



Trade Currents Navigator



February 2024

In Partnership With



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Introduction

U.S. international trade volumes have been turbulent from 2020 through 2023, with the COVID pandemic leading to a brief but sharp recession in 2020, followed by record-breaking economic stimuli, an inflationary spiral, and credit tightening by the Federal Reserve Bank. The war in Ukraine, the Israel-Hamas war, and other global economic dynamics have added further uncertainties to global trade prospects.

This edition of the Trade Currents Navigator examines U.S. containerized trade, focusing on:

- 1) Economic indicators that drive trade demand (from U.S. Bureau of Economic Analysis data)
- 2) The top commodities that have contributed to increases or decreases in containerized imports and exports (from U.S. Census Bureau data reported through December 2023)

The granular data used to measure real containerized trade volumes by commodity is in weight terms as reported by the Census Bureau. Commodities are defined by Harmonized System codes (see Appendix).

Recent trade volumes are compared with historic trends and seasonal patterns to offer insights into how they may return to those trend levels and seasonality through 2024.

Trade Currents

Trade Currents was created to improve the understanding of U.S. international goods trade. The founding partners include internationally recognized economists and trade analysts Walter Kemmsies, Andrei Roudoi, and Scudder Smith. Trade Currents is a partner with AAPA in support of its Port Statistics Program to benefit ports, as well as the broader trade and logistics industry, research community, policymakers, and private institutions.

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Executive Summary

Macroeconomic Factors:

- Consumer spending remained strong in 2023 despite the Federal Reserve (Fed) hiking interest rates. Construction has not held up as well except for expenditures on new manufacturing facilities, which in the fourth quarter of 2023 were 80% higher than the quarterly average from 2019 to 2022.
- It is likely that real consumer spending on goods will gradually approach the long-term growth trend; non-residential investment will continue to rise; and, due to housing shortages, residential investment will start recovering, driving demand for imported housing fixtures, furniture, and other housing goods.

Imports:

- On a monthly basis, containerized import volumes trended upwards between March and October 2023, but then declined during the remainder of the year mostly due to seasonal factors. However, December 2023 imports increased 1.7% year-over-year, the first increase since October 2022.
- Containerized imports boomed during the COVID pandemic, bolstered by stimulus funding and shifts in consumer spending from services to goods. However, imports started to decline in the summer of 2022, as stimulus impacts faded, monetary policy tightened, and retailers accumulated excessive inventories.
- In 2023, imports declined 11.9% from 2022, with furniture and wood accounting for almost a quarter of the total decline. However, the gap below the trend stabilized at 7%-8% in the summer of 2023 and then narrowed to 6% in December largely boosted by solar panel imports.
- In 2024, a moderate 4.9% increase is expected. Wood and furniture imports are projected to grow faster than total containerized imports partly because their gaps below long-term trends are especially large.

Exports:

- Containerized exports grew on a month-by-month basis starting in July 2023, and in the last quarter of 2023, they were 1% above the normal seasonal level. November and December were the first months with year-over-year increases since July 2021.
- However, in 2023 as a whole, annual containerized export volumes continued a declining trend. Volumes peaked in 2018 and have since fallen each year with no boost related to the COVID stimulus.
- In 2023, containerized export volumes fell 3.7%. A broad-based decline in waste paper exports to almost all major destinations was responsible for almost half of the total export contraction.
- After volumes fluctuated during the pandemic, plastics in primary forms has reemerged as the main commodity contributing to containerized export growth, as U.S. production benefited from access to relatively inexpensive hydrocarbon feedstocks.
- In 2024, exports are projected to post a modest 1.6% increase. Exports of plastics in primary forms are likely to continue strong growth. Waste paper exports will likely fall significantly less than in 2023.

Key Risk Factors:

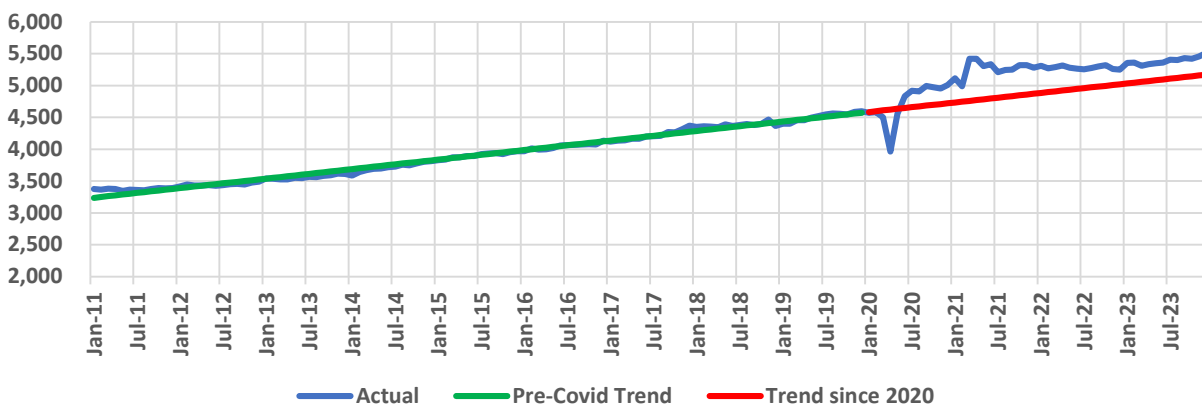
- A worsening geopolitical situation, such as a possible spread of the Middle East conflict, could lead to imported volumes below projections. Such declines could occur due to added costs resulting from trade route relocations or higher security and insurance costs, possibly leading to increased domestic sourcing.
- Monetary policy is expected to loosen in 2024, as the Fed switches its focus from inflation to economic growth. However, persistent inflation could slow the Fed's propensity to reduce interest rates. On the other hand, quickly easing inflation or a threat to economic growth coming, for example, from significantly aggravated geopolitical instability, could prompt the Fed to relax monetary policy more quickly.
- Volatility in containerization rates is also a risk to volume projections, both positive and negative, with exports more likely to switch between bulk and containerized shipment than imports.

Macroeconomic Developments

Consumer Spending:

- As a result of stimulus funding and changes in consumer spending patterns, real consumer spending on goods has been consistently above the long-term pre-COVID trend since June 2020. Moreover, the gap above the trend increased to 6% in December 2023 from 5% in November.
- The U.S. labor market added 350 thousand jobs in January 2024, significantly exceeding economists' projections. Barring significant growth in unemployment, spending on goods is expected to gradually approach the long-term trend without a significant decline.
- In addition, a revival in spending on services could boost imports of food and beverages for restaurant consumption, as well as goods related to travel.

Real Consumer Spending on Goods, billions of 2017 dollars, seasonally adjusted at annual rates



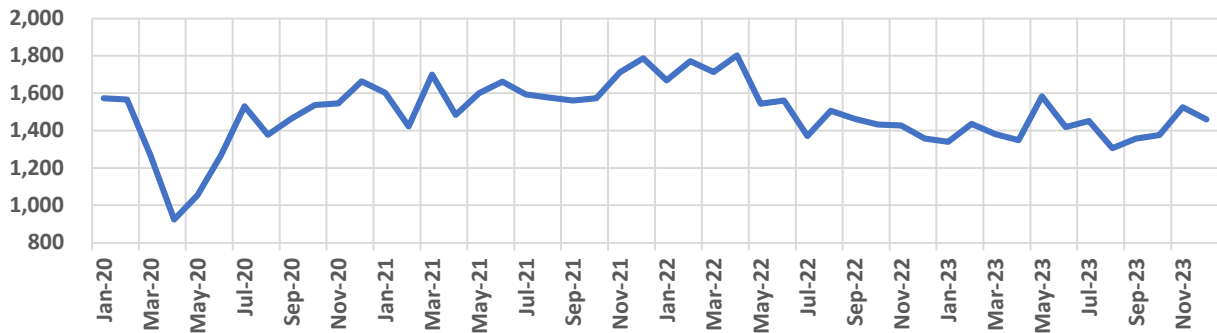
Sources: Bureau of Economic Analysis, Trade Currents estimates

Fixed Investment:

- While the Federal Reserve's monetary policy has not reduced consumer spending to pre-pandemic trend levels, it has had a major negative impact on fixed investment.
- Real residential investment, after stagnating in 2018 and 2019, boomed during the COVID pandemic starting in the third quarter of 2020. The boom lasted through the first half of 2022, but residential investment then dropped steeply. By the first quarter of 2023, real residential investment fell to a level not seen since 2015. Sluggish growth was registered in the second half of 2023.
- There was no pandemic-related boom for real non-residential investment.
- Following a drop in the first half of 2020, non-residential investment in equipment posted small gains, reaching an all-time high in the third quarter of 2022, but volumes have since stabilized.
- Real non-residential investment in structures fell sharply during the pandemic. By the third quarter of 2022, this investment contracted to the lowest level since 2013. However, since the third quarter of 2022, it has been rising, including an increase of 15% year-over-year in the fourth quarter of 2023.
- The major types of fixed investment – residential investment and non-residential investment in structures and equipment – have substantial growth potential that could be limited if interest rates remain high.

- Seasonally adjusted housing starts increased every month during the fall of 2023, but they fell again in December. Nevertheless, the residential investment outlook is favorable, given the announced monetary policy relaxation.
- Non-residential investment prospects are also positive. Non-residential investment in structures has been gaining momentum primarily due to increases in construction of manufacturing facilities, as the U.S. seeks to repatriate production, including the manufacturing of autos, computer components, and healthcare-related products. A notable exception to a positive outlook is office building construction.
- A recovery in investment in structures would positively affect imports of building materials, appliances, furniture, and other furnishings.
- Trucks could be a non-residential equipment commodity with growth potential, recovering from a slump in 2020 through the first half of 2022. Investment in computers and peripheral equipment may also have bottomed out, increasing in the fourth quarter of 2023 and likely to continue growing. In contrast, investment in construction machinery apparently reached a plateau after strong growth in 2021 and 2022.

New Privately-Owned Housing Units Started, thousands, seasonally adjusted at annual rates

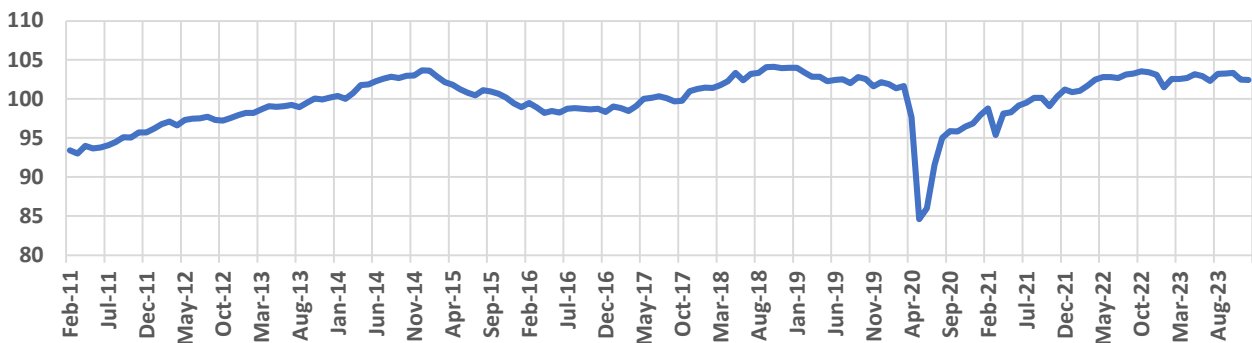


Source: Federal Reserve Bank of St. Louis Economic Database (FRED)

Industrial Production:

- Real industrial production has stagnated since the fall of 2022, following a long recovery from the slump at the beginning of the COVID pandemic. COVID stimulus funding did not result in increased industrial production, which has remained below the peak levels at the end of 2018.
- Real industrial production is likely to start rising, boosted by recent investment and retailers’ inventories being trimmed back to more sustainable levels compared to sales.

▪ **Real Industrial Production, index numbers (2017 = 100), seasonally adjusted**



Source: Federal Reserve Bank of St. Louis Economic Database (FRED)

Geopolitical Developments and Risks:

- The geopolitical environment is an important risk for macroeconomic assumptions and trade forecasts, with China, Russia, Iran, and North Korea challenging the U.S., Europe, and allies for global influence. Armed conflicts in Ukraine and the Middle East are contributing to this risk.
- The macroeconomic and trade outlook assumes that geopolitical tensions will not become significantly worse in 2024. Geopolitical assumptions behind the macroeconomic and trade outlook for 2024 include:
 - ✓ The Houthi/Red Sea conflict will improve, though not necessarily quickly.
 - ✓ Iran will not be directly involved in military actions in the Middle East and will continue acting through its proxies.
 - ✓ China will not take overly aggressive actions toward Taiwan.
 - ✓ The Russia-Ukraine war will not expand to other European countries.
- Impacts of the Houthi/Red Sea conflict
 - ✓ Houthi attacks on vessels have been increasing the cost of shipping goods between Asia and North America/Europe. These increased costs result from higher insurance premiums for Red Sea/Suez Canal transits or increased ship operating costs from longer distance services rerouted around the Cape of Good Hope. These higher costs will likely be passed on to beneficial cargo owners and consumers.
 - ✓ Under the base case scenario, the Houthi/Red Sea issues will improve, and the cost of moving containers via the Red Sea/Suez Canal could decline towards previous levels. The Fed has already indicated that it would reduce the short-term interest rate (Federal Funds Rate) in 2024. This reduction would likely give economic growth a boost, with U.S. import volumes rising. Export volumes could also be expected to increase since lower U.S. interest rates usually result in a lower value for the U.S. dollar. Since most U.S. exports are agricultural and industrial commodities, the lower cost to importers of these commodities could lead to higher U.S. exports.
 - ✓ Under a less likely scenario, Red Sea issues would not improve, and the cost of shipping goods between Asia and North America/Europe could continue to rise. Further disruptions to supply chains could be expected, with resulting price increases adding to overall inflation. In this case, the Fed would face a dilemma. It could make monetary policy more restrictive, which would dampen economic growth and imports. Alternatively, the Fed could focus on stimulating economic growth hurt by supply issues, by reducing the Fed Funds Rate more than currently anticipated.
- Containerized commodity exposure to Middle East and South Asia trade disruptions
 - ✓ U.S. containerized trade with Middle East countries (excluding those on the Mediterranean Sea) and with South Asian countries represents the highest risk of disruption due to the Middle East crisis.
 - ✓ Overall, these two regions' shares of U.S. containerized trade are not very high. In 2023, their shares were 8% of imports and 12% of exports. However, for some commodities the Middle East and South Asia shares are relatively significant.
 - ✓ Of the import commodities examined in this report, cyclical hydrocarbons had the highest share of imports from these two regions, 34% in 2023, followed by articles of iron or steel at 15%. For exports to these regions, cars and waste paper had the highest shares, 36% and 24%, respectively.

Containerized Imports

Outlook:

- Following normal seasonal patterns, containerized import volumes are likely to trend downward through February 2024 before peaking in July-August, the typical peak season.
- Following a 12% decline from 2022 to 2023, a moderate 4.9% recovery is expected in 2024.

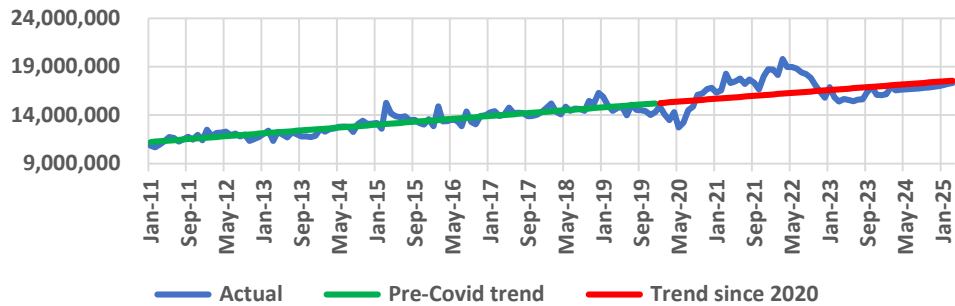
Outlook Background:

- Containerized imports surged during the pandemic as a result of stimulus funding and changes in consumer spending patterns. In March 2022, the gap above the pre-COVID trend reached 22%.
- As the stimulus impact faded and monetary policy tightened, imports dropped in the second half of 2022, but the decline appears to be over. In December 2023, imports increased 1.7% year-over-year, the first increase since October 2022. The gap below the trend stabilized at 7%-8% during the summer of 2023 and then narrowed to 6% in December. The negative gap will likely shrink to 1% by the spring of 2025.

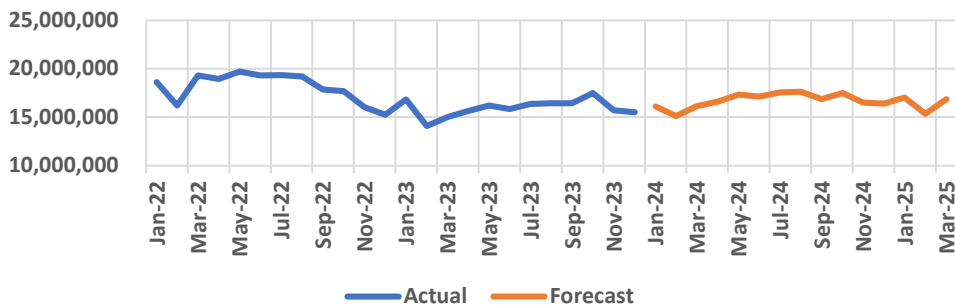
Key Risks:

- Geopolitical instability is the main risk factor. This includes spread of the Middle East conflict, which may result in major sea transportation disruptions and a significant rise in energy prices.
- China’s economic woes and tensions with the U.S. could lead to import volumes lower than expected.
- The number and timing of interest rate cuts by the Fed are uncertain. The pace of monetary policy relaxation may have an impact on imports in either positive or negative directions.
- Containerization volatility and changes in competition with overland shipments from Canada and Mexico could reduce or increase containerized import volumes from current projections.

Total Containerized Imports, seasonally adjusted, metric tons



Total Containerized Imports, not seasonally adjusted, metric tons



Principal Commodities - Import Volumes

Solar panels and other photosensitive semiconductor devices was the top growth commodity with containerized tons increasing in 2023. The other top commodities with year-over-year growth in 2023 include cars; cyclic hydrocarbons; construction and lifting machinery; and lithium-ion batteries.

Major commodities with volume declines in 2023 were wood; furniture; plastics; machinery (except construction and lifting); and articles of iron or steel.

One additional commodity for which containerized imports have declined over the long term is beer. This long-term decline has resulted from a drop in seaborne imports while overland shipments from Mexico have increased.

Containerized Imports

Commodity	Thousands of metric tons			Year-over-year growth rates		
	2022	2023	Difference	2023	2024	2025Q1
Total commodities	217,336	191,429	-25,907	-12%	5%	3%
Top growth commodities						
Photosensitive semiconductor devices	1,915	3,507	1,593	83%	15%	-41%
Cars	690	1,353	663	96%	-8%	1%
Cyclic hydrocarbons	280	689	409	146%	-37%	1%
Construction and lifting machinery	1,143	1,513	369	32%	6%	2%
Lithium-ion batteries	617	828	212	34%	25%	13%
Major commodities with volume declines						
Articles of iron or steel	10,135	8,955	-1,180	-12%	8%	1%
Plastics	14,178	12,801	-1,377	-10%	4%	1%
Machinery, except construction and lifting	14,298	12,707	-1,591	-11%	4%	3%
Furniture	14,868	12,177	-2,691	-18%	12%	11%
Wood	10,348	7,159	-3,189	-31%	14%	13%
Additional commodity with volume decline						
Beer	1,412	1,269	-143	-10%	-6%	-5%

Photosensitive Semiconductor Devices

Outlook:

- Strong growth in imports of solar panels and other photosensitive semiconductor devices is expected in the spring of 2024, prior to the introduction of new tariffs that will likely result in a significant volume decline in the second half of 2024.

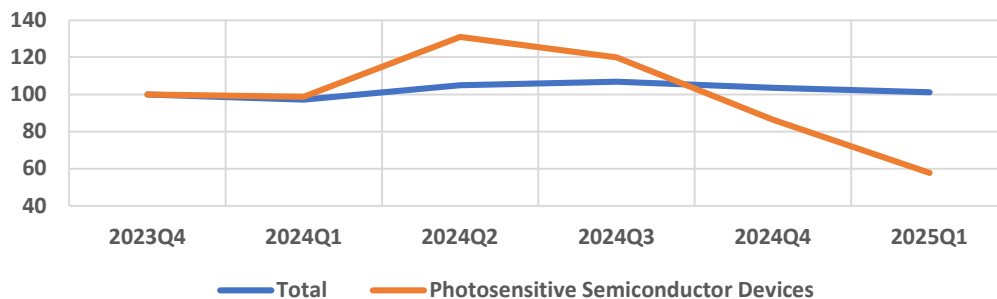
Outlook Background:

- Photosensitive semiconductor devices are in exceptionally high demand.
- However, in August 2023 the U.S. Department of Commerce determined that Cambodia, Malaysia, Thailand, and Vietnam, which account for over four-fifths of U.S. solar panel containerized imports, circumvented tariffs imposed on China. As a result, some imports from these countries are expected to be subject to tariffs starting in June 2024.

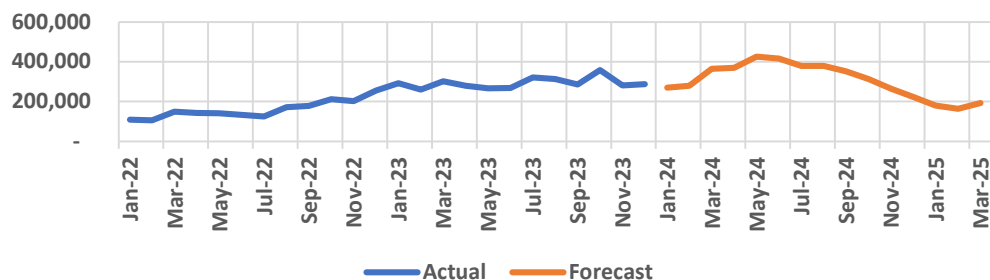
Key Risks:

- A substantial share of imported solar panels from the four countries listed above may be exempt from the tariffs following a certification process that would show compliance with U.S. regulations.
- Solar panel containerized imports from India are growing much faster than imports from the four countries, which may significantly dampen the impact of tariffs. At the same time, Red Sea shipping disruptions may dampen imports from that country.
- Political decisions between now and next June may have a major impact on solar panel tariffs and imports in positive or negative directions.

Containerized Imports, 2023Q4 = 100



Photosensitive Semiconductor Devices, Containerized Imports, metric tons



Cars

Outlook:

- Through early 2025, containerized car imports are unlikely to return to the peak levels of May-June 2023.
- January is typically a month of sharp seasonal declines. Imports will likely stay relatively low until a seasonal rebound in the fourth quarter. Overall, 2024 imports are projected to fall compared with 2023.

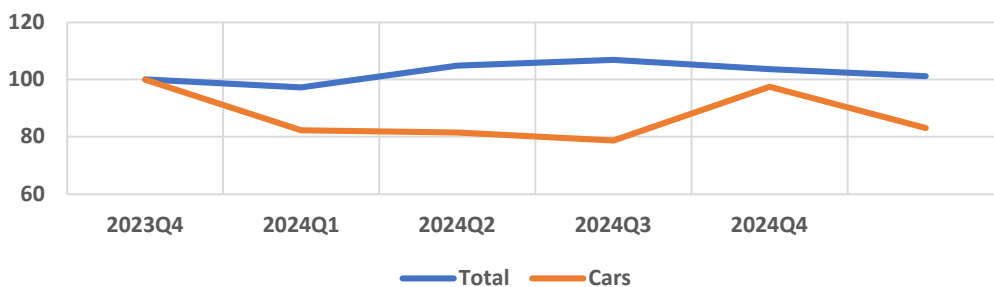
Outlook Background:

- Total seaborne import volumes contracted 7% between 2019 and 2022. Over the same period, containerized car imports surged 128%, as containerization rates rose from 4% in 2019 to 9% in 2022.
- In 2023, containerization grew further, to 15%, the main reason that containerized imports increased 96%, about four times as fast as total seaborne car imports. Imports from South Korea contributed three quarters of this growth. Containerization is likely to decline from currently high levels.

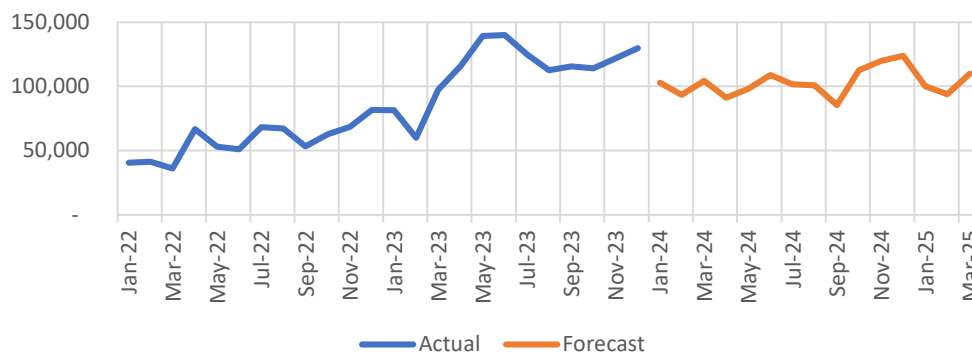
Key Risks:

- Containerized car import volumes are more dependent on highly volatile containerization rates than on U.S. demand for cars or production capacity abroad.
- The strong demand for cars could be dampened, and the overall car import recovery from the COVID-related slump may end, especially if monetary policy relaxation proceeds slowly.
- Competition with mostly overland imports from Canada and Mexico could dampen seaborne car imports. Those countries' share of U.S. imports rose from 40% in 2021 to 44% in 2023.

Containerized Imports, 2023Q4 = 100



Cars, Containerized Imports, metric tons



Construction and Lifting Machinery

Outlook:

- The usual peak import season for construction and lifting machinery is from March through July, while February and September are typically lower-volume months.
- Compared to the fourth quarter of 2023, containerized imports of construction and lifting machinery will likely grow in the first half of 2024, before declining in the third quarter.

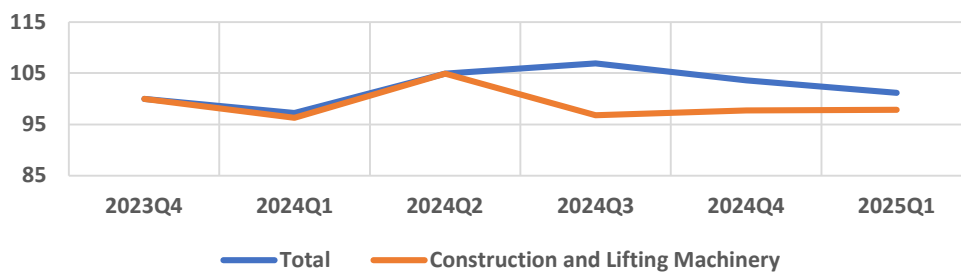
Outlook Background:

- Unlike many other imported commodities, construction and lifting machinery volumes did not boom as a result of COVID-related stimulus funding. However, imports grew significantly in the second half of 2022, when overall containerized imports significantly declined.
- The exceptionally strong growth in imports appears to be waning. In the fourth quarter of 2023, volumes generally followed the typical seasonal pattern.

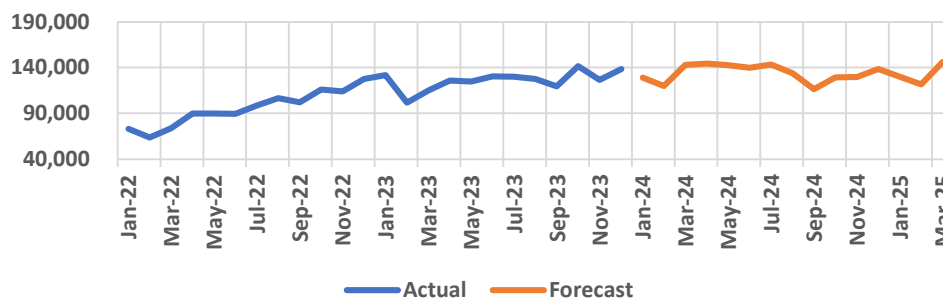
Key Risks:

- The recent strong increase in construction machinery imports is not in line with fixed investment growth, and there is therefore a risk of import decline.
- Persistent inflation and a delayed relaxation of monetary policy could cause a decrease in residential investment and suppress demand for construction machinery.
- Containerization rates increased from 48% in 2022 to 50% in 2023 but remained below the peak rate of 54% reached in 2016. Continued rise in containerization rates could lead to higher containerized volumes than those projected.

Containerized Imports, 2023Q4 = 100



Construction and Lifting Machinery, Containerized Imports, metric tons



Cyclic Hydrocarbons

Outlook:

- The second and third quarters are usually the peak import season for cyclic hydrocarbons (comprised mostly of benzene and para-xylene).
- Following a sharp decline at the end of 2023, volumes may partly recover in the early months of 2024. However, barring a significant rise in containerization rates, this commodity will likely post a steep drop overall in 2024 with respect to the prior year. The beginning of 2025 may see a small year-over-year rise.

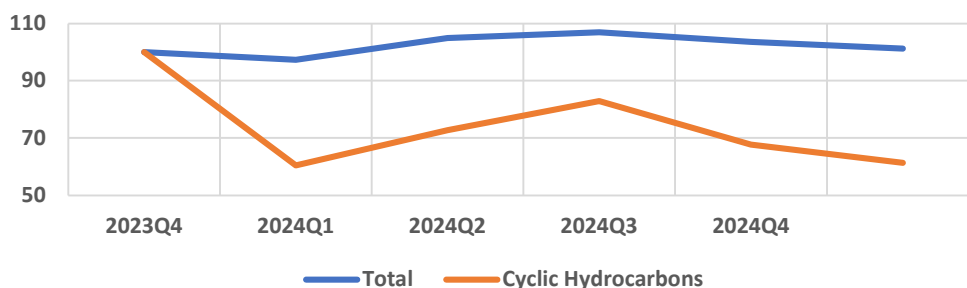
Outlook Background:

- Unlike many other imported commodities, cyclic hydrocarbons import volumes did not experience a boom related to COVID-related stimulus funding. However, imports grew in the second half of 2022.
- In 2023, imports of containerized cyclic hydrocarbons surged 146%, in large part due to an increase in containerization from 8% in 2022 to 16% in 2023. Even though containerization fell to 11% in December, it is still high by historical standards – it was 5%, on average, in 2015-2021 - and is likely to decline in 2024.
- After volumes peaked in July 2023, they fell sharply, indicating that strong growth appears to be ending.

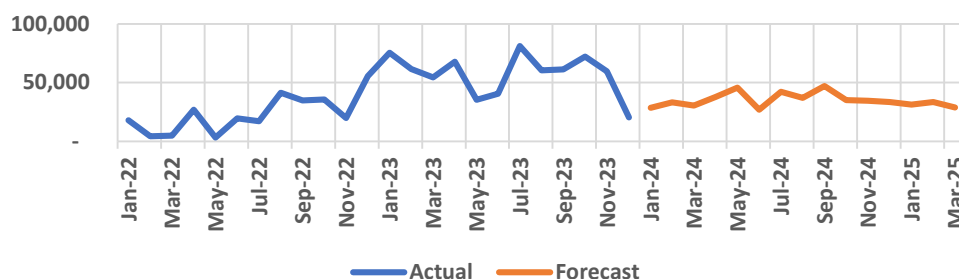
Key Risks:

- Volumes of containerized cyclic hydrocarbon imports are more dependent on highly volatile containerization rates than on U.S. demand or production capacity abroad.
- A spread of the Middle East conflict supply disruptions, a rise in hydrocarbon prices, and competition with domestic cyclic hydrocarbon production, especially the production of para-xylene, could dampen U.S. import volumes more than currently projected.

Containerized Imports, 2023Q4 = 100



Cyclic Hydrocarbons, Containerized Imports, metric tons



Lithium-Ion Batteries

Outlook:

- Lithium-ion battery imports will likely reach the exceptionally high levels of early 2023 at the beginning of 2024 and exceed them in early 2025, though volumes may fall due to seasonality during the second quarter of 2024.
- Year-over-year growth will likely remain in double-digits in 2024 and the beginning of 2025 despite an expected slowdown compared to growth in 2023.

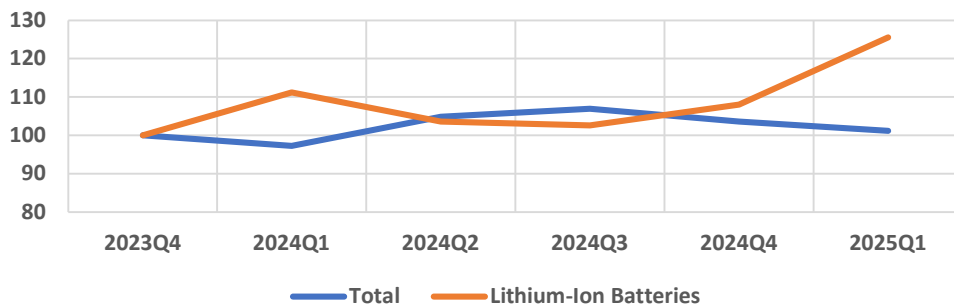
Outlook Background:

- Lithium-ion batteries is an exceptionally strong growth commodity.
- After a sharp increase in 2022 and, especially in January 2023, imports declined to relatively moderate levels, but growth resumed in the third quarter of 2023.

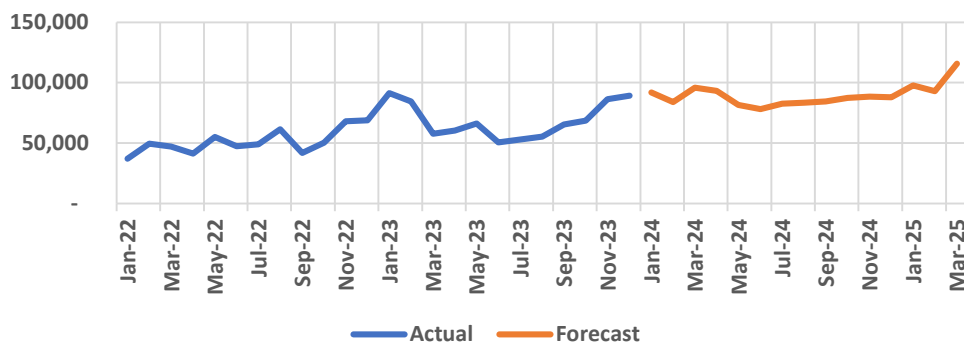
Key Risks:

- While annual growth potential appears to be strong, monthly and quarterly volatility is high.
- The U.S. is trying to move its supply sources away from China, the dominant supplier of lithium-ion batteries to the U.S. Nevertheless, China’s share of U.S. lithium-ion battery imports rose from 79% in 2022 to 86% in 2023. The near-term ability of other countries to compete with China in the U.S. import lithium-ion battery market is questionable. Lithium-ion battery imports from Japan, the second largest origin in 2022, plummeted in 2023.

Containerized Imports, 2023Q4 = 100



Lithium-Ion Batteries, Containerized Imports, metric tons



Articles of Iron or Steel

Outlook:

- Containerized imports of iron or steel articles are expected to rise by May 2024, which is typically the peak import month. Volumes will likely be the highest in the second quarter of 2024 and lowest in the fourth quarter.
- Compared to the last quarter of 2023, imports of iron or steel articles are likely to grow faster than total containerized imports in the first half of 2024, before falling significantly in the second half of the year.

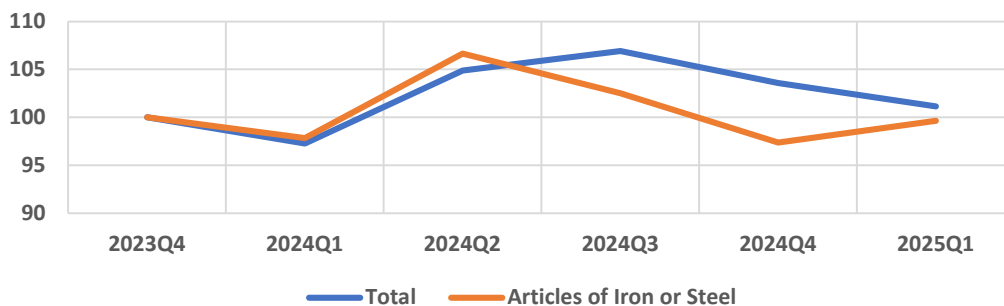
Outlook Background:

- In 2010 to 2022, containerized imports of iron or steel articles grew faster than total containerized imports.
- After a boom during the pandemic, imports of iron or steel articles dropped sharply. The gap below the pre-COVID trend was 17% in March 2023. However, volumes increased slightly above the long-term trend in December 2023 and are likely to stay near the trend through the end of the first quarter of 2025.

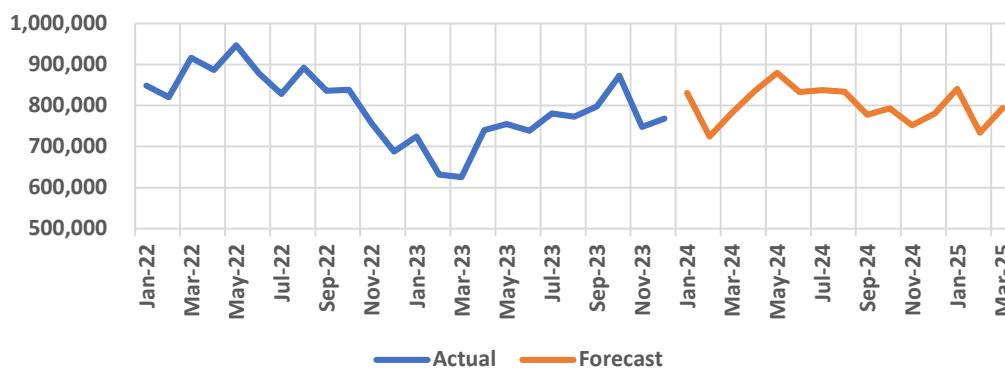
Key Risks:

- China, India, and Taiwan accounted for almost two thirds of iron or steel articles containerized imports in 2023. Rising tensions with China and Red Sea transportation disruptions (for India) may suppress imports.
- Rising competition with imports from Mexico and Canada (mostly overland) could dampen containerized imports. Canada and Mexico’s share of total import value increased from 25% in 2022 to 27% in 2023.

Containerized Imports, 2023Q4 = 100



Articles of Iron or Steel, Containerized Imports, metric tons





Machinery

Outlook:

- A seasonal recovery in machinery imports is likely to start in March and peak in May 2024.
- Though volumes will likely decline on a month-on-month basis from May to September, they are expected to grow moderately overall in 2024 compared to 2023. Moderate growth will likely continue in early 2025.

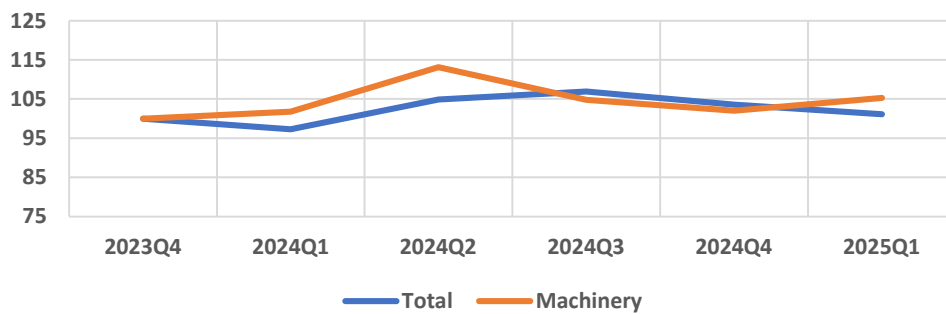
Outlook Background:

- From 2010 to 2022, machinery imports grew significantly faster than total containerized imports.
- After a boom during the pandemic, volumes declined to 5% below the pre-COVID long-term trend in May and June of 2023. However, the year-over-year decline appears to be over. By December, the gap below the trend narrowed to 2%. Volumes are expected to closely approach the trend in the summer of 2024.

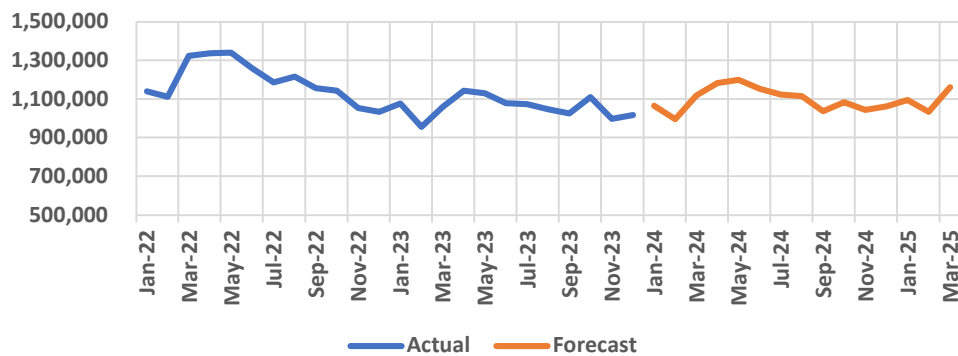
Key Risks:

- Persistent inflation and a delayed relaxation of monetary policy could suppress investment in equipment and, therefore, demand for machinery.
- Rising competition with imports from Canada and Mexico (mostly overland) could dampen containerized imports. Mexico’s share of U.S. *refrigerator and freezer* imports increased from 30% in 2022 to 33% in 2023. *Taps, valves, bearings, transmission shafts, gears, and gaskets* are also among commodities with rising shares of imports from Canada and Mexico.

Containerized Imports, 2023Q4 = 100



Machinery, Containerized Imports, metric tons



Plastics

Outlook:

- Following normal seasonal patterns, plastics imports (primary forms and plastic articles combined) are expected to decline by February 2024, and then rise significantly by May 2024, the seasonal peak.
- Compared to the fourth quarter of 2023, plastics imports will likely grow on par with total containerized imports in the first half of 2024, before declining through the first quarter of 2025.

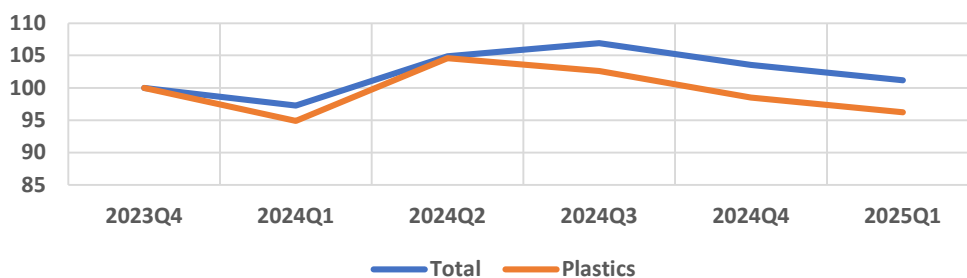
Outlook Background:

- From 2010 to 2022, plastics was a strong-growth commodity, significantly outpacing growth of total containerized imports. However, after a boom during the pandemic, plastics imports declined between May 2022 and February 2023. They then partly recovered and were mostly stable from April to December.
- Despite a significant year-over-year drop, plastics imports in 2023 remained above the pre-COVID trend, unlike many other commodities for which imports posted sharp year-over-year declines. In December, plastics imports gap above the trend was 5%. Volumes will likely fall toward the trend in early 2025.

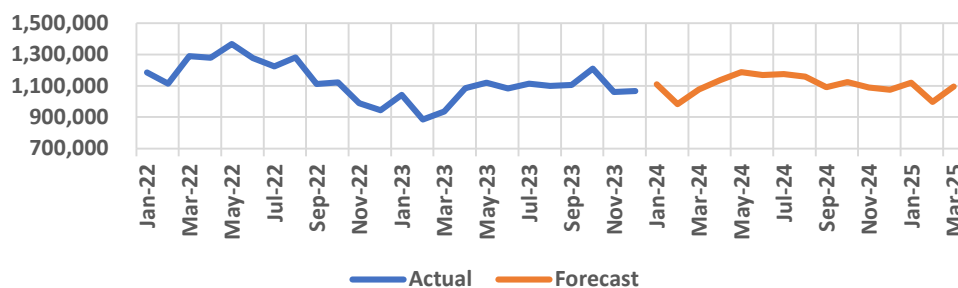
Key Risks:

- China and Taiwan accounted for 52% of U.S. containerized plastics imports in 2023. China’s rising tensions with the U.S. and Taiwan may suppress imports.
- Competition with imports from Canada and Mexico (mostly overland) could dampen containerized import volumes. Canada and Mexico’s share of total plastics import value rose from 27% in 2020 and 29% in 2022 to 31% in 2023.
- Competition with domestic plastics production could lessen demand for imports.

Containerized Imports, 2023Q4 = 100



Plastics, Containerized Imports, metric tons



Wood

Outlook:

- Containerized wood import volumes are projected to decline through February 2024, a typical low-volume month. Import volumes are then likely to start recovering, peaking in July and August 2024.
- Year-over-year, containerized wood import volumes are expected to register double-digit growth in both 2024 and in the first quarter of 2025.

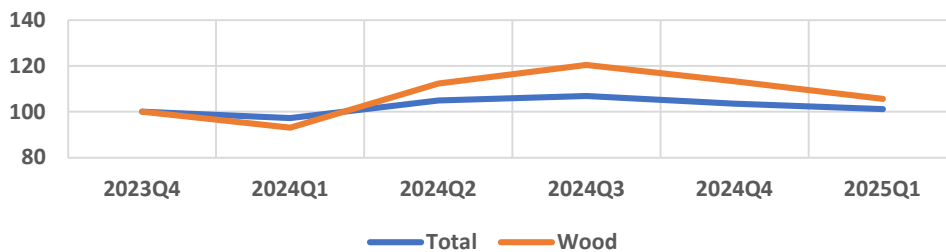
Outlook Background:

- In 2010 through 2022, containerized wood import volumes grew faster than total containerized imports. However, after a boom during the pandemic, volumes dropped dramatically.
- On the positive side, volumes increased in recent months, with a notable exception of November 2023. Volumes below the pre-COVID trend narrowed from 33% in June 2023 to 18% in December, with total imports in the fourth quarter of 2023 2% above the normal seasonal pattern. Wood import volumes will likely continue increasing, with the gap below the trend expected to shrink to 13% by the end of 2024.

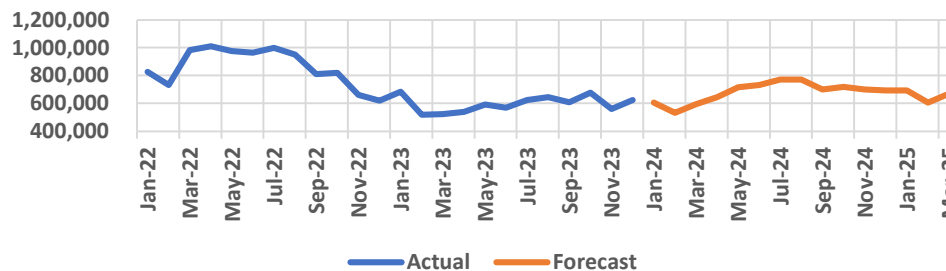
Key Risks:

- Persistent inflation and a delayed relaxation of monetary policy could cause a decline in investment.
- Wood import containerization rates rose from 72% in 2022 to 74% in 2023. However, this containerization is low by historical standards, increasing the possibility that it could rise, further boosting containerized wood import volumes.
- Competition with imports from Canada (that are almost all overland) contributes to seaborne import volatility. For some commodities, such as *particle board*, seaborne imports have been losing share, while for others, including *wood sawn lengthwise, etc.*, seaborne shares have been growing.

Containerized Imports, 2023Q4 = 100



Wood, Containerized Imports, metric tons



Furniture

Outlook:

- Year-over-year containerized furniture imports are expected to grow faster than total containerized imports in 2024 and the beginning of 2025.
- January 2024 will likely be the next seasonal import peak, followed by a low-volume month in March 2024.

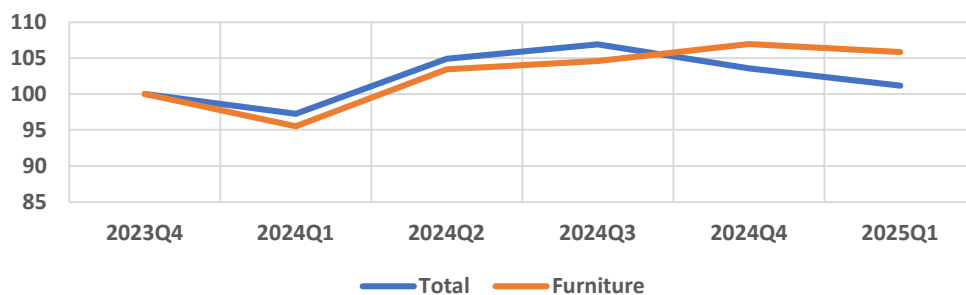
Outlook Background:

- In 2010 to 2022, containerized furniture imports grew faster than total containerized imports.
- After a boom during the pandemic, furniture imports dropped sharply. However, the gap below the pre-COVID trend narrowed from 28% in March 2023 to 15% in December 2023. Consumer spending on furniture has been close to its long-term trend, and imports are therefore likely to continue to increase toward their long-term trend. By the end of 2024, the gap below the trend is expected to shrink to 10%.

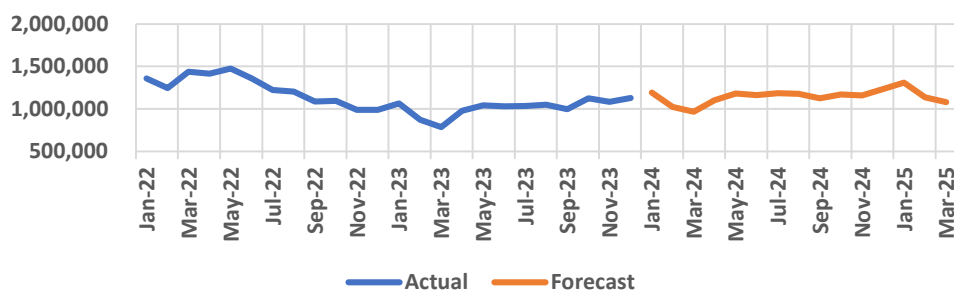
Key Risks:

- China accounts for almost half of U.S. containerized furniture imports. Rising tensions with China may dampen imports.
- If inflation is persistent and tight monetary policy is relaxed too slowly, this could cause a decline in residential and office investment, and therefore lower furniture sales and import volumes.
- Rising competition with overland transportation could lead to declines in containerized imports. The share of Mexico and Canada’s import value (almost exclusively overland) rose from 25% in 2022 to 30% in 2023.
- A shift to remote work could further dampen demand for office furniture and slow the recovery of furniture imports.

Containerized Imports, 2023Q4 = 100



Furniture, Containerized Imports, metric tons



Beer

Outlook:

- Containerized beer imports will likely decline in February 2024, the typical seasonal trough month, and then grow substantially in March, following the normal seasonal patterns.
- Overall, in 2024 and the beginning of 2025, containerized beer imports are expected to decline, though more slowly than in 2023.

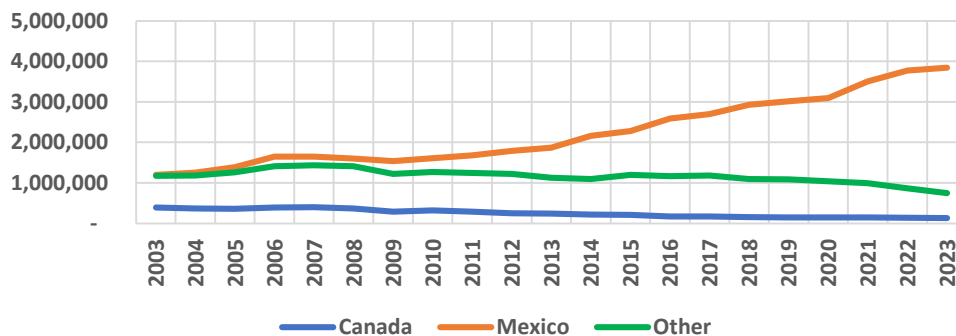
Outlook Background:

- Containerized beer imports fell every year between 2015 and 2023. The annual average decline was 6%. In 2023, the drop was 10%, markedly higher than the average. In contrast, during the same period, beer imports for all modes combined measured in liters rose 3% per year.
- The rise in total beer imports largely occurred due to imports from Mexico. Imports from Mexico and Canada are almost completely overland. Their share increased from 68% in 2015 to 84% in 2023.

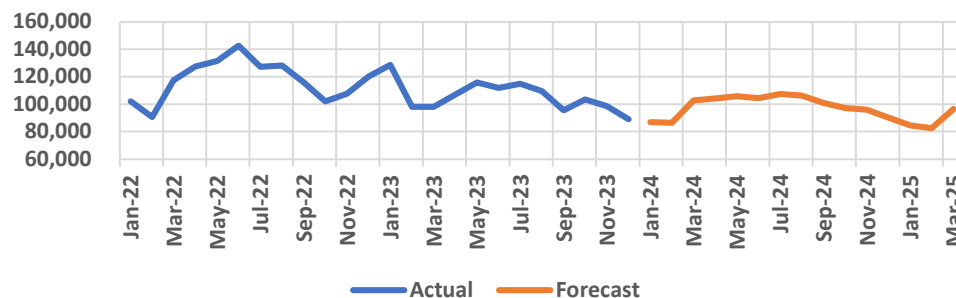
Key Risks:

- The gap above the pre-COVID trend for spending on beer consumption at home declined from 14% in 2022 but stabilized at about 8% in the second half of 2023. If the resumption of the gap narrowing is not offset by an increase in beer consumption in bars and restaurants, beer imports may fall more than predicted.
- Although only about 3% of beer imports from Mexico are shipped by sea, those imports increased 27% in 2023, and Mexico replaced Ireland as the second largest origin of imports by sea. If this shift continues, total containerized beer imports may decline less than forecasted or even grow.

Beer, Imports, All Modes, thousands of liters



Beer, Containerized Imports, metric tons, shipping weight



Containerized Exports

Outlook:

- Containerized export volumes are projected to fall in January 2024 mostly due to seasonal factors. Exports will then likely rise by March, the typical peak month, and trend downward through September 2024, one of the months with seasonally low volumes.
- Volumes fell 4% in 2023 but will likely grow 1.6% in 2024 and 1.4% year-over-year in January-March 2025.

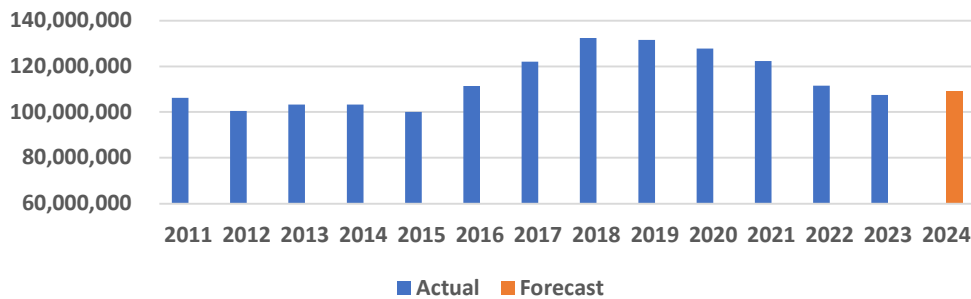
Outlook Background:

- U.S. containerized exports peaked in 2018 but have since declined each year. Unlike for containerized imports, for exports there was no boom related to the COVID stimulus.
- A drop in waste paper exports to China accounted for a third of the total volume decline between 2018 and 2022. In 2023, a broad-based decline in waste paper exports accounted for almost half of the total containerized export volume contraction.
- Containerized exports grew on a month-by-month basis beginning in July 2023. Overall, plastics in primary forms has been by far the most important export growth commodity.

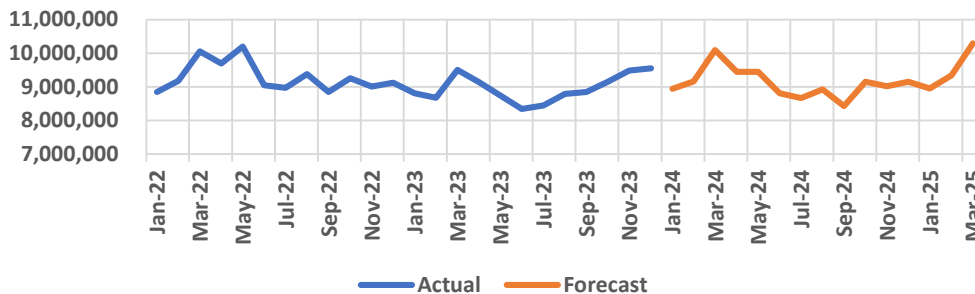
Key Risks:

- Containerized exports are more vulnerable to containerization volatility than imports since many exported U.S. commodities have significant bulk and break bulk shares.
- Policies in developing countries aimed at improving environmental protection and utilization of domestically produced waste could dampen global demand for a large portion of containerized exports.

Total Containerized Exports, metric tons



Total Containerized Exports, metric tons





Principal Commodities - Export Volumes

Plastics in primary forms was by far the top commodity with containerized tons increasing in 2023. The other top growth commodities in 2023 include starch manufacture residues, sugar manufacture waste, etc.; natural sands; cars; and soybean oilcake.

Major commodities for which volumes decreased in 2023 were waste paper; forage; cotton; wood in the rough; and kraft paper.

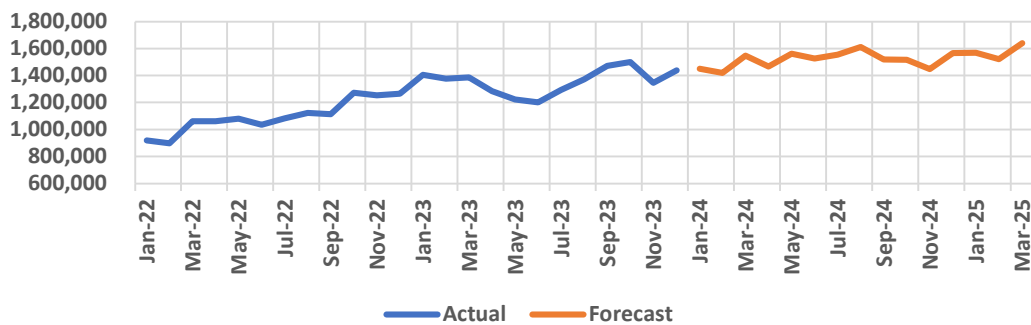
Containerized Exports

Commodity	Thousands of metric tons			Year-over-year growth rates		
	2022	2023	Difference	2023	2024	2025Q1
Total commodities	111,606	107,496	-4,110	-4%	2%	1%
Top growth commodities						
Plastics in primary forms	13,161	16,302	3,142	24%	12%	7%
Starch manufacture residues, sugar manufacture waste, etc.	3,670	4,829	1,159	32%	5%	-5%
Soybean oilcake	555	947	392	71%	26%	-9%
Natural sands	680	1,065	384	56%	-21%	-1%
Cars	1,405	1,672	267	19%	3%	-2%
Major commodities with volume declines						
Kraft paper	2,226	2,038	-188	-8%	16%	-21%
Wood in the rough	1,992	1,538	-454	-23%	-2%	-21%
Cotton	3,560	2,966	-595	-17%	-3%	11%
Forage	4,398	3,354	-1,044	-24%	4%	3%
Waste paper	12,280	10,294	-1,986	-16%	-3%	1%

Plastics in Primary Forms

- After volumes fluctuated during the pandemic, plastics in primary forms has reemerged as the main contributor to containerized export growth, as U.S. production has benefited from access to relatively inexpensive hydrocarbons.
- Robust growth is expected through August 2024 due to strong positive momentum and seasonality factors. Volumes will then likely drop by November, a typical seasonal trough. Overall growth is projected to slow in 2024 and 2025, but remain strong.
- A major risk factor is that half of export increases during 2023 went to China, which is a risky destination for geopolitical reasons and because past plastics export volumes to China have been highly volatile.

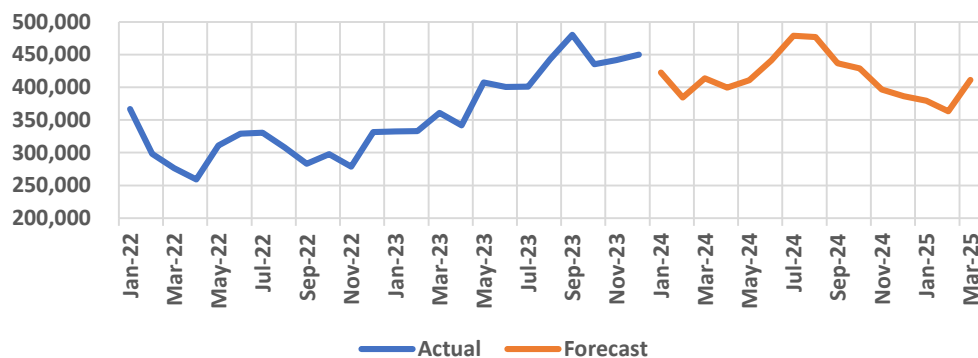
Plastics in Primary Forms, Containerized Exports, metric tons



Starch Manufacture Residues, Sugar Manufacture Waste, Etc.

- The long-term seaborne export trend is negative. In 2023, containerized exports of this commodity increased posted double-digit growth largely due to higher containerization of exports to Vietnam, Indonesia, and Turkey. Total seaborne exports rose slightly in 2023, and seaborne exports to Vietnam fell.
- Volumes will likely drop through February 2024 mostly due to seasonal factors. Summer is typically the peak export season. The long-term seaborne export decline will likely resume in 2024, which is expected to dampen containerized export growth overall in 2024 and lead to a containerized volume drop in 2025.
- A return to historically normal containerization of exports to Vietnam and other countries may result in more significant volume declines in 2024 than currently projected.

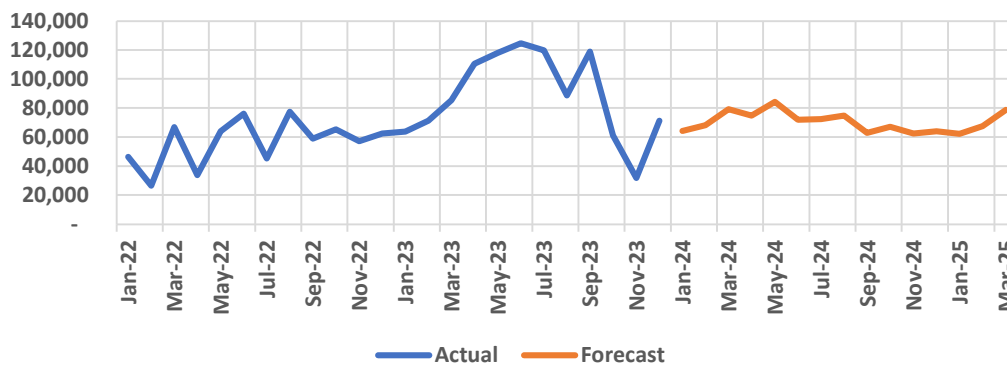
Starch and Sugar Manufacture Residues and Waste, Containerized Exports, metric tons



Natural Sands

- Containerized exports of natural sands grew quickly during the COVID pandemic and for most of 2023, largely due to shipments to China. However, exports to China fell sharply in the final quarter of 2023. An increase in total exports in December was due to an extraordinarily high, though probably one-time, rise exports to Japan. Volumes may grow through May 2024 and then again in early 2025 but will likely stay significantly below the exceptionally high levels of the middle of 2023.
- Exports of natural sands have been extremely volatile and concentrated in country destinations. Two countries – China and Japan – accounted for almost 90% of the 2023 volumes exported in containers.

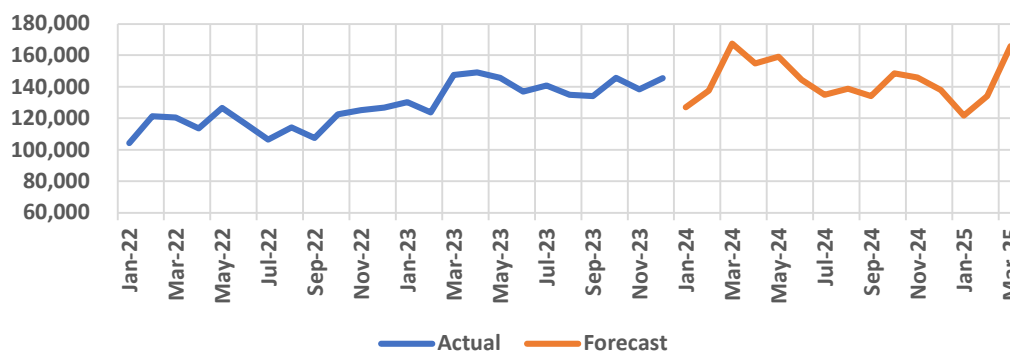
Natural Sands, Containerized Exports, metric tons



Cars

- Containerized car export volumes have grown during 2023 mostly due to shipments of used vehicles to three countries – the United Arab Emirates, Georgia, and Lithuania. However, the strong growth appears to have waned, with volumes generally flat in the second half of 2023.
- Car export volumes will likely fall by January 2024 due to seasonal factors before rising to seasonally high volumes in the spring of 2024.
- The strong car export growth to the three above-mentioned countries may not be sustainable. Overall containerized car export growth in 2024 will likely be sluggish, and volumes are expected to fall year-over-year in 2025.

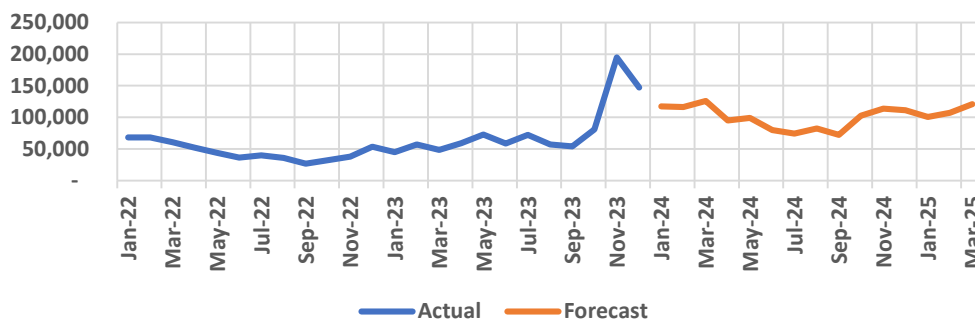
Cars, Containerized Exports, metric tons



Soybean Oilcake

- Soybean oilcake containerized export volumes grew strongly between 2010 and 2019, but this growth was interrupted by the COVID pandemic. However, export growth resumed in the fourth quarter of 2022 and continued in 2023.
- Soybean oilcake containerized exports surged almost 2.5 times in November 2023 compared to October in large part due to an increase in containerization. Exports declined 25% in December, as containerization fell. Containerization will likely decline further, to the pre-pandemic rates of 15%, within several months.
- Due primarily to the projected decline in containerization, containerized export volumes will likely decline month-on-month through September 2024 before an expected recovery caused largely by seasonal factors in the fourth quarter of 2024.

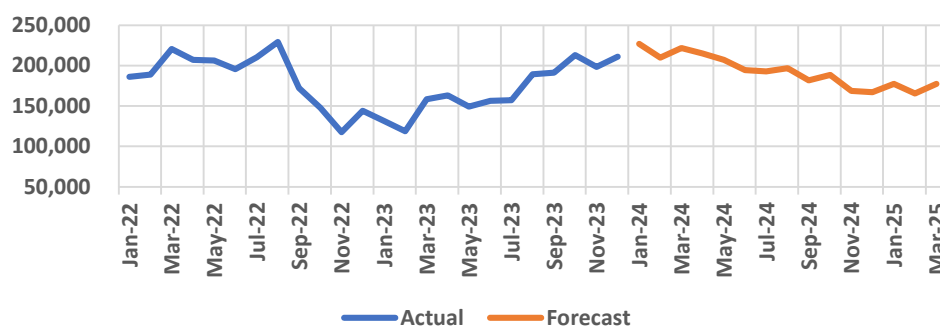
Soybean Oilcake, Containerized Exports, metric tons



Kraft Paper

- Kraft paper export volumes contracted sharply in the fall of 2022, and from January to August 2023, they were significantly lower than a year earlier. However, since March 2023 they have been recovering on the month-on-month basis largely due to demand from China.
- In the fourth quarter of 2023, kraft paper export volumes were 4% above the normal seasonal level and will likely peak in January 2024.
- Kraft paper exports have a long-term negative trend, and strong Chinese demand is unlikely to last. Therefore, volumes are expected to start falling on a month-on-month basis starting from April 2024. Nevertheless, for 2024 as a whole, kraft paper exports are projected to be significantly higher than in 2023.

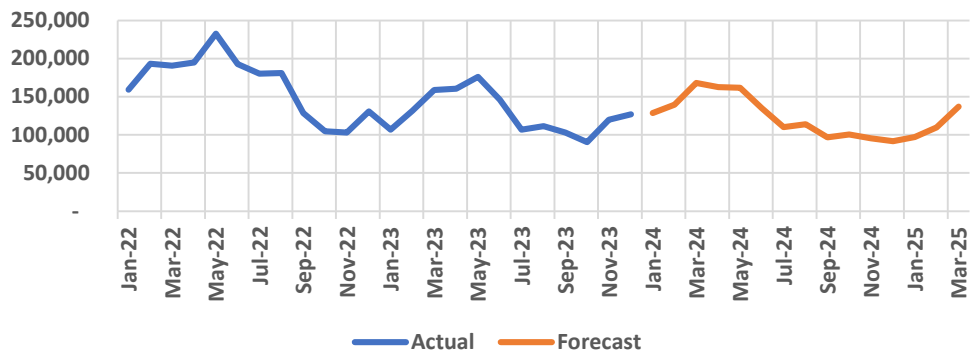
Kraft Paper, Containerized Exports, metric tons



Wood in the Rough

- Containerized exports of wood in the rough fell sharply between a peak in May and July 2023, largely due to seasonality patterns but then stabilized and started to improve at the end of 2023. Nevertheless, compared to the same period in 2022, volumes were significantly lower.
- Seaborne exports of this commodity have been falling over the long term, but containerization rates rose through 2021. Seaborne export declines are expected to continue, possibly accompanied by falling containerization rates. This will likely result in year-over-year drops in containerized export volumes in 2024 and early 2025, despite month-on-month seasonal recoveries in the first quarter of both years.
- China accounts for over half of wood in the rough containerized exports, and its economic woes may result in a more significant wood export decline than is currently projected.

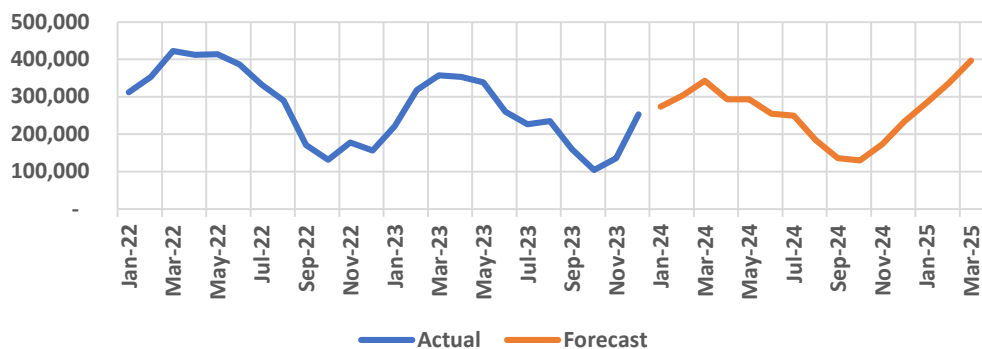
Wood in the Rough, Containerized Exports, metric tons



Cotton

- A rapid rise in cotton exports occurring after 2014 stalled during the pandemic. Cotton exports are highly seasonal, and in 2023, during the peak season of February to May, volumes were significantly less than in 2022. Exports to China (jointly with Hong Kong and Macau) accounted for a third of the 2023 decline.
- October is typically the month with the lowest export volumes. Due to seasonality, volumes are projected to rise through mid-spring 2024. Exports will likely fall in 2024 as a whole, though not as much as in 2023. Falling demand from China will likely be mostly offset by exports to other Asian countries, such as Pakistan and Bangladesh. A significant recovery is expected for late 2024 and early 2025.

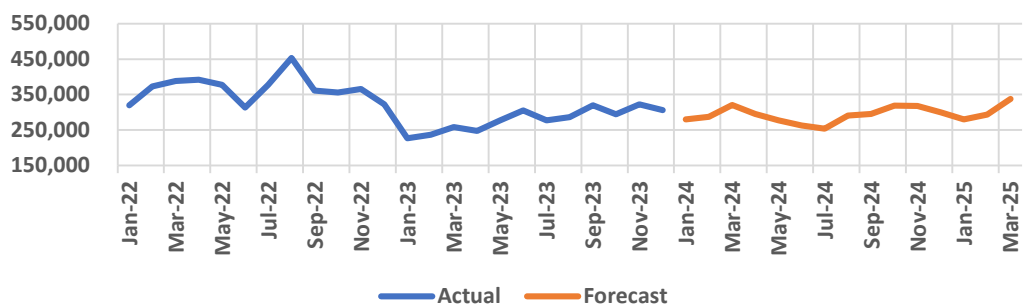
Cotton, Containerized Exports, metric tons



Forage

- Forage export volumes fell sharply in December 2022 and January 2023. While volumes often drop during these months, these declines were greater than the seasonal norms.
- Volumes have been trending upward since February 2023. However, due to seasonal factors, they will likely fall by mid-2024, before recovering by November. Overall, modest increases are projected for 2024 and the beginning of 2025, possibly bolstered by exports to the Middle East.
- Historically, forage has been a growing export commodity. However, the increase in seaborne exports between 2010 and 2022 occurred exclusively due to exports to China, which also accounted for two-thirds of the fall in 2023. China’s economic problems may hamper the currently expected recovery.

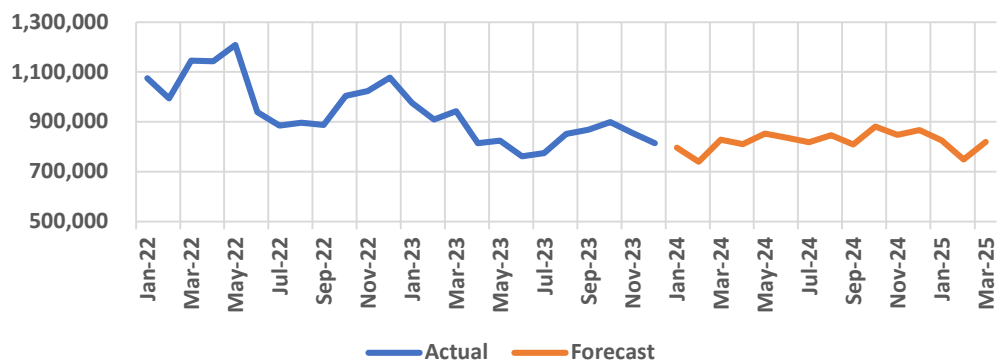
Forage, Containerized Exports, metric tons



Waste Paper

- Waste paper exports dropped sharply between the end of 2022 and June 2023. The decline was broad-based, across almost all major destinations. Despite some recovery between July and October 2023, volumes were about 4% below the normal seasonal pattern in the fourth quarter of 2023.
- After a seasonal low in February 2024, exports will likely trend upward through October 2024. Nevertheless, overall volumes in 2024 will likely decline, though not as much as in 2023. A marginal year-over-year increase is expected for the beginning of 2025. Thailand has emerged as a promising importer.
- Policies in developing countries aimed at improving environmental protection and utilization of domestically produced waste represent a major risk to waste paper exports.

Waste Paper, Containerized Exports, metric tons



Appendix - Commodity Definitions

Commodity	HS Codes	Harmonized System Commodity Description
Imports		
Articles of Iron or Steel	73	Articles of iron or steel
Cars	8703	Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 8702), including station wagons and racing cars
Construction and Lifting Machinery	8426-30	Construction and lifting machinery
Cyclic Hydrocarbons	2902	Cyclic hydrocarbons
Furniture	94	Furniture, bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated sign illuminated nameplates and the like; prefabricated buildings
Lithium-Ion Batteries	850760	Lithium-ion batteries
Machinery, Except Construction and Lifting Machinery	84, excl. 8426-30	Machinery except construction and lifting machinery
Photosensitive Semiconductor Devices	854140-49	Photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes (LED)
Plastics	39	Plastics and articles thereof
Wood	44	Wood and articles of wood; wood charcoal
Exports		
Cars	8703	Motor cars and other motor vehicles principally designed for the transport of persons (other than those of heading 8702), including station wagons and racing cars
Cotton	52	Cotton
Forage	1214	Rutabagas (swedes), mangolds, fodder roots, hay, alfalfa (lucerne), clover, sainfoin, forage kale, lupines, vetches and similar forage products, whether or not in the form of pellets
Kraft Paper	4804	Uncoated kraft paper and paperboard, in rolls or sheets, other than that of heading 4802 or 4803
Natural Sands	2505	Natural sands of all kinds, whether or not colored, other than metalbearing sands of chapter 26
Plastics in Primary Forms	3901-14	Plastics in primary forms
Soybean Oilcake	2304	Oilcake and other solid residues, whether or not ground or in the form of pellets, resulting from the extraction of soybean oil.
Starch Manufacture Residues, Sugar Manufacture Waste, Etc.	2303	Residues of starch manufacture and similar residues, beet-pulp, bagasse and other waste of sugar manufacture, brewing or distilling dregs and waste, whether or not in the form of pellets
Waste Paper	4707	Recovered (waste and scrap) paper and paperboard
Wood in the Rough	4403	Wood in the rough, whether or not stripped of bark or sap- wood, or roughly squared

