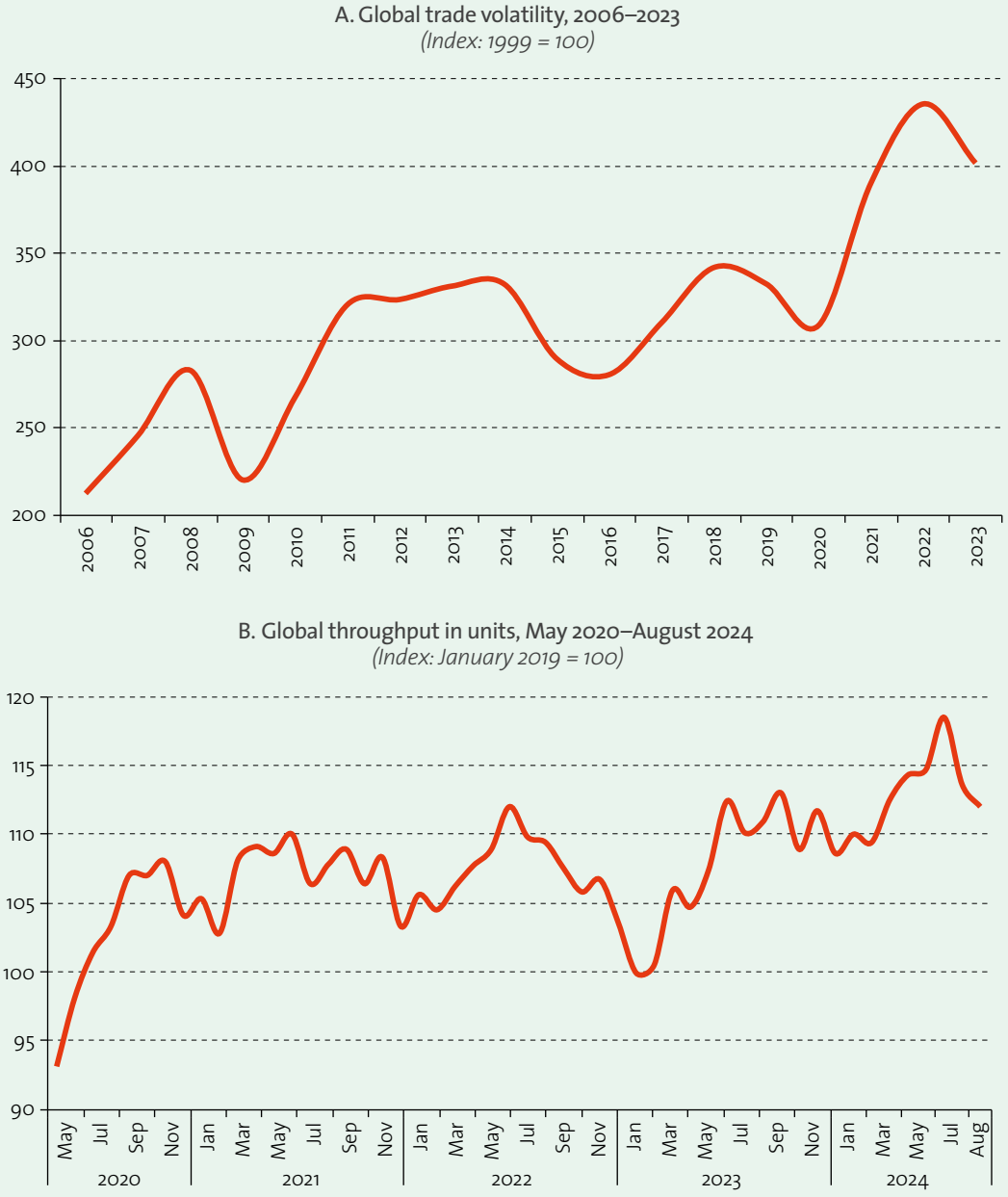
What follows is an assessment of performance of container shipping, with a particular focus on trade, trans-shipment and throughput.

II. Performance of containerized maritime trade

A. Trade

Volatility in international trade, as illustrated in figure 4A, has been compounded by the behaviour of throughput in container ports (depicted in figure 4B). This indicator has fluctuated significantly at the global level, especially in recent years.

Figure 4
Global trade volatility and throughput in container ports



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the World Trade Organization (WTO), 2024. Container data are based on Drewry, Port Throughput Indices, 2024.

In this context, containerized maritime trade has sustained successive impacts to differing degrees, as table 2 shows. By the end of 2023, Asia, North America, sub-Saharan Africa, and India and the Middle East had surpassed pre-pandemic trade levels. In contrast, trade in Latin America and the Caribbean, Australasia and Europe not only continued to lag behind pre-pandemic levels but had actually declined compared to 2021.

Table 2
Volume index of international containerized maritime trade, by subregion, 2019–2023
(Index: 2019 = 100)

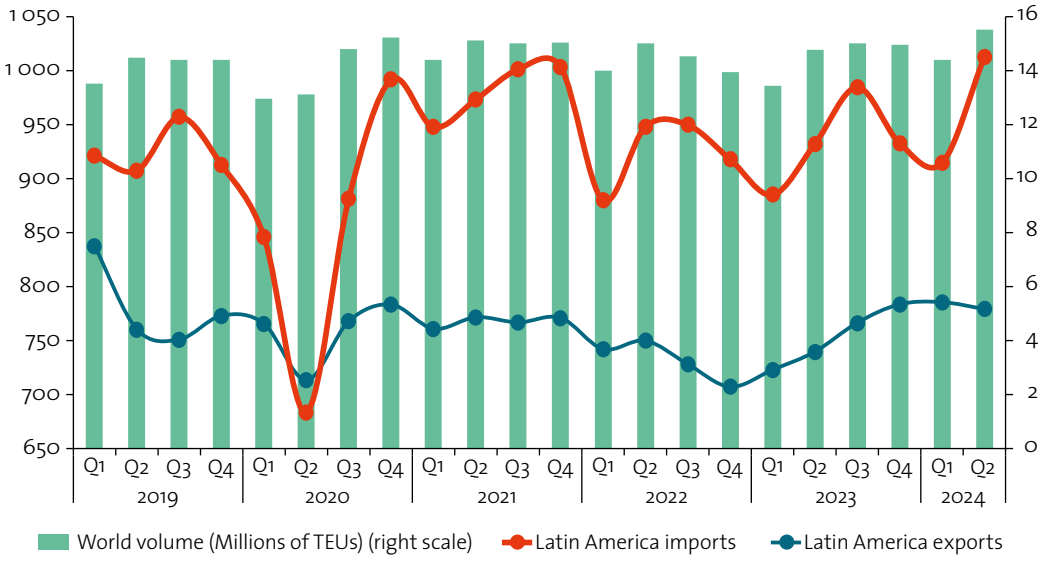
	2019	2020	2021	2022	2023
Sub-Saharan Africa	100.0	96.4	98.3	98.1	107.0
North America	100.0	100.5	110.4	102.4	100.4
Latin America	100.0	94.3	102.6	97.1	98.9
Australasia and Oceania	100.0	100.6	101.8	97.3	96.8
Europe	100.0	97.0	102.1	94.6	93.6
Asia	100.0	99.9	106.7	104.3	105.0
Indian subcontinent and Middle East	100.0	96.9	97.9	101.5	111.6
Global	100.0	98.7	104.9	101.2	102.4

Source: Prepared by the authors, on the basis of Container Trade Statistics (CTS), data for 2019–2023.

Global containerized maritime trade has fluctuated considerably between 2020 and 2024 as a result of the pandemic, geopolitical tensions and logistical challenges. The volume of this trade has been closely tied to the performance of the world economy. As figure 5 shows, in the first quarter of 2020, international maritime trade contracted sharply as a result of supply chain disruptions, port closures and reduced global demand.

As previously mentioned, Latin America was one of the most affected regions, as the contraction in regional gross domestic product and public health restrictions severely affected the movement of goods. However, as global economies began to recover in 2021, so did the volume of TEUs (see figure 5). However, logistical bottlenecks continued to cause delays and increased transport costs.

Figure 5
World and Latin America: trends in international containerized maritime trade volume, first quarter of 2019–second quarter of 2024
(Thousands and millions of TEUs)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Container Trade Statistics (CTS).

Despite the partial recovery, the outlook for international maritime trade remains uncertain owing to the persistence of logistical problems, such as port congestion and container shortages, and continuing tensions in global supply chains. These factors, along with geopolitical conflicts and the effects of the climate crisis, continue to adversely affect the efficient flow of goods globally.

Since 2019, exports and imports in Latin America and the Caribbean have been influenced by a number of factors, in particular the COVID-19 pandemic and armed conflicts in different parts of the world. The behaviour of imports and exports during 2023 is described below.

In 2019, prior to the pandemic, exports in various Latin American and Caribbean subregions showed some stability, although some areas, such as Central America and the Caribbean, experienced marked declines in the third and fourth quarters. In 2020, during the pandemic, exports were significantly affected in most subregions. The post-pandemic recovery began in 2021, with significant increases in exports from the Caribbean (tier 1 (T1), tier 2 (T2) and tier 3 (T3) ports), the East Coast of South America and the West Coast of South America. However, the recovery was slower in Central America and the Caribbean, where pre-pandemic levels were not regained until the first quarter of 2022.

By 2023, exports had slowed in several regions, with some notable declines compared to the previous year. For example, the Caribbean Coast of Central America (Central America-Caribbean) index stood at 75 in the third quarter of 2023, well below 2022 levels. Other indices, such as the Pacific coasts of Mexico (Mexico-Pacific) and Panama (Panama-Pacific), have also seen significant downturns. Overall, in 2023, export growth fell short of previous years, suggesting an incomplete and slower-than-expected recovery.

Imports, meanwhile, had been growing modestly prior to the pandemic in 2019, with the Pacific Coast of Central America (Central America-Pacific) and the East Coast of South America standing out for their faster growth. However, as with exports, imports were also impacted in 2020. That said, they rebounded at a faster pace, and by the fourth quarter of 2020, several areas, including Central America-Caribbean and Central America-Pacific, were showing signs of recovery. In the years following the pandemic, imports recovered more strongly than exports. In 2021 and 2022, there was sustained and significant growth in Mexico-Pacific and the East Coast of South America.

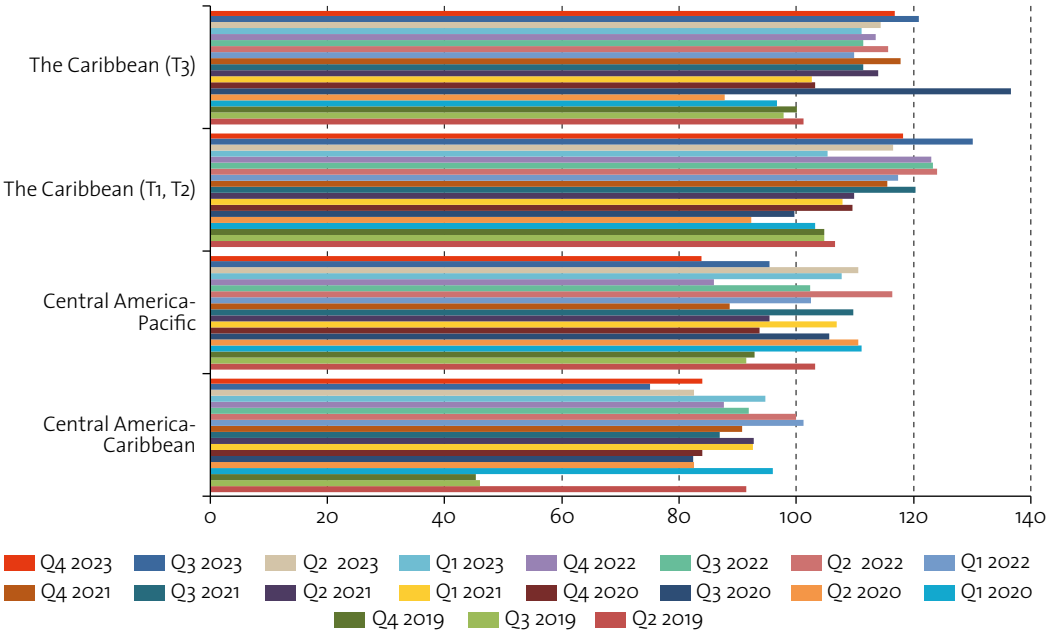
In 2023, imports performed strongly relative to exports. Central America-Pacific and Mexico-Pacific showed outstanding growth, reaching indices of 138 and 153, respectively, in the third quarter of 2023. This indicates that imports have not only regained their pre-pandemic levels, but in some areas have far exceeded them.

In short, the post-pandemic recovery of trade has been a mixed bag. While exports failed to recover fully in 2023 and slowed in several areas, imports have seen a stronger recovery, even surpassing pre-pandemic levels in many parts of Latin American and the Caribbean.

For the analysis, ports are classified into different categories according to their annual container handling capacity: T1 ports, with an annual traffic volume of less than 99,000 TEUs; T2 ports, handling between 100,000 and 999,999 TEUs per year; and T3 ports, handling more than one million TEUs per year.

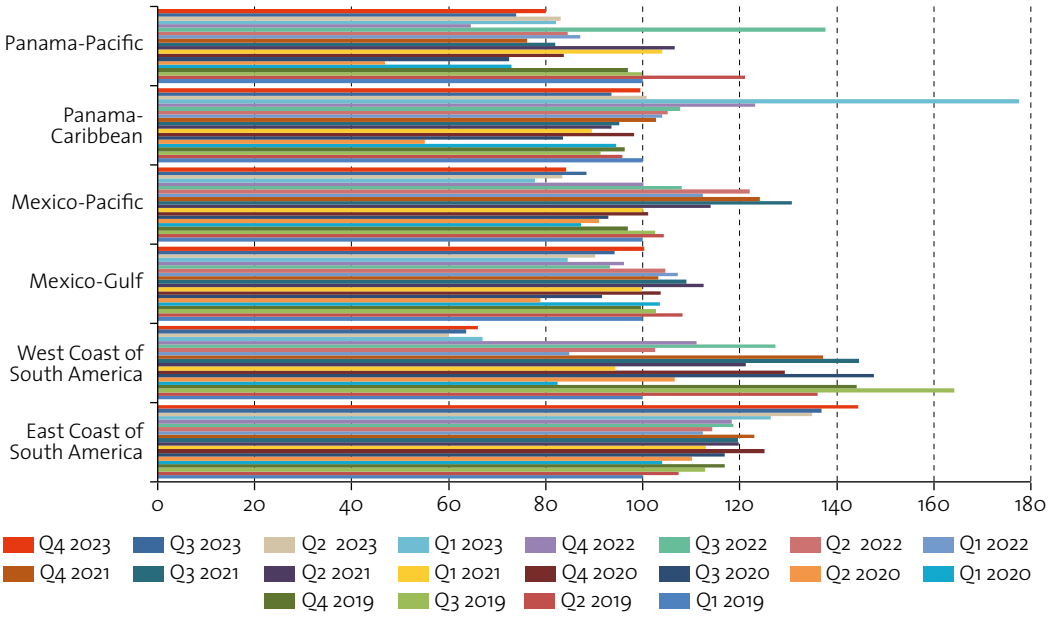
Figures 6–9 show the trends in exports and imports by coast, measured by indices where the first quarter of 2019 = 100, from 2019 to 2023.

Figure 6
The Caribbean (T1, T2), the Caribbean (T3), Central America-Pacific and Central America-Caribbean: exports by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



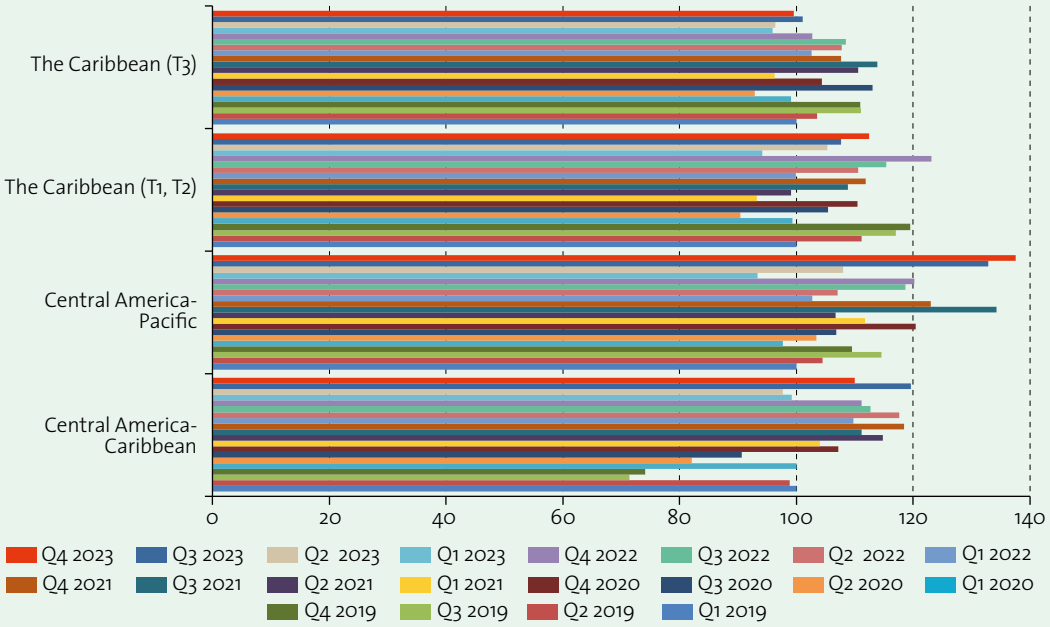
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.
Note: For the selection of ports, a sample with high national representativeness in terms of throughput was considered, according to the availability of data. Only full containers were considered for the calculation.

Figure 7
Panama-Pacific, Panama-Caribbean, Mexico-Pacific, Mexico-Gulf, West Coast of South America and East Coast of South America: exports by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



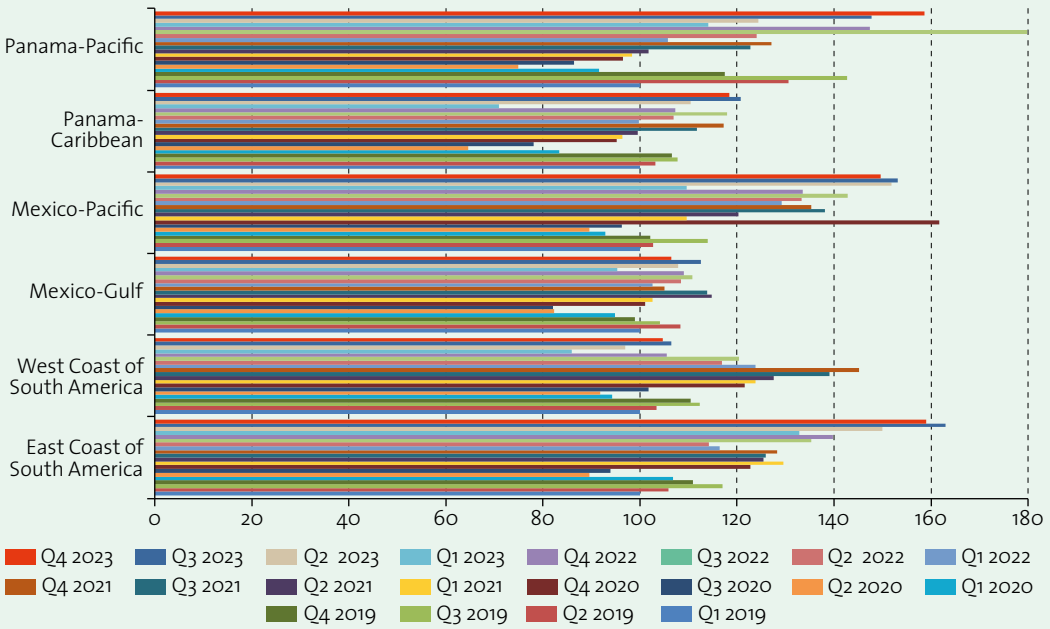
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.
Note: For the selection of ports, a sample with high national representativeness in terms of throughput was considered, according to the availability of data. Only full containers were considered for the calculation.

Figure 8
The Caribbean (T1, T2), the Caribbean (T3), Central America-Pacific and Central America-Caribbean: imports by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.
Note: For the selection of ports, a sample with high national representativeness in terms of throughput was considered, according to the availability of data. Only full containers were considered for the calculation.

Figure 9
Panama-Pacific, Panama-Caribbean, Mexico-Pacific, Mexico-Gulf, West Coast of South America and East Coast of South America: imports by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.
Note: For the selection of ports, a sample with high national representativeness in terms of throughput was considered, according to the availability of data. Only full containers were considered for the calculation.

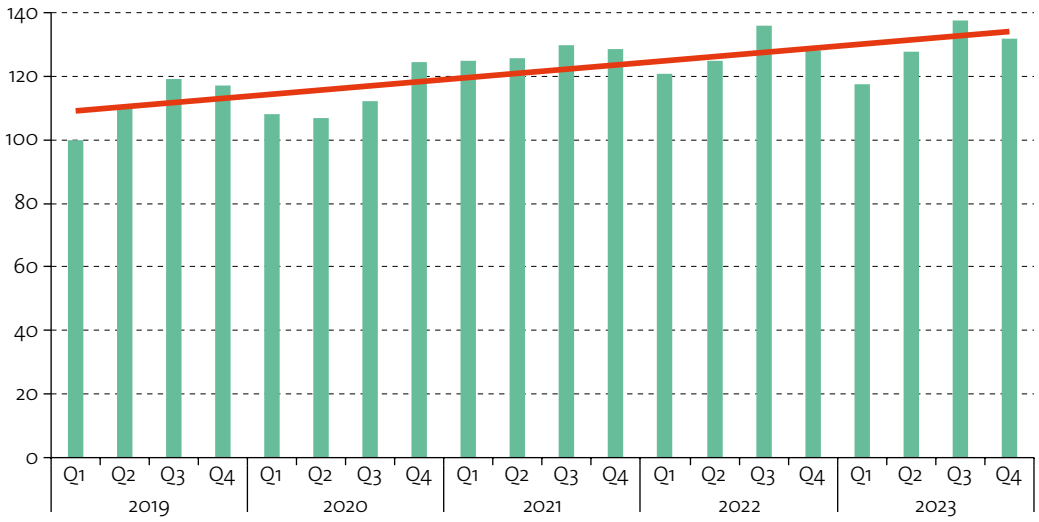
B. Throughput in Latin America and the Caribbean

The region's port system has experienced strong growth since 2000,[3] with almost 10 million TEUs added every five years to the annual total of containers handled. Total port cargo volume increased by a factor of 4.37 over the period as a whole. Between 2017 and 2019, average growth was influenced by two main factors: the completion of the Panama Canal expansion in 2016 and the continued growth of the port of Lázaro Cárdenas, which became a T3 port in 2015.

The East Coast of South America performed well between the first quarter of 2019 and the fourth quarter of 2023. Although moderate at the beginning of the growth period, throughput fluctuated, with a notable drop in the index value to 108 in the first quarter of 2020 as a result of the pandemic. However, signs of recovery started to emerge in the second half of 2020, with the index reaching a value of 130 in the third quarter of 2021. This upward trend continued, despite some minor fluctuations, such as decreases to 121 in the first quarter of 2022, and to 117 in the first quarter of 2023. By the fourth quarter of 2023, the end of the period analysed, the index stood at 132, suggesting that port activity levels in the region had stabilized.

The inclusion of strategic ports in Brazil, Argentina and Uruguay suggests that those areas played a key role in the growth of container traffic for the East Coast of South America, as figure 10 shows.

Figure 10
East Coast of South America: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)

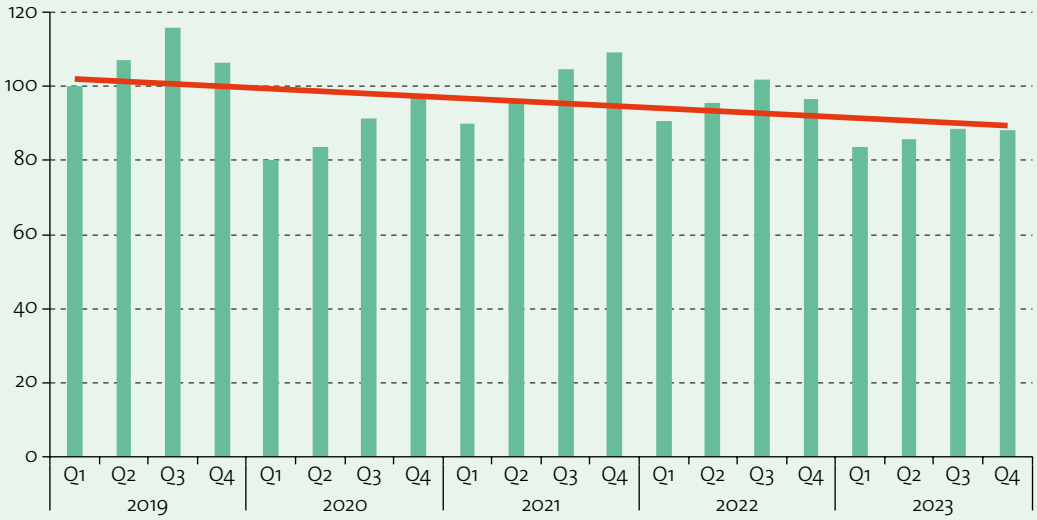


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes Brazil's T2 and T3 ports, Greater Buenos Aires and Montevideo.

As regards the West Coast of South America, the historical performance of throughput is notable for its volatility and lethargic recovery from the adverse effects of the pandemic. The index fell to 80 in the first quarter of 2020 and remained at low levels for the remainder of that year. Although port activity showed signs of recovery from the fourth quarter of 2021, when the index rebounded to 109, instability persists. In 2022 and 2023, the index fluctuated between 84 and 97, indicating that, despite some progress, the region still faces challenges in stabilizing throughput. Figure 11 shows throughput for the West Coast of South America between 2019 and 2023.

[3] For more details, historical annual data can be found for analysis in the Maritime and Logistics Profile (https://perfil.cepal.org/l/en/start.html).

Figure 11
West Coast of South America: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



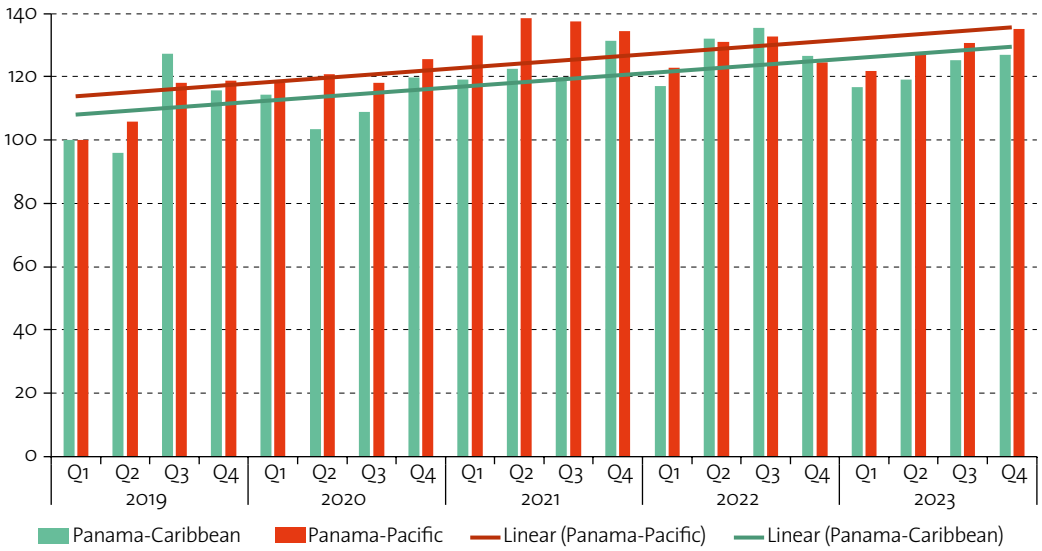
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes Buenaventura, in Colombia; El Callao, in Peru; Guayaquil, in Ecuador; and San Antonio, Valparaíso and San Vicente, in Chile.

Both coasts of Panama performed positively in throughput terms over the period analysed, although Panama-Caribbean has consistently outperformed the Panama-Pacific in terms of total volume. Panama-Pacific throughput fluctuations could be attributed to regional competition and external factors affecting ports, such as low tides, which can limit the operability of bigger vessels.

As figure 12 shows, Panama-Caribbean throughput experienced sustained growth in the first quarters of 2019. Despite a moderate decline at the beginning of 2020, thanks to its strategic location as a major trans-shipment hub in the Caribbean, Panama-Caribbean made a solid recovery from the fourth quarter of 2020 onward, exceeding 1 million TEUs on several occasions. In 2021, the growth trend continued, peaking at 1,310,488 TEUs in the fourth quarter (index value of 131). Although activity stabilized at high levels in 2022, there was a slight drop in the first quarter of 2023, after which performance remained relatively strong in subsequent quarters and reached 1,267,712 TEUs in the fourth quarter of 2023 (index value of 127).

Meanwhile, Panama-Pacific throughput saw more moderate growth. While it also experienced an upturn after the health crisis, factors such as competition from other ports in the region and tide-related operational constraints may have hindered growth. Panama-Pacific peaked in the third quarter of 2019 at 772,804 TEUs (index value of 118). Throughout 2020, it showed a similar, if slower, recovery, with notable growth in the fourth quarter to reach 821,854 TEUs (index value of 126). From 2021 onward, throughput remained consistently above 800,000 TEUs and peaked at 907,667 TEUs in the second quarter of that year (index value of 139). However, in 2022 and 2023, Panama-Pacific witnessed steeper declines, most likely as a result of slowing demand on some trade routes and logistical pressures faced by ports globally, before eventually stabilizing at 884,914 TEUs in the fourth quarter of 2023 (index value of 135). Figure 12 shows the performance of throughput on both coasts of Panama.

Figure 12
Panama-Caribbean and Panama-Pacific: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes the Caribbean Coast of Panama (i.e. CCT, MIT and Cristobal) and the Pacific Coast of Panama (i.e. Balboa and Rodman (PSA)).

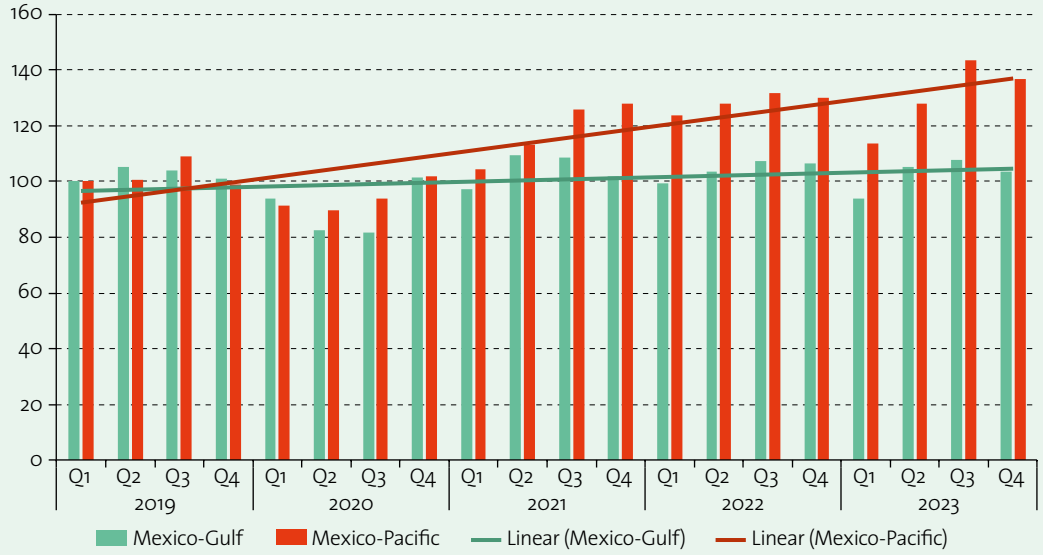
Analysis of port throughput on Mexico's Gulf coast (Mexico-Gulf) and for Mexico-Pacific between 2019 and 2023 shows significant trends in container handling that reflect both resilience and fluctuations in performance. Despite slight growth in the first two quarters of 2019, 2020 saw a considerable drop —as on all coasts— and as a result the index reached a low of 82 in the third quarter. A partial comeback in the course of 2021 led to a value of 109 in the second quarter. However, in 2022 and 2023, the indices fluctuated significantly, with a value of 94 in the first quarter of 2023, suggesting instability in port activity that can be put down to competition and ability to adapt to changing market conditions.

In contrast to Mexico-Gulf, Mexico-Pacific showed more stable growth. Although it also experienced a drop in 2020, the index remained relatively high, with a low of 91 in the first quarter. In 2021, Mexico-Pacific saw a remarkable rebound, with the index reaching 128 in the fourth quarter, signalling a solid recovery and an increase in business activity. From 2022 onward, the index remained high, culminating with a value of 143 in the third quarter of 2023, reflecting strong consolidation and sustained growth. Figure 13 illustrates the performance and trends of both coasts over the period covered.

An analysis of throughput in the Caribbean ports reveals notable differences between the T1, T2 and T3 ports of the region. Caribbean T1 and T2 ports managed sustained, relatively stable growth over the period from the first quarter of 2019 to the third quarter of 2023. Despite a decline in the second quarter of 2020 (with an index value of 98), the recovery was steady. In the first quarter of 2021, the index picked up again, reaching a new high of 144 in the fourth quarter of 2023.

In contrast, the performance of T3 ports in the Caribbean was more moderate and less volatile. In 2020, as was universally the case, the pandemic had a clear impact, with the index falling to 94 in the second quarter. However, the recovery was less buoyant than for the T1 and T2 ports. In the fourth quarter of 2023, the end of the period under review, the index for T3 ports stood at 113, indicating moderate but sustained growth. This behaviour suggests that T3 ports face specific challenges, possibly related to competition from other trade routes.

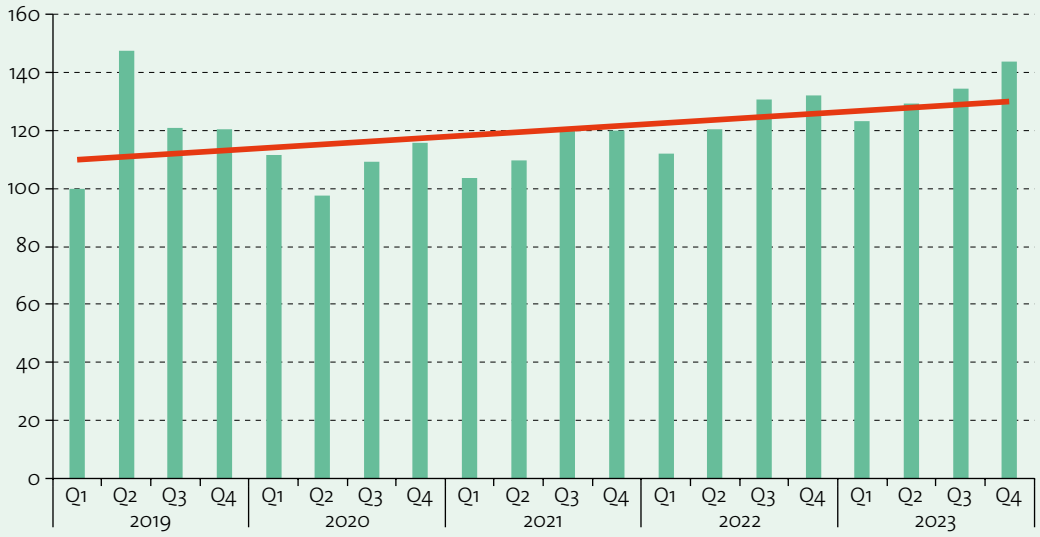
Figure 13
Mexico-Pacific and Mexico-Gulf: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes the Pacific Coast of Mexico (i.e. Manzanillo and Lázaro Cárdenas) and the Gulf Coast of Mexico (i.e. Altamira, Tampico and Veracruz).

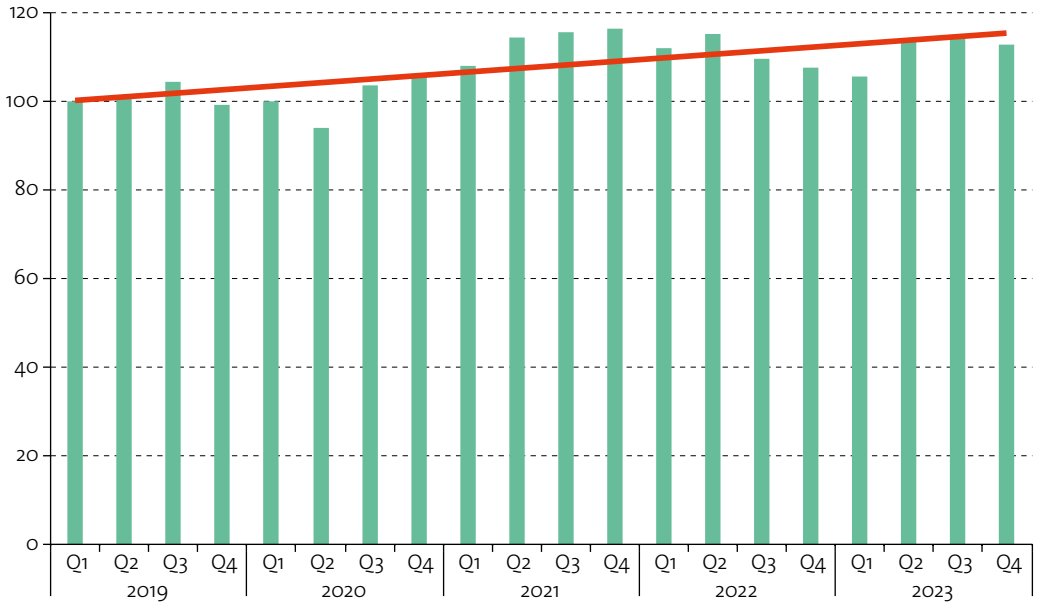
Figures 14 and 15 illustrate throughput trends in Caribbean ports, disaggregating activity for the T1, T2 and T3 categories from the first quarter of 2019 to the fourth quarter of 2023.

Figure 14
T1 and T2 Caribbean ports: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes Fort-de-France, Oranjestad, PLIPDECO and Port of Spain, Willemstad, and Santa Marta, Colombia.

Figure 15
T3 Caribbean ports: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



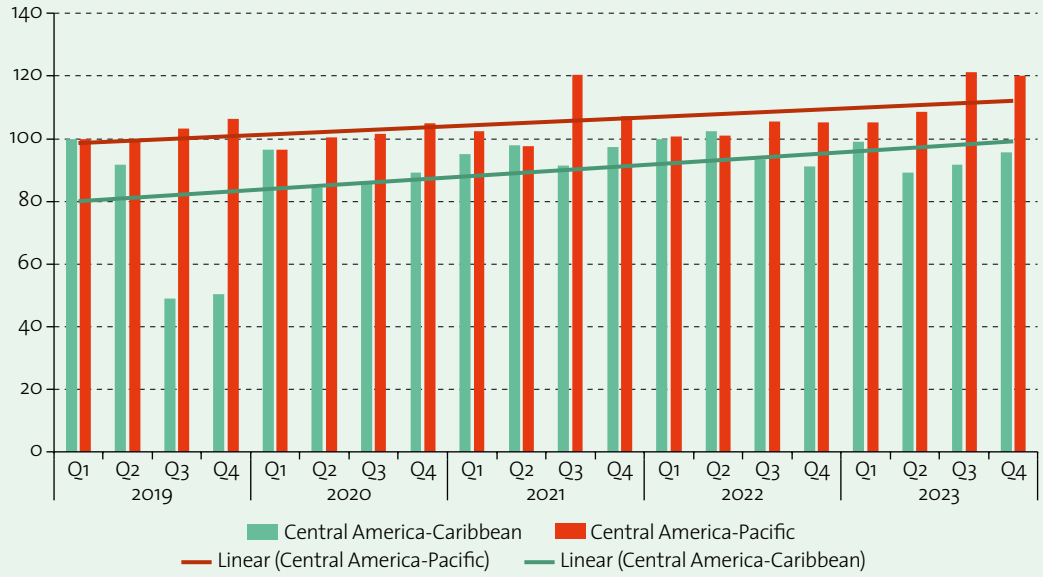
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes Cartagena, Colombia; Caucedo, Dominican Republic; Freeport, Bahamas; Kingston; and San Juan.

Analysis of the throughput index for Central America-Pacific and Central America-Caribbean between the first quarter of 2019 and the fourth quarter of 2023 reveals differentiated patterns of behaviour between the two regions.

The throughput index for Central America-Caribbean fluctuated considerably over the period reviewed, reflecting its vulnerability to external shocks. However, the first quarter of 2021 marked the start of a sustained recovery trend in 2021 and 2022. In 2023, the index ranged from 99 to 96, recording a mild contraction; however, the coast remained relatively stable compared to its pre-pandemic performance.

By contrast, the performance of the throughput index for Central America-Pacific was more resilient and positive, especially in the third quarter of 2021, when it registered a value of 120. Growth was especially notable in the third quarter of 2023, when the index reached 121, signalling robust growth in port activity and increased cargo handling capacity. Despite the fluctuations in the first quarters of 2020, the region made a sustained recovery over the remainder of the period (see figure 16).

Figure 16
Central America-Caribbean and Central America-Pacific: throughput by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)

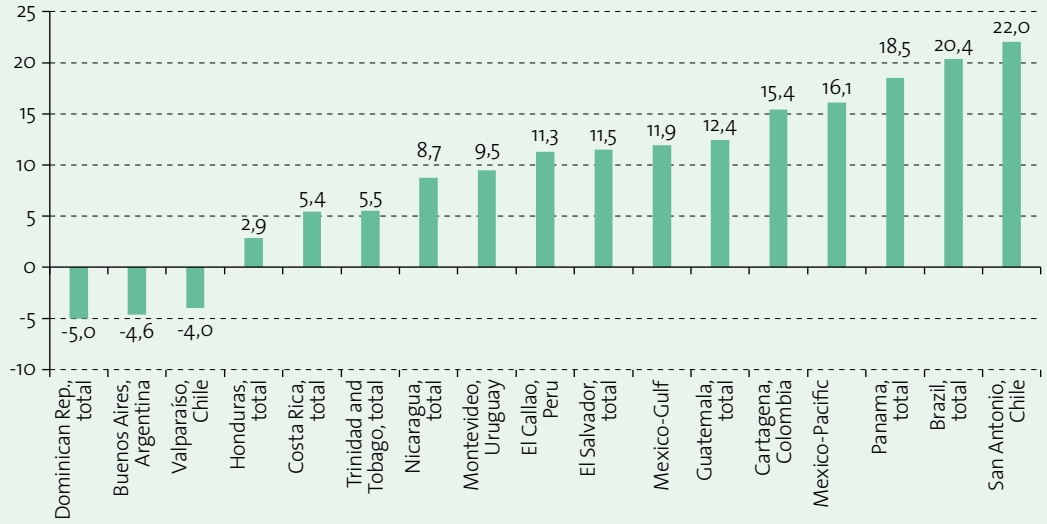


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.
Note: Includes the Caribbean Coast of Central America (Puerto Barrios and Santo Tomás de Castilla, Guatemala; Puerto Castilla and Puerto Cortés, Honduras; Arlen Siu, Nicaragua; and Limón+Moin, Costa Rica) and the Pacific Coast of Central America (Acajutla, El Salvador; Puerto Quetzal, Guatemala; San Lorenzo, Honduras; and Puerto Caldera, Costa Rica).

C. What happened in 2024?

Data for the first six months of 2024 showed a significant recovery in port activity, reflecting growth in containerized maritime trade. Figure 17 contains a very representative sample of Latin American and Caribbean ports.

Figure 17
Latin America and the Caribbean: year-on-year change in throughput, first half of 2024
(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data for the ports in the sample.

The figure shows that most of the major ports of Latin America and the Caribbean recorded positive throughput growth rates for the first six months of 2024 compared to the same period in 2023. Increases ranged from a 2.9% in the ports of Honduras to a striking 22% in the port of San Antonio, Chile —evidence of a significant recovery in certain key areas of the region. In the sample in figure 17, only three ports recorded downturns, with declines ranging between 4% and 5%. These decreases suggest that while most ports are seeing growth, some still face specific challenges, probably related to competition and the persistence of logistical problems.

D. Trans-shipment

Analysis of quarterly trans-shipment data between 2019 and 2023 reveals interesting patterns in the different subregions of Latin America and the Caribbean where there is a high incidence of trans-shipment. Transhipment rates in different areas have seen a recovery, albeit with uneven growth, with some standout cases. Mexico is not included in this analysis because it does not separate trade from trans-shipment, which prevents accurate measurement of its trans-shipment activity.

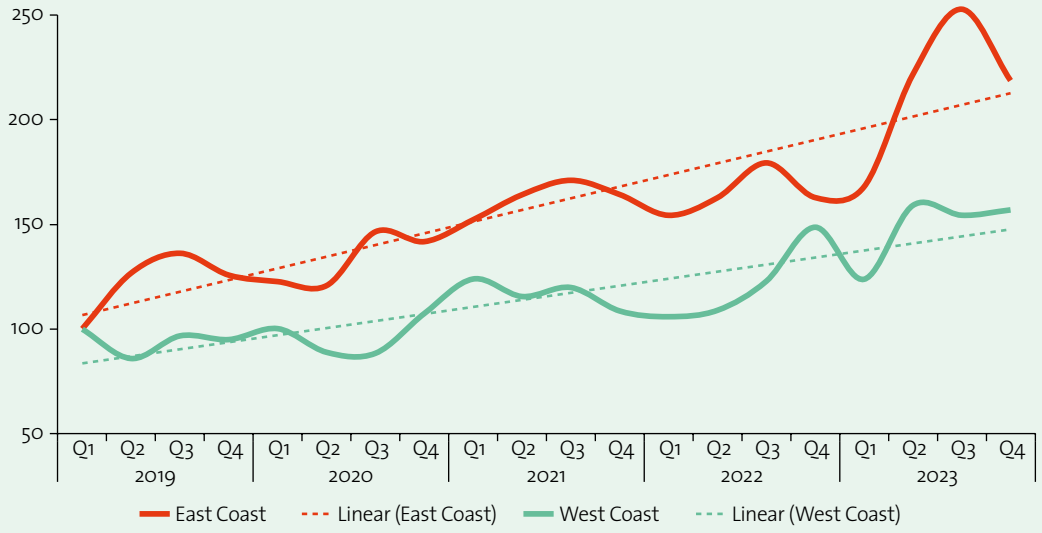
The Caribbean (T3) recorded relatively steady growth over the period. Despite a slight setback (index value of 101) in the second quarter of 2020 as a result of the pandemic, the index recovered quickly to a high of 132 in the third quarter of 2023. The region's stability and growth show that the Caribbean (T3) has been remarkably resilient over time.

The East Coast of South America has registered steady growth since 2020, which peaked in the third quarter of 2023. The acceleration began in the third quarter of 2020, when the subregion registered a remarkable index value of 146, with sustained increases continuing thereafter until 2023. This growth denotes a significant expansion in its trans-shipment activity during this period.

By contrast, the West Coast of South America has seen greater fluctuation. After a dip in 2019, when the index fell to 86 in the second quarter, the region slowly began to recover. A steadier increase from 2021 onwards led to an index value of 159 in the second quarter of 2023. Despite the fluctuations, the West Coast of South America showed remarkable resilience in the wake of the pandemic, largely attributable to steady growth in trans-shipment at the port of El Callao.

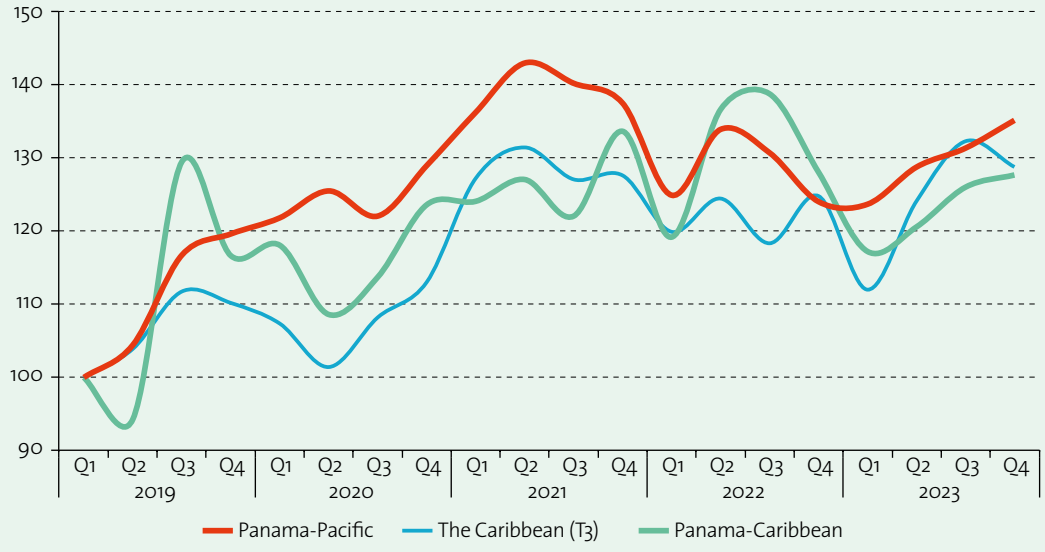
Despite moderate fluctuations, Panama-Caribbean has shown steady growth. After a dip in 2020, when an index value of 109 was reported in the second quarter, the region recovered, staying in a range of 120–139 between 2021 and 2023. For its part, Panama-Pacific managed steady growth, with index values ranging between 120 and 140 for the 2020–2023 period. Although it failed to keep pace with the rate of growth of the East Coast of South America, its performance was consistent, with a mild upward trend leading to an index value of 135 in the fourth quarter of 2023. The stability of both coasts of Panama is a reflection of its key role in trans-shipment operations in the region. Figures 18 and 19 show the trans-shipment trends for the main ports of the East Coast of South America, the West Coast of South America and both coasts of Panama.

Figure 18
East Coast of South America and West Coast of South America: trans-shipment at main ports, by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.
Note: The figures for Santos, Brazil, and for Montevideo were included for the East Coast of South America. For the West Coast of South America, San Antonio, Chile, and Callao, Peru, were included.

Figure 19
Panama-Caribbean and Panama-Pacific: trans-shipment at main ports, by quarter, 2019–2023
(Indices: first quarter of 2019 = 100)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.

III. Ranking of ports or port areas in Latin America and the Caribbean, 2023

The region's port ranking has remained consistent over time, reflecting stability (Barleta and Pallis, 2024). In 2023, the port landscape in the region continued to be shaped by the consolidation of its main ports. The port of Santos in Brazil maintained its leading position, followed by Manzanillo, Mexico, and Cartagena, Colombia. One notable case is the port of El Callao, Peru, which has risen to fourth place, displacing Manzanillo International Terminal (MIT) in Panama. Table 3 ranks the top 96 ports in Latin America and the Caribbean in terms of throughput in 2023. This table reflects the recent trends in port activity in the region and how cargo volumes have evolved among the main ports.

Table 3
Latin America and the Caribbean: ranking of ports or port areas by throughput, 2023
(TEUs)

Port	Country	2019 ranking	2022 ranking	2023 ranking	2023 throughput
Santos	Brazil	1	1	1	4 284 387
Manzanillo	Mexico	2	2	2	3 698 582
Cartagena	Colombia	3	3	3	3 300 366
El Callao	Peru	5	5	4	2 757 687
MIT	Panama	4	4	5	2 622 256
Guayaquil	Ecuador	6	7	6	2 544 000
Kingston	Jamaica	8	8	7	2 349 405
Balboa	Panama	7	6	8	2 312 553
Lazaro Cardenas	Mexico	15	9	9	1 869 293
Caucedo	Dominican Republic	13	14	10	1 488 022
San Antonio	Chile	9	11	11	1 407 869
Buenos Aires (AMBA)	Argentina	10	16	12	1 367 136
Colon	Panama	23	13	13	1 358 197
San Juan	Puerto Rico	12	15	14	1 349 405
Itajaí	Brazil	16	12	15	1 267 840
Freeport	Bahamas	14	10	16	1 215 000
Limón+APM	Costa Rica	26	17	17	1 213 431
Paranaguá	Brazil	22	20	18	1 186 267
Veracruz	Mexico	17	18	19	1 148 325
Montevideo	Uruguay	24	21	20	1 125 290
São Francisco do Sul	Brazil	25	23	21	1 066 088
Buenaventura 3 terminals	Colombia	11	...	22	1 061 256
Rodman	Panama	19	19	23	1 057 456
Cristobal	Panama	18	22	24	888 306
Altamira/Tampico	Mexico	21	24	25	886 127
Valparaiso	Chile	20	25	26	788 970
Puerto Cortés	Honduras	29	26	27	752 732
Rio Grande	Brazil	28	33	28	693 196
Manaus	Brazil	27	27	29	681 154
Puerto Quetzal	Guatemala	31	29	30	656 706
Rio de Janeiro - Niterói	Brazil	35	28	31	594 789
Puerto Barrios	Guatemala	33	32	32	575 464
Santo Tomás de Castilla	Guatemala	30	30	33	536 109
Pecém - Fortaleza	Brazil	34	35	34	534 670
Suape - Recife	Brazil	32	34	35	524 962
Rio Haina	Dominican Republic	36	31	36	84.724
Ensenada	Mexico	37	36	37	462 176
Paita	Peru	39	37	38	323 647
Port of Port-of-Spain (PPOS)	Trinidad and Tobago	41	39	39	317 322
Puerto Caldera	Costa Rica	40	40	40	310 680
Aratu - Salvador	Brazil	38	38	41	304 592
Vitória	Brazil	45	44	42	265 561

Port	Country	2019 ranking	2022 ranking	2023 ranking	2023 throughput
Acajutla	El Salvador	43	42	43	256 301
San Vicente/Tacalhuano	Chile	67	70	44	246 889
Santa Marta	Colombia	44	41	45	242 183
PLIPDECO	Trinidad and Tobago	77	62	46	227 877
Jarry/Point-a-Pitre	Guadeloupe	46	43	47	216 006
Fort-de-France	Martinique	47	45	48	187 117
Barranquilla	Colombia	48	46	49	163 154
Corinto	Nicaragua	49	47	50	151 285
Puerto Castilla	Honduras	53	49	51	129 076
Zarate	Argentina	51	48	52	128 160
Progreso	Mexico	50	50	53	102 833
Bridgetown	Barbados	54	51	54	101 272
Willemstad	Curaçao	55	53	55	98 051
Turbo	Colombia	...	...	56	97 835
Santo Domingo	Dominican Republic	...	55	57	92 322
Itaguaí	Brazil	42	54	58	83 913
Almirante Bocas Fruit	Panama	57	57	59	75 528
Imbituba	Brazil	59	59	60	66 037
Oranjestad	Aruba	58	58	61	64 753
Tuxpan, VER.	Mexico	63	60	62	53 060
Georgetown-Cayman	Cayman Islands	62	61	63	46 692
Pichilingue	Mexico	...	82	64	43 120
Vila do Conde - Belém	Brazil	52	52	65	42 690
Ushuaia	Argentina	65	69	66	39 976
Castries	Saint Lucia	64	63	67	36 981
Mazatlan	Mexico	61	65	68	34 734
Rosario	Argentina	56	56	69	28 468
Pisco	Peru	78	77	70	8.246
Ilo	Peru	68	66	71	27 596
San Lorenzo	Honduras	66	72	72	25 603
Puerto Chiapas	Mexico	60	64	73	23 754
Puerto Plata	Dominican Republic	...	67	74	20 499
CPCP (Campden Park Container Port)	Saint Vincent and the Grenadines	72	68	75	20 299
Coatzacoalcos	Mexico	75	71	76	17 712
San Andrés	Colombia	...	...	77	17 378
Manzanillo	Dominican Republic	...	74	78	16 026
Guaymas	Mexico	71	76	79	15 304
Puerto Madryn	Argentina	74	81	80	14 784
San Antonio Este	Argentina	70	73	81	12 978
Porto Velho	Brazil	79	75	82	11 559
Puerto Deseado	Argentina	73	78	83	11 447
Roseau	Dominica	80	79	84	10 411
La Plata (TecPlata)	Argentina	85	80	85	8 069
Matarani	Peru	76	86	86	7 280
Bahia Blanca	Argentina	69	83	87	6 639
Puerto Morelos, Q. ROO	Mexico	81	84	88	5 722
Arlen Siu	Nicaragua	82	85	89	4 533
Barrancabermeja	Colombia	...	...	90	2 887
Guajira	Colombia	...	...	91	2 757
Mar del Plata	Argentina	83	87	92	2 618
Salina Cruz	Mexico	84	88	93	1 430
Euroamerica	Argentina	86	89	94	1 354
Santa Fe	Argentina	...	91	95	464
Dos Bocas	Mexico	...	90	96	37

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.

Note: Some ports have been omitted from the ranking owing to a lack of data. An ellipsis (...) indicates that data are missing, not separately reported, or not available.

At the country level, Brazil continues to head the ranking in 2023, followed by Mexico and Panama, which swapped places from previous years. These three countries account for a large part of the regional throughput, with Brazil registering more than 11 million TEUs, and Mexico and Panama exceeding 8 million TEUs each. Colombia and Peru continue to account for a sizeable share in fourth and fifth place, respectively. Chile and Argentina, on the other hand, have seen slight declines, reflecting changes in their trade dynamics. Conversely, smaller nations, such as Jamaica, Guatemala and Costa Rica, have held steady in the ranking, with lower but still significant traffic.

Table 4 ranks the 28 Latin American and Caribbean countries by throughput in 2023.

Table 4
Latin America and the Caribbean: ranking of the top 28 countries by throughput, 2023
(TEUs)

Country	2019 ranking	2022 ranking	2023 ranking	2023 throughput
Brazil	1	1	1	11 607 704
Mexico	3	3	2	8 362 209
Panama	2	2	3	8 314 296
Colombia	4	4	4	4 887 816
Peru	6	6	5	3 144 456
Ecuador	7	7	6	2 544 000
Chile[a]	5	5	7	2 443 728
Jamaica	9	8	8	2 349 405
Guatemala	11	10	9	1 768 279
Argentina	8	11	10	1 622 093
Costa Rica	12	12	11	1 524 111
Dominican Republic	10	9	12	1 488 022
Puerto Rico	13	13	13	1 349 405
Bahamas	...	...	14	1 215 000
Uruguay	14	14	15	1 125 290
Honduras	15	15	16	907 411
Trinidad and Tobago	16	16	17	545 199
El Salvador	17	17	18	256 301
Guadeloupe	18	18	19	216 006
Martinique	20	19	20	187 117
Nicaragua	19	20	21	155 818
Barbados	21	n.a.	22	101 272
Curaçao	...	...	23	98 051
Aruba	...	...	24	64 753
Cayman Islands	22	21	25	46 692
Saint Lucia	...	...	26	36 981
Saint Vincent and the Grenadines	23	22	27	20 299
Dominica	...	...	28	10 411

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information provided by the ports in the sample.
Note: Some ports have been omitted from the ranking owing to a lack of data. An ellipsis (...) indicates that data are missing, not separately reported, or not available.
[a] For Chile, in 2023, the figures of the main ports of the central region —San Antonio, Valparaiso and San Vicente/Talcahuano— were included, which could impact the ranking of Chile in 2023 and its comparison with previous years.

IV. Final considerations

In the 2023–2024 period, volatility and uncertainty marked the port sector in the Latin American and Caribbean region. Although the first half of 2024 saw significant recovery in terms of throughput, major overarching challenges remain. In short, as has been the case in recent years, the pendulum of port activity continues to swing, reflecting an environment where stability is elusive and constant monitoring and adaptation is required.

A key factor that has helped shape the region's port performance is its high exposure to global economic and geopolitical conditions. Geopolitical tensions with no resolution in sight, coupled with adverse weather events, such as drought in the Panama Canal affecting major shipping lanes, have ushered in a new wave of disruptions. These events have slowed the recovery seen in 2023 and significantly impacted logistics operations in the region.

At the structural level, the main ports of the region have shown a steady hand in continuing to lead the sector. However, that stability has not guaranteed uniform progress. While some ports have moved up in the rankings, others face challenges in terms of modernizing infrastructure and adapting to growing demand for more efficient logistics. In particular, medium and small ports require further modernization if they are to remain competitive and increase their operational capacity.

A major challenge is progressive consolidation in global shipping alliances, which has benefited the sector's big players and put increasing pressure on smaller ports. They have to contend with technological limitations and often outdated governance, which is a significant hurdle when it comes to offering advanced, competitive logistics services.

Despite signs of recovery in 2023, new logistics disruptions emerged in 2024, underlining the need for great caution in forecasting trade and economic developments. International maritime logistics markets appear to be adapting to a new panorama of uncertainty and disruption, and decisions such as freight rate adjustments could slow the recovery recorded in the first part of the year.

Other important unknowns could also make their impact felt in the coming months, such as a spate of presidential elections in key countries for the region's development, as well as threats to port operations.

The effects of climate change and the intensification of natural events are a real threat to maritime transport. This was clear from the decrease in water flows in South American waterways and the drought in the Panama Canal. Such extreme natural phenomena represent concrete risks that have been manifesting themselves along the main maritime routes in the region. In the long term, these risks will require the implementation of more robust infrastructure and logistics planning policies to mitigate their effects.

The port ranking in the region has remained consistent over time, suggesting a stable structure at both port and country level.

However, the lack of upgrading and modernization in many medium and small ports is an obstacle to improving mobility and offering advanced, high-productivity logistics services. Furthermore, the sector's institutional framework and governance are outdated, and in many cases, the sector continues to operate under regulatory frameworks introduced by reforms from the 1990s that were designed to address challenges that differ greatly from those of today. This situation was noted and highlighted by ECLAC almost 10 years ago (Sánchez, R.J. and F. Pinto, 2015).

At the same time, a deficit in infrastructure investment remains one of the greatest challenges to sustainable development in the region. This deficit, compounded by pandemic-related disruptions, geopolitical tensions and extreme weather events, further complicates supply chain disruptions. The amount of investment needed to close this gap is considerable, especially in a context where the region's countries are contending with growing economic pressures and limited resources.

The ports of Latin America and the Caribbean, especially the small and medium-sized ones, face enormous challenges that require more active cooperation practices to enable them to access technological and organizational improvements tailored to the reality of each and keep up with productivity and efficiency demands.

In that sense, adopting more efficient and rigorous resource planning, accompanied by innovative financing mechanisms to tackle the infrastructure deficit is critical. However, it is equally important that countries in the region do not take on these challenges in isolation. In an increasingly interconnected world, Latin America and the Caribbean should seek greater economic integration and coordination in its port policies. Only through strengthened trade, deeper integration and closer regional cooperation will it be possible for the region to strengthen its role globally and move towards sustainable development.

In short, the future of port activity in the region will be marked by uncertainty, as well as a need for resilience. The region must continue to adapt to an ever-changing global logistics environment, where modernization, the adoption of advanced technologies and the ability to cope with climate and economic challenges will be essential to ensure its long-term competitiveness and sustainability.

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VI. Publications of interest

FAL Bulletin No.401

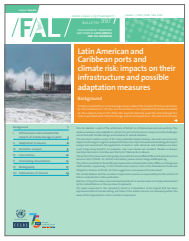
Port Report 2022–first quarter of 2023 The calm after the storm?

Miryam Saade Hazin
Eliana P. Barleta

Shipping transports around 80% of global trade in goods by volume, and 70% by value (ECLAC, 2023). Global supply chains suffered unprecedented distortions, first as a result of the coronavirus disease (COVID-19) pandemic, declared in March 2020, and then with the outbreak of the war between Ukraine and the Russian Federation on 24 February 2022.

Maritime transport has clearly played a major role in international trade in recent decades, particularly since the declaration of the COVID-19 pandemic in March 2020. The Infrastructure Services Unit of the Economic Commission for Latin America and the Caribbean (ECLAC) began publishing the Port Report at the start of the new millennium. On this occasion, the Report comes in the aftermath of the impact of an unprecedented health crisis and the war between the Russian Federation and Ukraine, which exposed the fragility of shipping and supply chains worldwide. The situation at present is beset with new challenges, such as the drought affecting the Panama Canal drought, among others, which are once again threatening to impair global supply chains.

Available in: English Spanish



FAL Bulletin No. 397

Latin American and Caribbean ports and climate risk: impacts on their infrastructure and possible adaptation measures

Diogo Aita

This *FAL Bulletin* is part of the reflections of ECLAC on infrastructure and connectivity. This edition examines some adaptation options for port infrastructure in response to the challenges connected with climate change and resilience to natural disasters.

The document outlines some of the main potential climate hazards, risk areas and economic impacts on the region's logistics and port infrastructure. It puts forward a methodology for impact analysis and assessment, the application of which in Latin American and Caribbean countries could bring many benefits. As examples, two case studies are included: Muelles el Bosque maritime terminal in Colombia and the Port of Manzanillo in Mexico.

Available in: English Spanish