MARKET RESEARCH REPORT

Product: 920290 - Musical instruments; string, played other than with a bow (e.g. guitars and harps)

Country: USA

Special type of report considering USA announcement of new tariffs of 2nd April 2025

{ GTAIC } Global Trade Algorithmic Intelligence Center

DISCLAIMER

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice.

You should not act upon the information contained in this publication without obtaining specific professional advice.

No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, UAB Export Hunter, its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

CONTENTS OF THE REPORT

SCOPE OF THE MARKET RESEARCH

Selected Product	Other string musical instruments
Product HS Code	920290
Detailed Product Description	920290 - Musical instruments; string, played other than with a bow (e.g. guitars and harps)
Selected Country	USA
Period Analyzed	Jan 2018 - Dec 2024

1

EXECUTIVE
SUMMARY

ESTIMATION OF WEIGHTED AVERAGE TARIFF ON THE PRODUCT IMPORTED TO USA BASED ON GEO OF IMPORTS

This section presents an estimation of additional tariff burden on the imports of the analyzed product based on the tariffs announced by a number of Executive Orders of the President of the United States issued from February to April 2025. The table provides detailed information on imports of "Other string musical instruments" to the USA for the LTM period (01.2024 - 12.2024), along with an estimation of the additional tariff burden on the imports potentially arising as a result of implementation of the mentioned regulations. The methodology used for the estimation is outlined on the following page of this report.

Table 1. Country's Imports by Trade Partners in LTM, US$. Calculation of Potential Additional Tariff Burden

Trade Partner	Imports to the USA (01.2024 - 12.2024), US $)	Trade Partner's Share in Total Imports to the USA (01.2024 - 12.2024), %	Country Specific Additional Ad Valorem Duty in acc. with Executive Order from April 2, 2025 or Executive Orders from February 1, 2025	Country Specific Additional Ad Valorem Duty in acc. with the decision to "pause" reciprocal tariffs for some nations (as of April 9, 2025)	Product Specific Exemption from Application of Additional Ad Valorem Duty in acc. with Executive Order from April 2, 2025 or Executive Orders from February 1, 2025 or Product Specific Ad Valorem Duty in acc. with the Executive Orders from February 10, 2025, February 11, 2025, and March 26, 2025	Additional Ad Valorem Duty Applied in Estimation
China	69,140,938	40.991%	54.0%	145.0%	-	145.0%
Mexico	56,344,682	33.404%	25.0%	0.0%	-	0.0%
Indonesia	23,366,038	13.853%	32.0%	10.0%	-	10.0%
Canada	2,974,526	1.763%	25.0%	0.0%	-	0.0%
Japan	2,315,091	1.373%	24.0%	10.0%	-	10.0%
Spain	1,952,544	1.158%	20.0%	10.0%	-	10.0%
France	1,722,133	1.021%	20.0%	10.0%	-	10.0%
United Kingdom	1,634,860	0.969%	10.0%	10.0%	-	10.0%
Germany	1,592,816	0.944%	20.0%	10.0%	-	10.0%
Italy	1,045,554	0.620%	20.0%	10.0%	-	10.0%
India	1,029,324	0.610%	26.0%	10.0%	-	10.0%
Australia	949,040	0.563%	10.0%	10.0%	-	10.0%
Rep. of Korea	880,119	0.522%	25.0%	10.0%	-	10.0%
Czechia	844,263	0.501%	20.0%	10.0%	-	10.0%
Bulgaria	497,350	0.295%	20.0%	10.0%	-	10.0%
Netherlands	323,932	0.192%	20.0%	10.0%	-	10.0%
Ireland	278,414	0.165%	20.0%	10.0%	-	10.0%
Poland	245,053	0.145%	20.0%	10.0%	-	10.0%
Pakistan	195,782	0.116%	29.0%	10.0%	-	10.0%
Romania	160,610	0.095%	20.0%	10.0%	-	10.0%
Total Imports	**167,493,069**	**99.299%**				
Weighted Average Additional Tariff Burden						**62.2%**

ESTIMATION OF WEIGHTED AVERAGE TARIFF ON THE PRODUCT IMPORTED TO USA BASED ON GEO OF IMPORTS

This section presents the methodology and an important disclaimer in relation to the estimation of additional tariff burden on the imports of the analyzed product based on the tariffs announced by a number of Executive Orders of the President of the United States issued from February to April 2025.

Approach to Estimation & Disclaimer:

1. The estimation of potential additional tariff burdens on international trade flows with the United States, as presented in the table on the preceding page, is based on GTAIC's interpretation of the following legislative acts issued by the U.S. Government:

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated April 2, 2025, titled "Regulating Imports with a Reciprocal Tariff to Rectify Trade Practices that Contribute to Large and Persistent Annual United States Goods Trade Deficits."

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated February 1, 2025, titled "Imposing Duties to Address the Flow of Illicit Drugs Across Our Northern Border."

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated February 1, 2025, titled "Imposing Duties to Address the Situation at Our Southern Border."

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated February 10, 2025, titled "Adjusting Imports of Steel into the United States".

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated February 11, 2025, titled "Adjusting Imports of Aluminum into the United States".

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated March 26, 2025, titled "Adjusting Imports of Automobiles and Automobile Parts into the United States."

   ◦ Executive Order of the President of the United States, Donald J. Trump, dated March 3, 2025, titled "Further Amendment to Duties Addressing the Synthetic Opioid Supply Chain in the People's Republic of China."

2. The decision of the US President to "pause" reciprocal tariffs for "non-retaliating countries" for 90 days, and the decision to apply 125% tariff on the imports from China, which were announced on 9 April, 2025, are also considered in the estimation.

3. The weighted average additional tariff burden, calculated in the table, is derived based on the import values from top-20 Trade Partners supplying the product analyzed to the USA in the LTM period, incorporating the applicable country specific tariff set by the aforementioned regulations. In case if any exemptions have been set for specific product, or otherwise, product specific additional ad valorem duties have been set by the aforementioned regulations, these product specific tariffs have been applied instead of country specific tariffs.

4. A 0% tariff rate is applied to goods imported from Canada and Mexico, provided they meet the requirements of the USMCA trade agreement. This exemption does not extend to goods specifically regulated by the aforementioned orders. However, goods that do not comply with the USMCA provisions will be subject to an additional duty of 25%.

5. Exemptions set in the guidance by U.S. Customs and Border Protection CSMS # 64724565 - UPDATED GUIDANCE – Reciprocal Tariff Exclusion for Specified Products in relation to specific goods imported from China are also considered in the calculations.

6. As GTAIC reports can be prepared for goods classified under 4- or 6-digit HS codes, and given that the product-specific regulations are primarily applicable to goods under 8-digit HS codes, the tariffs for goods classified under 8-digit HS codes have been applied to the corresponding broader categories of goods classified under 6-digit and 4-digit HS codes.

7. It is important to note that this estimation does not account for existing tariff levels and reflects only the projected additional tariff burden that could result from the aforementioned regulations. These projections are based solely on GTAIC interpretation of the cited regulations. As such, the actual tariffs applicable to specific products from specific countries may differ from the figures used in this estimation.

8. The primary purpose of this estimation is to provide a high-level overview of the potential impact of the announced tariffs on trade with the United States. This estimation may be subject to revision as the tariffs are practically implemented and as outcomes from any bilateral negotiations, which may occur in the coming months, are realized.

9. GTAIC disclaims any responsibility for the accuracy or completeness of the projections, and cautions that actual tariff rates and their effects may vary from those outlined in this report.

2

GLOBAL
MARKET
TRENDS

GLOBAL MARKET: SUMMARY

|	
Global Market Size (2023), in US$ terms	US$ 0.64 B
US$-terms CAGR (5 previous years 2019-2023)	-1.79 %
Global Market Size (2023), in tons	14.91 Ktons
Volume-terms CAGR (5 previous years 2019-2023)	-8.78 %
Proxy prices CAGR (5 previous years 2019-2023)	7.66 %

GLOBAL MARKET: LONG-TERM TRENDS

This section describes the development over the past five years, focusing on global imports of the chosen product in US$ terms, aggregating data from all countries. It presents information in absolute values, percentage growth rates, long-term Compound Annual Growth Rate (CAGR), and delves into the economic factors contributing to global imports.

Key points:

   i. The global market size of Other string musical instruments was reported at US$0.64B in 2023.
   ii. The long-term dynamics of the global market of Other string musical instruments may be characterized as stagnating with US$-terms CAGR exceeding -1.79%.
   iii. One of the main drivers of the global market development was decline in demand accompanied by growth in prices.
   iv. Market growth in 2023 underperformed the long-term growth rates of the global market in US$-terms.

Figure 1. Global Market Size (B US$, left axes), Annual Growth Rates (%, right axis)
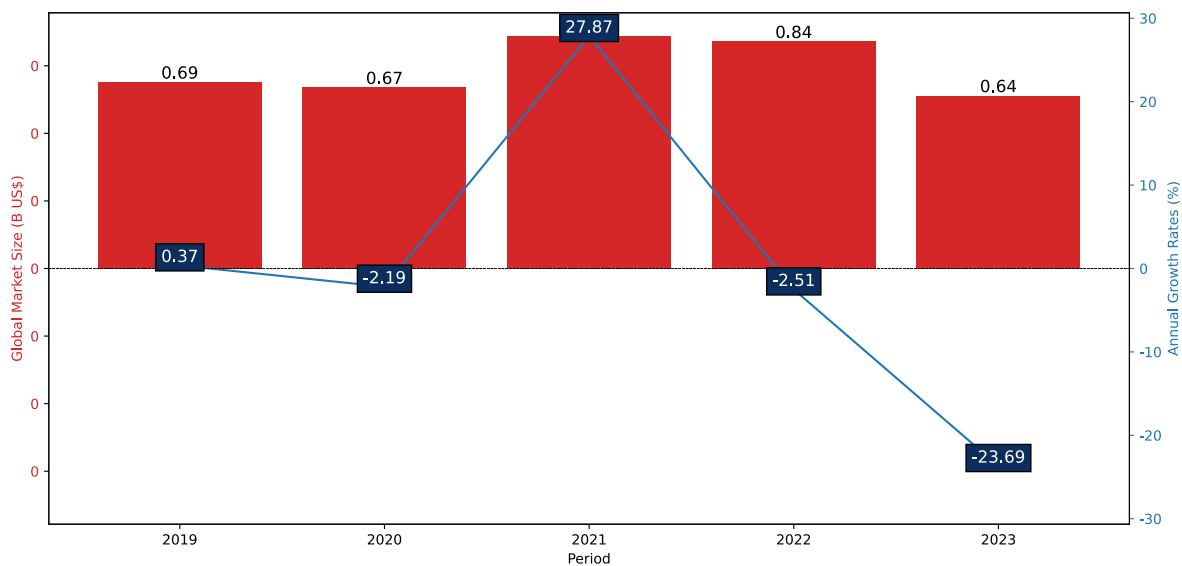
a. The global market size of Other string musical instruments was estimated to be US$0.64B in 2023, compared to US$0.84B the year before, with an annual growth rate of -23.69%

b. Since the past five years CAGR exceeded -1.79%, the global market may be defined as stagnating.

c. One of the main drivers of the long-term development of the global market in the US$ terms may be defined as decline in demand accompanied by growth in prices.

d. The best-performing calendar year was 2021 with the largest growth rate in the US$-terms. One of the possible reasons was growth in demand.

e. The worst-performing calendar year was 2023 with the smallest growth rate in the US$-terms. One of the possible reasons was biggest drop in import volumes with slow average price growth.

The following countries were not included in the calculation of the size of the global market over the last six years due to irregular provision of annual import statistics to the UN Comtrade Database (Top 10 countries with irregular data provision): Japan, Russian Federation, Belarus, Sri Lanka, Honduras, Nepal, Papua New Guinea, Cayman Isds, Ghana, Mongolia.

GLOBAL MARKET: LONG-TERM TRENDS

This section provides an overview of the global imports of the chosen product in volume terms, aggregating data from imports across all countries. It presents information in absolute values, percentage growth rates, and the long-term Compound Annual Growth Rate (CAGR) to supplement the analysis.

Key points:

    i. In volume terms, global market of Other string musical instruments may be defined as stagnating with CAGR in the past five years of -8.78%.

    ii. Market growth in 2023 underperformed the long-term growth rates of the global market in volume terms.

Figure 2. Global Market Size (Ktons, left axis), Annual Growth Rates (%, right axis)
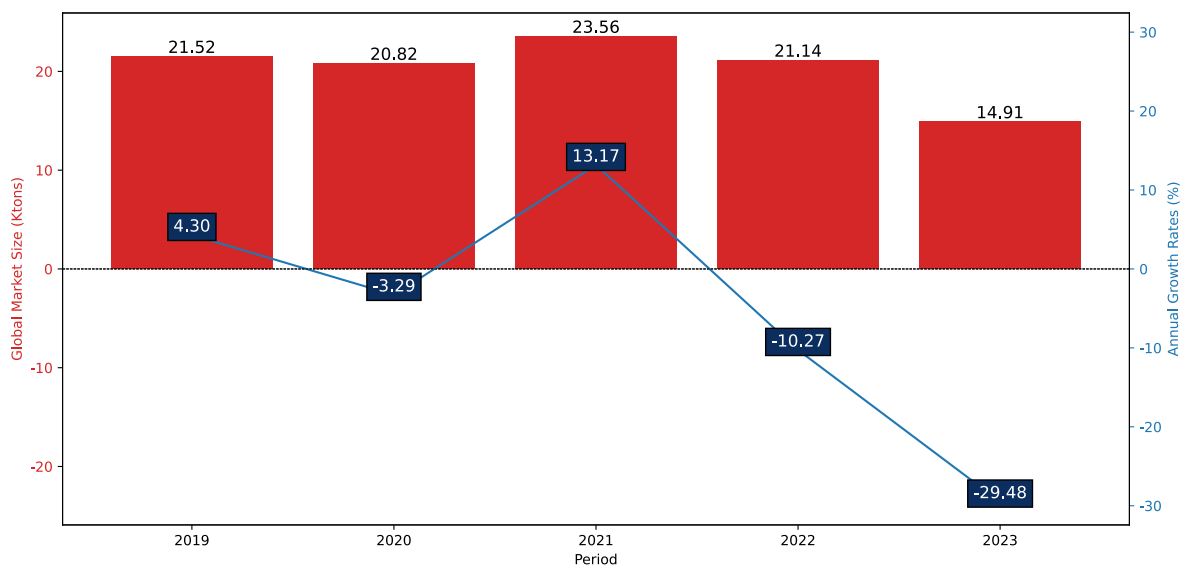
a. Global market size for Other string musical instruments reached 14.91 Ktons in 2023. This was approx. -29.48% change in comparison to the previous year (21.14 Ktons in 2022).

b. The growth of the global market in volume terms in 2023 underperformed the long-term global market growth of the selected product.

The following countries were not included in the calculation of the size of the global market over the last six years due to irregular provision of annual import statistics to the UN Comtrade Database (Top 10 countries with irregular data provision): Japan, Russian Federation, Belarus, Sri Lanka, Honduras, Nepal, Papua New Guinea, Cayman Isds, Ghana, Mongolia.

MARKETS CONTRIBUTING TO GLOBAL DEMAND

This section describes the global structure of imports for the chosen product. It utilizes a tree-map diagram, which offers a user-friendly visual representation covering all major importers.

Figure 3. Country-specific Global Imports in 2023, US$-terms
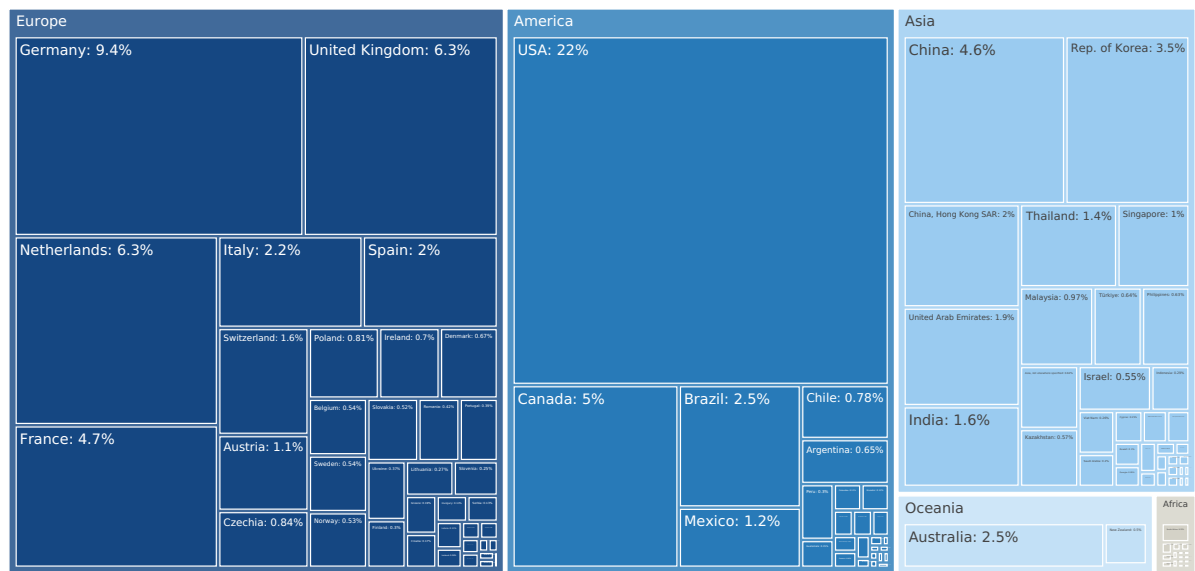
Top-5 global importers of Other string musical instruments in 2023 include:

1. USA (21.57% share and -37.1% YoY growth rate of imports);

2. Germany (9.42% share and -21.84% YoY growth rate of imports);

3. United Kingdom (6.33% share and -21.19% YoY growth rate of imports);

4. Netherlands (6.27% share and -10.16% YoY growth rate of imports);

5. Canada (4.99% share and -18.05% YoY growth rate of imports).

USA accounts for about 21.57% of global imports of Other string musical instruments.

3

COUNTRY
MARKET
TRENDS

PRODUCT MARKET SNAPSHOT

This section provides data on imports of a specific good to a chosen country.

Country Market Size (2023), US$	US$ 138.36 M
Contribution of Other string musical instruments to the Total Imports Growth in the previous 5 years	US$ -33.18 M
Share of Other string musical instruments in Total Imports (in value terms) in 2023.	0.0%
Change of the Share of Other string musical instruments in Total Imports in 5 years	-34.64%

|	
Country Market Size (2023), in tons	2.2 Ktons
CAGR (5 previous years 2019-2023), US$-terms	-5.23%
CAGR (5 previous years 2019-2023), volume terms	-13.87%
Proxy price CAGR (5 previous years 2019-2023)	10.02%

LONG-TERM COUNTRY TRENDS: IMPORTS VALUES

This section provides information on the imports of a specific product to a designated country over the past five years, presented in US$ terms. It encompasses the growth rates of imports, the development of long-term import patterns, factors influencing import fluctuations, and an estimation of the country's reliance on imports.

Key points:

i. Long-term performance of USA's market of Other string musical instruments may be defined as declining.

ii. Decline in demand accompanied by growth in prices may be a leading driver of the long-term growth of USA's market in US$-terms.

iii. Expansion rates of imports of the product in 01.2024-12.2024 surpassed the level of growth of total imports of USA.

iv. The strength of the effect of imports of the product on the country's economy is generally low.

Figure 4. USA's Market Size of Other string musical instruments in M US$ (left axis) and Annual Growth Rates in % (right axis)
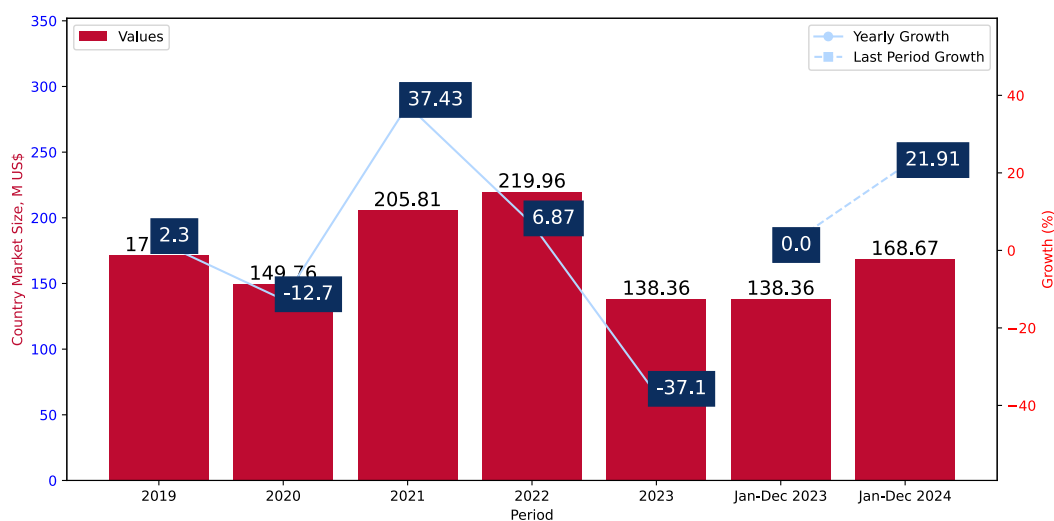
a. USA's market size reached US$138.36M in 2023, compared to US219.96$M in 2022. Annual growth rate was -37.1%.

b. USA's market size in 01.2024-12.2024 reached US$168.67M, compared to US$138.36M in the same period last year. The growth rate was 21.91%.

c. Imports of the product contributed around 0.0% to the total imports of USA in 2023. That is, its effect on USA's economy is generally of a low strength. At the same time, the share of the product imports in the total Imports of USA remained stable.

d. Since CAGR of imports of the product in US$-terms for the past 5Y exceeded -5.23%, the product market may be defined as declining. Ultimately, the expansion rate of imports of Other string musical instruments was underperforming compared to the level of growth of total imports of USA (5.4% of the change in CAGR of total imports of USA).

e. It is highly likely, that decline in demand accompanied by growth in prices was a leading driver of the long-term growth of USA's market in US$-terms.

f. The best-performing calendar year with the highest growth rate of imports in the US$-terms was 2021. It is highly likely that growth in demand had a major effect.

g. The worst-performing calendar year with the smallest growth rate of imports in the US$-terms was 2023. It is highly likely that biggest drop in import volumes with slow average price growth had a major effect.

LONG-TERM COUNTRY TRENDS: IMPORTS VOLUMES

This section presents information regarding the imports of a particular product to a selected country over the last five years. It includes details about physical volumes, import growth rates, and the long-term development trend in imports.

Key points:

    i. In volume terms, the market of Other string musical instruments in USA was in a declining trend with CAGR of -13.87% for the past 5 years, and it reached 2.2 Ktons in 2023.

    ii. Expansion rates of the imports of Other string musical instruments in USA in 01.2024-12.2024 surpassed the long-term level of growth of the USA's imports of this product in volume terms

Figure 5. USA's Market Size of Other string musical instruments in K tons (left axis), Growth Rates in % (right axis)
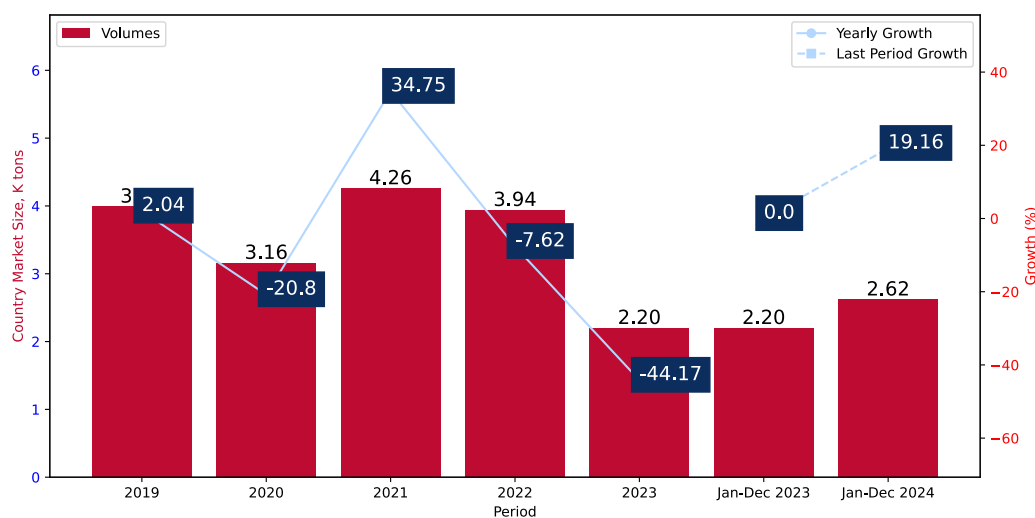
a. USA's market size of Other string musical instruments reached 2.2 Ktons in 2023 in comparison to 3.94 Ktons in 2022. The annual growth rate was -44.17%.

b. USA's market size of Other string musical instruments in 01.2024-12.2024 reached 2.62 Ktons, in comparison to 2.2 Ktons in the same period last year. The growth rate equaled to approx. 19.16%.

c. Expansion rates of the imports of Other string musical instruments in USA in 01.2024-12.2024 surpassed the long-term level of growth of the country's imports of Other string musical instruments in volume terms.

LONG-TERM COUNTRY TRENDS: PROXY PRICES

This section provides details regarding the price fluctuations of a specific imported product over the past five years. It covers the assessment of average annual proxy prices, their changes, growth rates, and identification of any anomalies in price fluctuations.

Key points:

   i. Average annual level of proxy prices of Other string musical instruments in USA was in a fast-growing trend with CAGR of 10.02% for the past 5 years.
   ii. Expansion rates of average level of proxy prices on imports of Other string musical instruments in USA in 01.2024-12.2024 underperformed the long-term level of proxy price growth.

Figure 6. USA's Proxy Price Level on Imports, K US$ per 1 ton (left axis), Growth Rates in % (right axis)
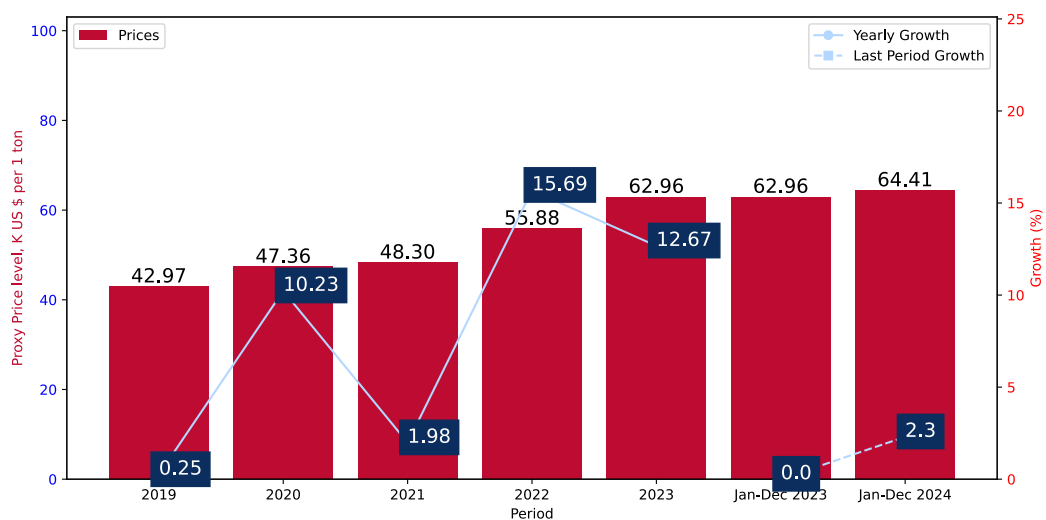

1. Average annual level of proxy prices of Other string musical instruments has been fast-growing at a CAGR of 10.02% in the previous 5 years.

2. In 2023, the average level of proxy prices on imports of Other string musical instruments in USA reached 62.96 K US$ per 1 ton in comparison to 55.88 K US$ per 1 ton in 2022. The annual growth rate was 12.67%.

3. Further, the average level of proxy prices on imports of Other string musical instruments in USA in 01.2024-12.2024 reached 64.41 K US$ per 1 ton, in comparison to 62.96 K US$ per 1 ton in the same period last year. The growth rate was approx. 2.3%.

4. In this way, the growth of average level of proxy prices on imports of Other string musical instruments in USA in 01.2024-12.2024 was lower compared to the long-term dynamics of proxy prices.

SHORT-TERM TRENDS: IMPORTS VALUES

This section offers comprehensive and up-to-date statistics concerning the imports of a specific product into a designated country over the past 24 months for which relevant statistics is published and available. It includes monthly import values in US$, year-on-year changes, identification of any anomalies in imports, examination of factors driving short-term fluctuations. Besides, it provides a quantitative estimation of the short-term trend in imports to supplement the data.

2.08%   27.99%
monthly annualized

Figure 7. Monthly Imports of USA, K current US$
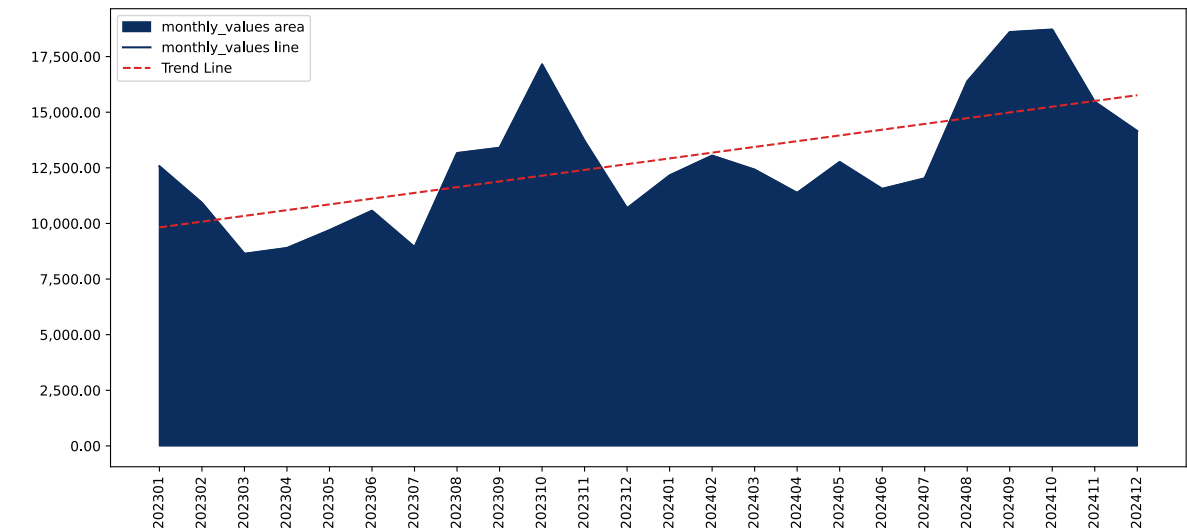
Average monthly growth rates of USA's imports were at a rate of 2.08%, the annualized expected growth rate can be estimated at 27.99%.

The dashed line is a linear trend for Imports. Values are not seasonally adjusted.

Figure 8. Y-o-Y Monthly Level Change of Imports of USA, K current US$ (left axis)
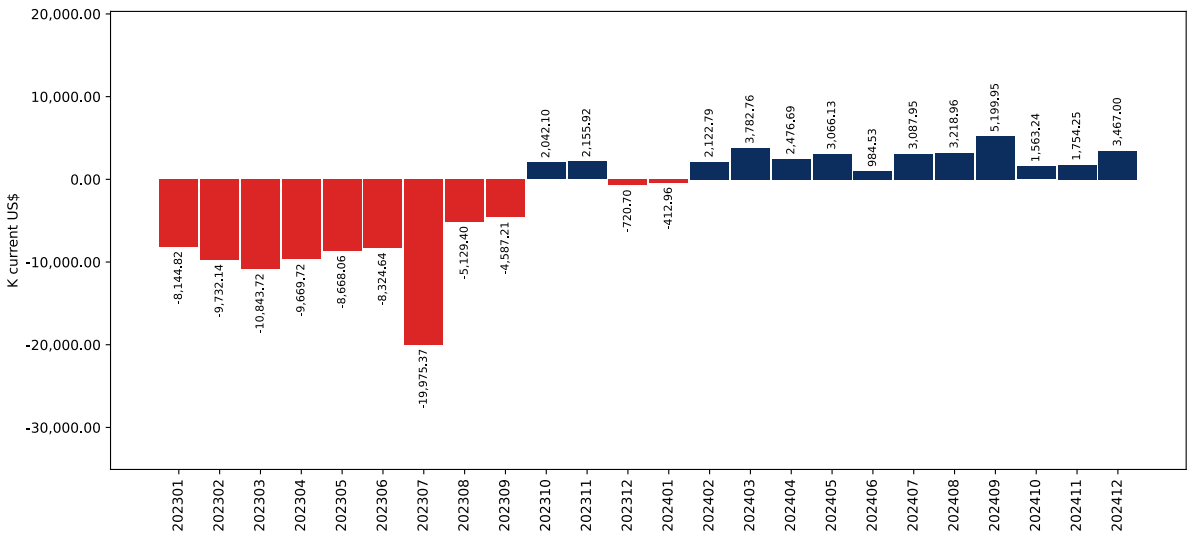
Year-over-year monthly imports change depicts fluctuations of imports operations in USA. The more positive values are on chart, the more vigorous the country in importing of Other string musical instruments. Negative values may be a signal of the market contraction.

Values in columns are not seasonally adjusted.

SHORT-TERM TRENDS: IMPORTS VALUES

This section presents detailed and the most recent data on the imports of a specific commodity to a chosen country over the past 24 months for which relevant statistics is published and available. It encompasses monthly import figures in US dollars, year-on-year changes, anomalies in import patterns, factors driving short-term fluctuations, and includes a quantitative estimation of short-term import trends as additional information.

Key points:

    i. The dynamics of the market of Other string musical instruments in USA in LTM (01.2024 - 12.2024) period demonstrated a fast growing trend with growth rate of 21.91%. To compare, a 5-year CAGR for 2019-2023 was -5.23%.

    ii. With this trend preserved, the expected monthly growth of imports in the coming period may reach the level of 2.08%, or 27.99% on annual basis.

    iii. Data for monthly imports over the last 12 months contain no record(s) of higher and no record(s) of lower values compared to any value for the 48-months period before.

    a. In LTM period (01.2024 - 12.2024) USA imported Other string musical instruments at the total amount of US$168.67M. This is 21.91% growth compared to the corresponding period a year before.

    b. The growth of imports of Other string musical instruments to USA in LTM outperformed the long-term imports growth of this product.

    c. Imports of Other string musical instruments to USA for the most recent 6-month period (07.2024 - 12.2024) outperformed the level of Imports for the same period a year before (23.74% change).

    d. A general trend for market dynamics in 01.2024 - 12.2024 is fast growing. The expected average monthly growth rate of imports of USA in current USD is 2.08% (or 27.99% on annual basis).

    e. Monthly dynamics of imports in last 12 months included no record(s) that exceeded the highest/peak value of imports achieved in the preceding 48 months, and no record(s) that bypass the lowest value of imports in the same period in the past.

SHORT-TERM TRENDS: IMPORTS VOLUMES

This section presents detailed and the most recent data on the imports of a specific commodity to a chosen country over the past 24 months for which relevant statistics is published and available. It encompasses monthly import figures in tons, year-on-year changes, anomalies in import patterns, factors driving short-term fluctuations, and includes a quantitative estimation of short-term import trends as additional information.

1.4% **18.12%**
monthly **annualized**

Figure 9. Monthly Imports of USA, tons
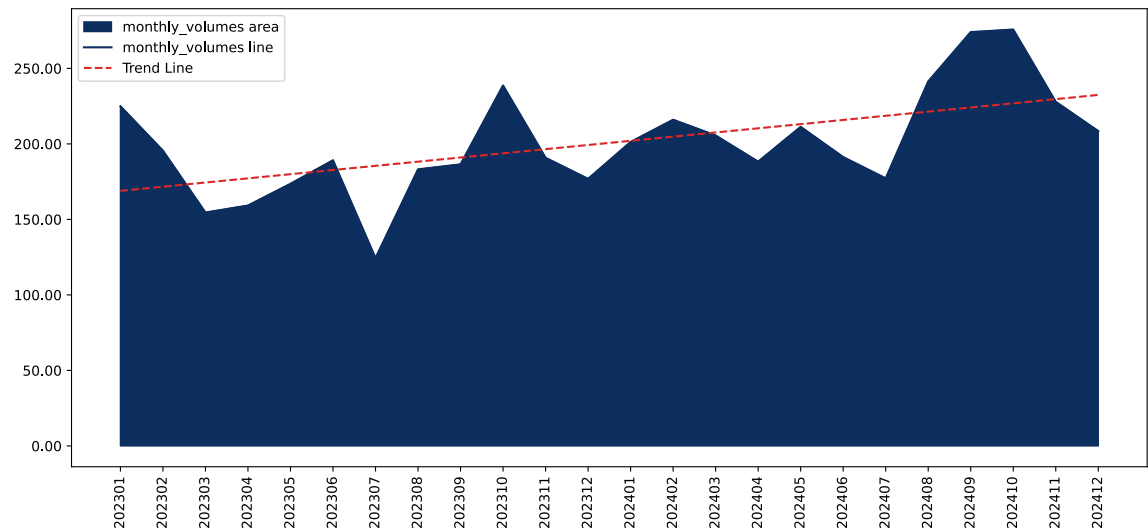
Monthly imports of USA changed at a rate of 1.4%, while the annualized growth rate for these 2 years was 18.12%.

The dashed line is a linear trend for Imports. Volumes are not seasonally adjusted.

Figure 10. Y-o-Y Monthly Level Change of Imports of USA, tons

Year-over-year monthly imports change depicts fluctuations of imports operations in USA. The more positive values are on chart, the more vigorous the country in importing of Other string musical instruments. Negative values may be a signal of market contraction.

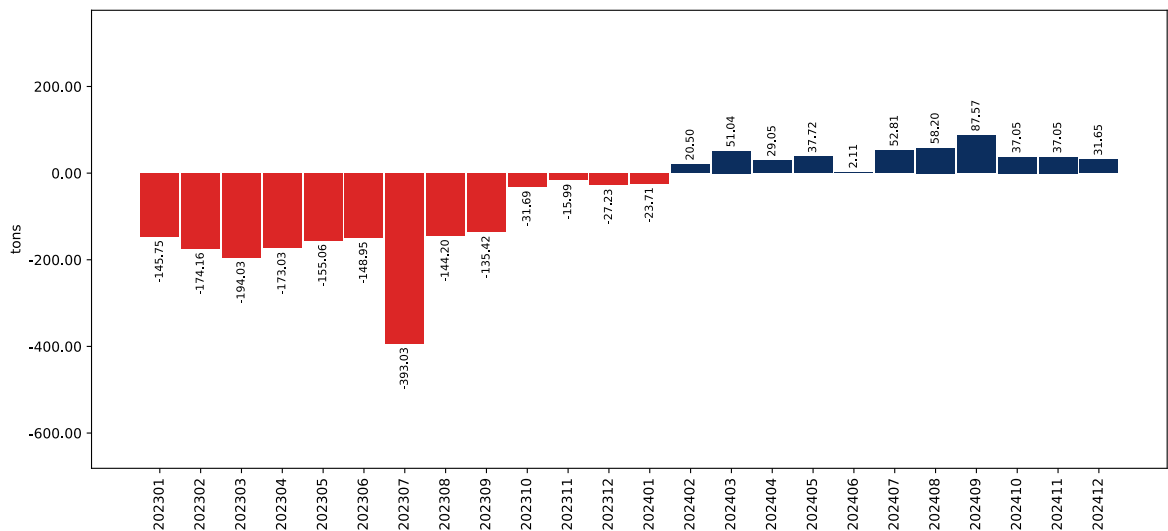Volumes in columns are in tons.

SHORT-TERM TRENDS: IMPORTS VOLUMES

This section presents detailed and the most recent data on the imports of a specific commodity into a chosen country over the past 24 months for which relevant statistics is published and available. It encompasses monthly import figures in tons, year-on-year changes, anomalies in import patterns, factors driving short-term fluctuations, and includes a quantitative estimation of short-term import trends as additional information.

Key points:

i. The dynamics of the market of Other string musical instruments in USA in LTM period demonstrated a fast growing trend with a growth rate of 19.16%. To compare, a 5-year CAGR for 2019-2023 was -13.87%.

ii. With this trend preserved, the expected monthly growth of imports in the coming period may reach the level of 1.4%, or 18.12% on annual basis.

iii. Data for monthly imports over the last 12 months contain no record(s) of higher and no record(s) of lower values compared to any value for the 48-months period before.

a. In LTM period (01.2024 - 12.2024) USA imported Other string musical instruments at the total amount of 2,618.57 tons. This is 19.16% change compared to the corresponding period a year before.

b. The growth of imports of Other string musical instruments to USA in value terms in LTM outperformed the long-term imports growth of this product.

c. Imports of Other string musical instruments to USA for the most recent 6-month period (07.2024 - 12.2024) outperform the level of Imports for the same period a year before (27.65% change).

d. A general trend for market dynamics in 01.2024 - 12.2024 is fast growing. The expected average monthly growth rate of imports of Other string musical instruments to USA in tons is 1.4% (or 18.12% on annual basis).

e. Monthly dynamics of imports in last 12 months included no record(s) that exceeded the highest/peak value of imports achieved in the preceding 48 months, and no record(s) that bypass the lowest value of imports in the same period in the past.

SHORT-TERM TRENDS: PROXY PRICES

This section provides a quantitative assessment of short-term price fluctuations. It includes details on the monthly proxy price changes, an estimation of the short-term trend in proxy price levels, and identification of any anomalies in price dynamics.

Key points:

  i. The average level of proxy price on imports in LTM period (01.2024-12.2024) was 64,414.95 current US$ per 1 ton, which is a 2.31% change compared to the same period a year before. A general trend for proxy price change was fast-growing.
  ii. Decline in demand accompanied by growth in prices was a leading driver of the Country Market Short-term Development.
  iii. With this trend preserved, the expected monthly growth of the proxy price level in the coming period may reach the level of 0.62%, or 7.64% on annual basis.

0.62% **7.64%**
monthly **annualized**

Figure 11. Average Monthly Proxy Prices on Imports, current US$/ton
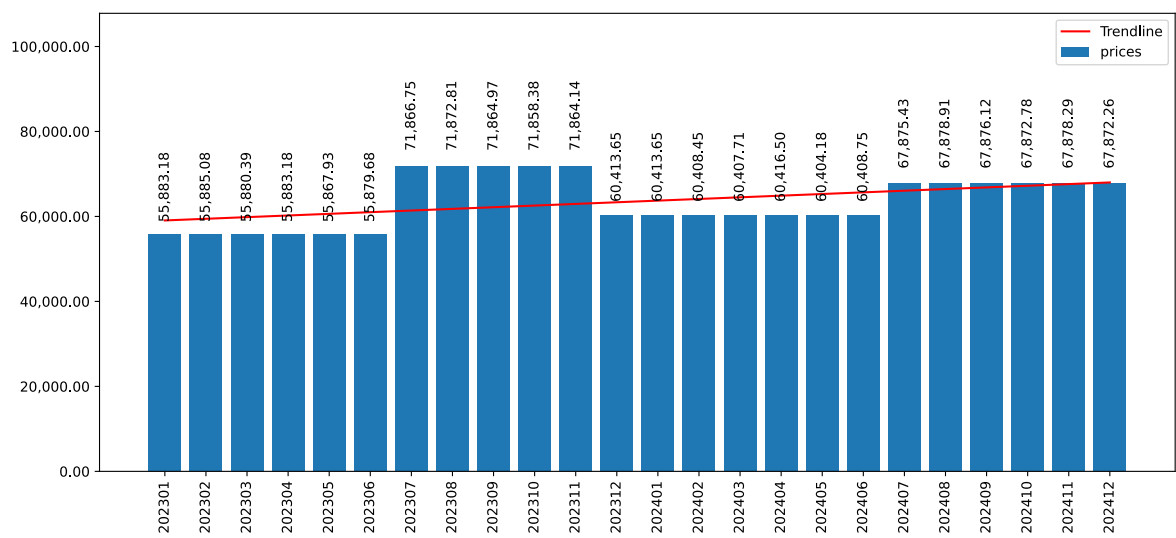
a. The estimated average proxy price on imports of Other string musical instruments to USA in LTM period (01.2024-12.2024) was 64,414.95 current US$ per 1 ton.

b. With a 2.31% change, a general trend for the proxy price level is fast-growing.

c. Changes in levels of monthly proxy prices on imports for the past 12 months consists of no record(s) with values exceeding the highest level of proxy prices for the preceding 48-months period, and no record(s) with values lower than the lowest value of proxy prices in the same period.

d. It is highly likely, that decline in demand accompanied by growth in prices was a leading driver of the short-term fluctuations in the market.

SHORT-TERM TRENDS: PROXY PRICES

This section provides comprehensive details on proxy price levels in a form of box plot. It facilitates the analysis and comparison of proxy prices of the selected good supplied by other countries.

Figure 12. LTM Average Monthly Proxy Prices by Largest Suppliers, Current US$ / ton
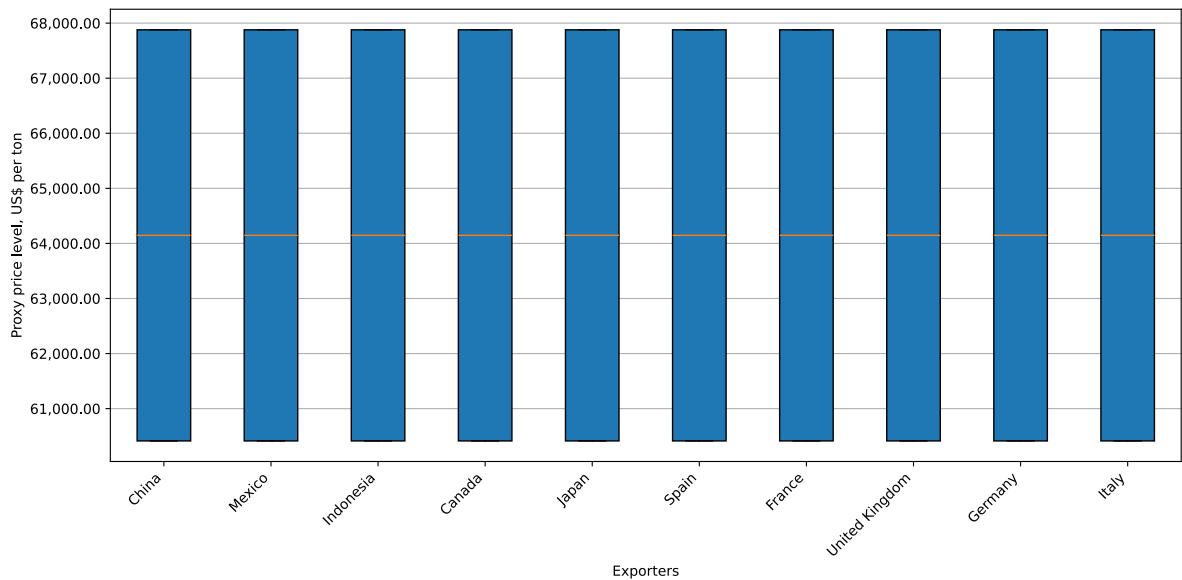
The chart shows distribution of proxy prices on imports for the period of LTM (01.2024-12.2024) for Other string musical instruments exported to USA by largest exporters. The box height shows the range of the middle 50% of levels of proxy price on imports formed in LTM. The higher the box, the wider the spread of proxy prices. The line within the box, a median level of the proxy price level on imports, marks the midpoint of per country data set: half the prices are greater than or equal to this value, and half are less. The upper and lower whiskers represent values of proxy prices outside the middle 50%, that is, the lower 25% and the upper 25% of the proxy price levels. The lowest proxy price level is at the end of the lower whisker, while the highest is at the end of the higher whisker. Red dots represent unusually high or low values (i.e., outliers), which are not included in the box plot.

4

COUNTRY
COMPETITION
LANDSCAPE

COMPETITION LANDSCAPE: VALUE TERMS

This section offers insights into major suppliers of the selected product to a particular country within the last 12 months. A tree-map chart is used to facilitate the identification and better visualization of primary competitors, illustrating market shares in US$ terms. Additionally, a diagram highlighting suppliers who experienced significant increases or decreases in market shares during the last 12 months complements the analysis. These are winners or losers from the market share perspective.

Figure 13.Largest Trade Partners of USA in 2023, K US$
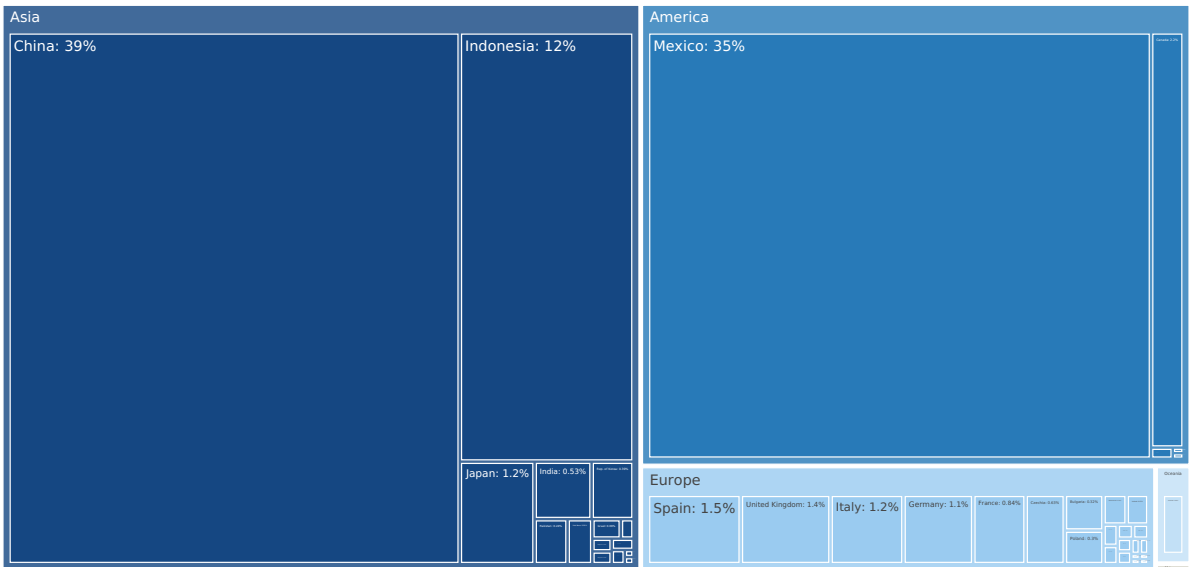
The chart shows largest supplying countries and their shares in imports of Other string musical instruments to USA in 2023 in value terms (US$). Different colors depict geographic regions.

Figure 14. Contribution to Growth of Imports in LTM (January 2024 − December 2024),K US$ | Figure 15. Contribution to Decline of Imports in LTM (January 2024 − December 2024),K US$

| GROWTH CONTRIBUTORS | DECLINE CONTRIBUTORS |

Country	Growth		Decline	Country
China	15,442.90		-576.27	Italy
Mexico	7,415.36		-351.41	United Kingdom
Indonesia	6,678.10		-166.61	Poland
Japan	599.04		-130.07	Pakistan
France	554.99		-115.70	Spain
Rep. of Korea	338.42		-115.67	Canada
India	296.74		-104.01	Viet Nam
Australia	270.63		-99.65	Israel
Netherlands	103.12		-43.42	Belgium
Ireland	69.59		-27.11	Czechia

Total imports change in the period of LTM was recorded at 30,311.29 K US$.

The charts show Top-10 countries with positive and negative contribution to the growth of imports of Other string musical instruments to USA in the period of LTM (January 2024 − December 2024 compared to January 2023 − December 2023).

COMPETITION LANDSCAPE: VOLUME TERMS

This section offers insights into major suppliers of the selected product to a particular country within the last 12 months. A tree-map chart is used to facilitate the identification and better visualization of primary competitors, illustrating market shares in Ktons. Additionally, a diagram highlighting suppliers who experienced significant increases or decreases in market shares during the last 12 months complements the analysis. These are winners or losers from the market share perspective.

The chart shows largest supplying countries and their shares in imports of Other string musical instruments to USA in 2023 in volume terms (tons). Different colors depict geographic regions.

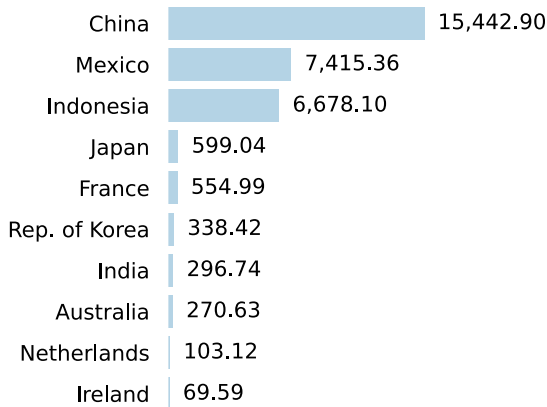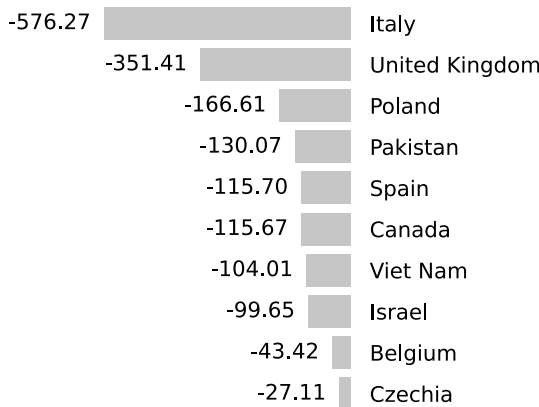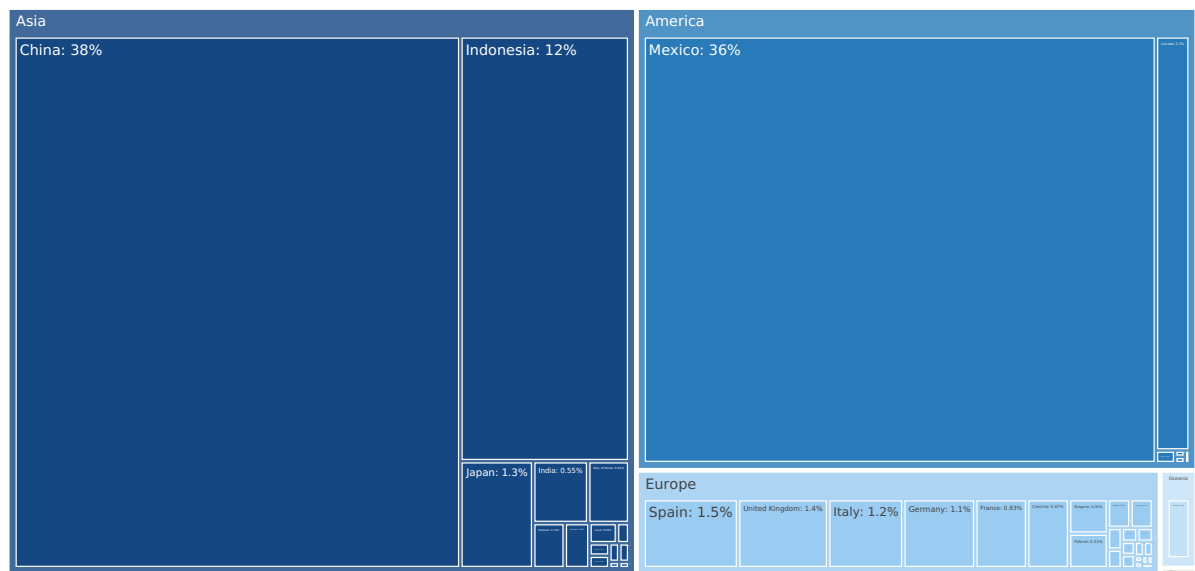| Figure 17. Contribution to Growth of Imports in LTM (January 2024 – December 2024), tons	Figure 18. Contribution to Decline of Imports in LTM (January 2024 – December 2024), tons
GROWTH CONTRIBUTORS	DECLINE CONTRIBUTORS

Growth Contributors		Decline Contributors	
China	222.91	-9.96	Italy
Indonesia	106.68	-6.00	United Kingdom
Mexico	89.42	-3.72	Canada
France	8.92	-3.02	Poland
Japan	8.23	-2.49	Spain
Rep. of Korea	4.23	-2.12	Pakistan
India	3.77	-1.67	Viet Nam
Australia	3.74	-1.57	Israel
Netherlands	1.62	-1.14	Czechia
Bulgaria	1.12	-0.75	Belgium
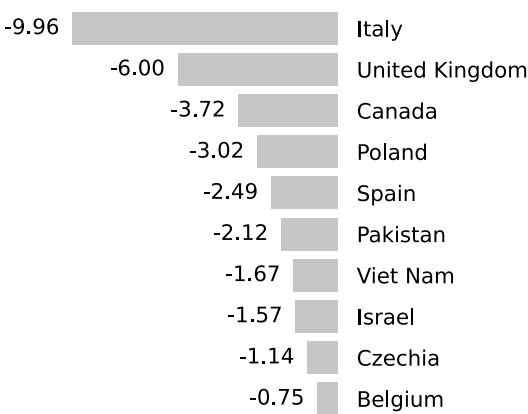
Total imports change in the period of LTM was recorded at 421.04 tons

The charts show Top-10 countries with positive and negative contribution to the growth of imports of Other string musical instruments to USA in the period of LTM (January 2024 – December 2024 compared to January 2023 – December 2023).

COMPETITION LANDSCAPE: CONTRIBUTORS TO GROWTH

This section presents information about the most successful exporters who managed to significantly increase their supplies over last 12 months. The upper-left corner of the chart highlights countries deemed the most aggressive competitors in the market. The horizontal axis measures the proxy price level offered by suppliers, the vertical axis portrays the growth rate of supplies in volume terms, and the bubble size indicates the extent at which a country-supplier contributed to the growth of imports. The chart encompasses the most recent data spanning the past 12 months.

Figure 19. Top suppliers-contributors to growth of imports of to USA in LTM (winners)

Average Imports Parameters:
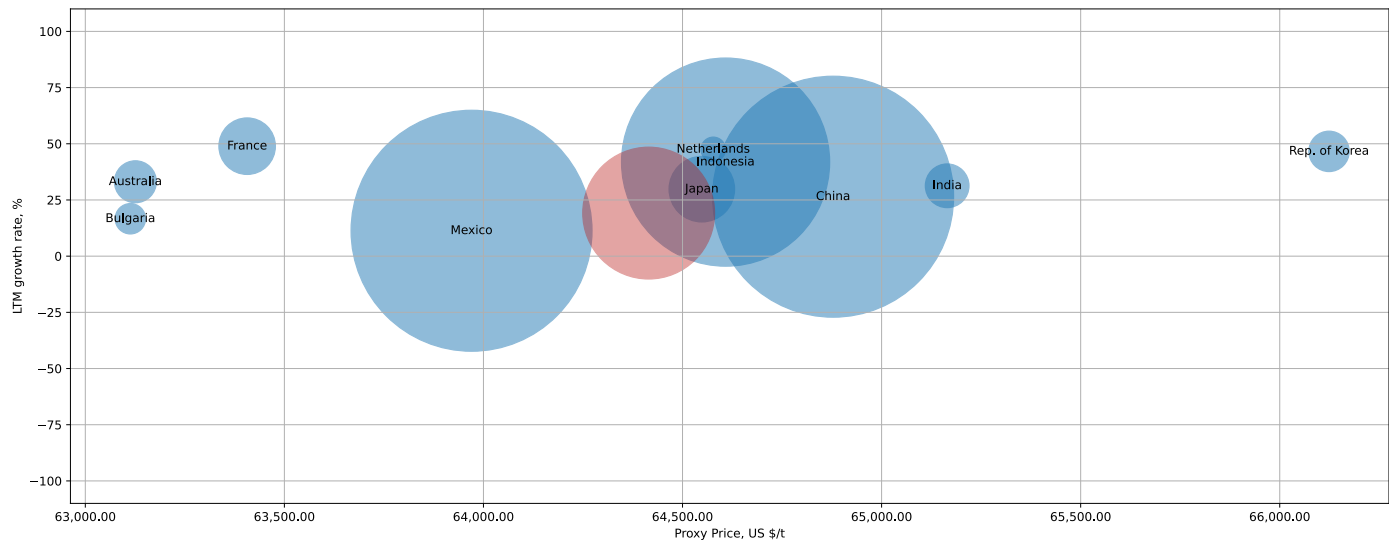LTM growth rate = 19.16%
Proxy Price = 64,414.95 US$ / t

The chart shows the classification of countries who were among the greatest growth contributors in terms of supply of Other string musical instruments to USA:

- Bubble size depicts the volume of imports from each country to USA in the period of LTM (January 2024 – December 2024).
- Bubble's position on X axis depicts the average level of proxy price on imports of Other string musical instruments to USA from each country in the period of LTM (January 2024 – December 2024).
- Bubble's position on Y axis depicts growth rate of imports of Other string musical instruments to USA from each country (in tons) in the period of LTM (January 2024 – December 2024) compared to the corresponding period a year before.
- Red Bubble represents a theoretical "average" country supplier out of the top-10 countries shown in the Chart.

Various factors may cause these 10 countries to increase supply of Other string musical instruments to USA in LTM. Some may be due to the growth of comparative advantages price wise, others may be related to higher quality or better trade conditions. Below is a list of countries, whose proxy price level of supply of Other string musical instruments to USA seemed to be a significant factor contributing to the supply growth:

1. Australia;
2. France;
3. Mexico;

COMPETITION LANDSCAPE: TOP COMPETITORS

This section provides details about the primary exporters of a particular product to a designated country. To present a comprehensive view, a bubble-chart is employed, showcasing a country's position relative to others. It simultaneously utilizes three indicators: the horizontal axis measures the proxy price level provided by suppliers, the vertical axis indicates the market share growth rate, and the size of the bubble denotes the volume of imports from a country-supplier. Countries positioned in the upper-left corner of the chart are considered the most competitive players in the market. The chart includes the most recent data spanning the past 12 months.

Total share of identified TOP-10 supplying countries in USA's imports in US$-terms in LTM was 96.1%
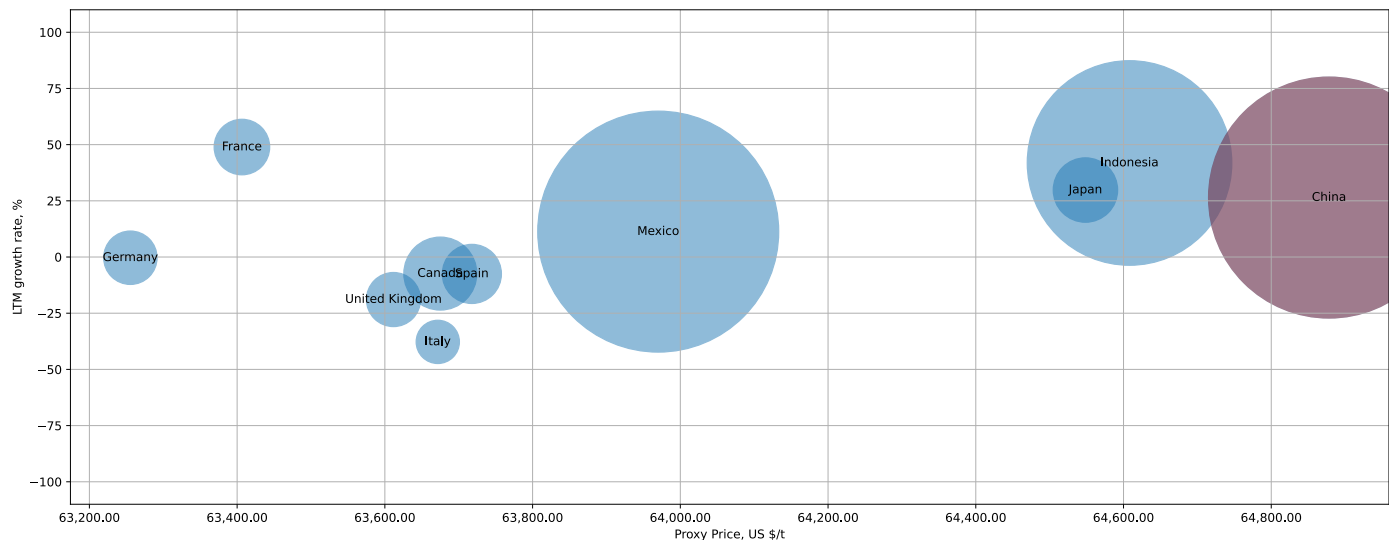
The chart shows the classification of countries who are strong competitors in terms of supplies of Other string musical instruments to USA:

- Bubble size depicts market share of each country in total imports of USA in the period of LTM (January 2024 – December 2024).
- Bubble's position on X axis depicts the average level of proxy price on imports of Other string musical instruments to USA from each country in the period of LTM (January 2024 – December 2024).
- Bubble's position on Y axis depicts growth rate of imports Other string musical instruments to USA from each country (in tons) in the period of LTM (January 2024 – December 2024) compared to the corresponding period a year before.
- Red Bubble represents the country with the largest market share.

COMPETITION LANDSCAPE: TOP COMPETITORS

This section focuses on competition among suppliers and includes a ranking of countries-exporters that are regarded as the most competitive within the last 12 months.

a) In US$-terms, the largest supplying countries of Other string musical instruments to USA in LTM (01.2024 - 12.2024) were:

1. China (69.14 M US$, or 40.99% share in total imports);
2. Mexico (56.34 M US$, or 33.4% share in total imports);
3. Indonesia (23.37 M US$, or 13.85% share in total imports);
4. Canada (2.97 M US$, or 1.76% share in total imports);
5. Japan (2.32 M US$, or 1.37% share in total imports);

b) Countries who increased their imports the most (top-5 contributors to total growth in imports in US $ terms) during the LTM period (01.2024 - 12.2024) were:

1. China (15.44 M US$ contribution to growth of imports in LTM);
2. Mexico (7.42 M US$ contribution to growth of imports in LTM);
3. Indonesia (6.68 M US$ contribution to growth of imports in LTM);
4. Japan (0.6 M US$ contribution to growth of imports in LTM);
5. France (0.55 M US$ contribution to growth of imports in LTM);

c) Countries whose price level of imports may have been a significant factor of the growth of supply (out of Top-10 contributors to growth of total imports):

1. Australia (63,126 US$ per ton, 0.56% in total imports, and 39.89% growth in LTM);
2. France (63,406 US$ per ton, 1.02% in total imports, and 47.55% growth in LTM);
3. Mexico (63,970 US$ per ton, 33.4% in total imports, and 15.16% growth in LTM);

d) Top-3 high-ranked competitors in the LTM period:

1. China (69.14 M US$, or 40.99% share in total imports);
2. Mexico (56.34 M US$, or 33.4% share in total imports);
3. Indonesia (23.37 M US$, or 13.85% share in total imports);

Figure 21. Ranking of TOP-5 Countries - Competitors
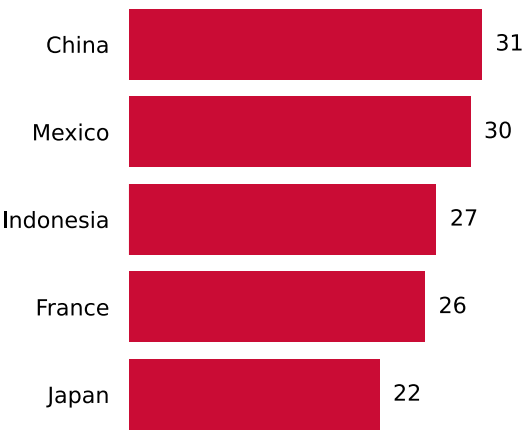
The ranking is a cumulative value of 4 parameters, with the maximum possible score of 40 points. For more information on the methodology, refer to the "Methodology" section.

LIST OF ABBREVIATIONS AND TERMS USED

Ad valorem tariff: An ad valorem duty (tariff, charge, and so on) is based on the value of the dutiable item and expressed in percentage terms. For example, a duty of 20 percent on the value of automobiles.

Applied tariff / Applied rates: Duties that are actually charged on imports. These can be below the bound rates.

Aggregation: A process that transforms microdata into aggregate-level information by using an aggregation function such as count, sum average or standard deviation.

Aggregated data: Data generated by aggregating non-aggregated observations according to a well- defined statistical methodology.

Approx.: Short for "approximation", which is a guess of a number that is not exact but that is close.

B: billions (e.g. US$ 10B)

CAGR: For the purpose of this report, the compound annual growth rate (CAGR) is the annualized average rate of growth of a specific indicator (e.g. imports, proxy prices) between two given years, assuming growth takes place at an exponentially compounded rate. The CAGR between given years X and Z, where Z - X = N, is the number of years between the two given years, is calculated as follows:

$$CAGR_{\text{from year X to year Z}} = \left(\frac{Value_{yearZ}}{Value_{yearX}}\right)^{(1/N)} - 1$$

Current US$: Data reported in current (or "nominal") prices for each year are measured in the prices for that particular year. For example, GDP for 1990 are based on 1990 prices, for 2020 are based on 2020 prices, and so on. Current price series are influenced by the effects of inflation.

Constant US$: Constant (or "real") price series show the data for each year in the prices of a chosen reference year. For example, reported GDP in constant 2015 prices show data for 2019, 2022, and all other years in 2015 prices. Constant price series are used to measure the true volume growth, i.e. adjusting for the effects of price inflation.

CPI, Inflation: Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly.

Country Credit Risk Classification: The Organization for Economic Cooperation & Development (OECD) Country Risk Classification measures the country credit risk and the likelihood that a country will service its external debt. The index uses a scale of eight risk categories to determine a country's credit risk (from 0 to 7: 0 being risk free and 7 represents the highest level of country risk to service its external debt). The country risk classifications are not sovereign risk classifications and therefore should not be compared with the sovereign risk classifications of private credit rating agencies (CRAs).

Country Market: For the purpose of this report, this is the total number of all goods (in US$ or volume values) which added to the stock of material resources of a country by entering (imports) its economic territory in a certain period of time (often measured over the course of a year).

Competitors: Businesses/companies who compete against each other in the same good market. This may also refer to a country on a global level.

Domestic or foreign goods: Specification of whether the good is of domestic or foreign origin.

Domestic goods: Can be defined as goods originating in the economic territory of a country. In general, goods are considered as originating in the country if they have been wholly obtained in it or were substantially transformed.

Economic territory: The area under the effective economic control of a single government.

Estimation: Estimation is concerned with inference about the numerical value of unknown population values from incomplete data such as a sample.

Foreign goods: Are goods which originate from the rest of the world (including foreign goods in transit through the compiling country) or are obtained under the outward processing procedure, when such processing confers foreign origin (compensating products which changed origin).

Growth rates: refer to the percentage change of a specific variable within a specific time period.

GDP (current US$): Gross Domestic Product at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.

LIST OF ABBREVIATIONS AND TERMS USED

GDP (constant 2015 US$): Gross Domestic Product at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2015 prices, expressed in U.S. dollars. Dollar figures for GDP are converted from domestic currencies using 2015 official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.

GDP growth (annual %): Annual percentage growth rate of GDP at market prices based on constant local currency. An economy's growth is measured by the change in the volume of its output or in the real incomes of its residents. The 2008 United Nations System of National Accounts (2008 SNA) offers three plausible indicators for calculating growth: the volume of gross domestic product (GDP), real gross domestic income, and real gross national income. The volume of GDP is the sum of value added, measured at constant prices, by households, government, and industries operating in the economy. GDP accounts for all domestic production, regardless of whether the income accrues to domestic or foreign institutions.

Goods (products): For the purpose of his report the term is defined as physical, produced objects for which a demand exists, over which ownership rights can be established and whose ownership can be transferred from one institutional unit to another by engaging in transactions on markets, plus certain types of so-called knowledge-capturing products stored on physical media that can cross borders physically.

Goods in transit: Goods are considered as simply being transported through a country if they (a) enter and leave the compiling country solely for the purpose of being transported to another country, (b) are not subject to halts not inherent to the transportation and (c) can be identified when both entering and leaving the country.

General imports and exports: Are flows of goods entering/leaving the statistical territory of a country applying the general trade system and recorded in compliance with the general and specific guidelines.

General imports consist of:

(a) Imports of foreign goods (including compensating products after outward processing which changed their origin from domestic to foreign) entering the free circulation area, premises for inward processing, industrial free zones, premises for customs warehousing or commercial free zones;

(b) Re-imports of domestic goods into the free circulation area, premises for inward processing or industrial free zones, premises for customs warehousing or commercial free zones.

General exports consist of:

(a) Exports of domestic goods (including compensating products after inward processing which changed their origin from foreign to domestic) from any part of the statistical territory, including free zones and customs warehouses;

(b) Re-exports of foreign goods from any part of the statistical territory, including free zones and customs warehouses.

Global Market: For the purpose of this report, the term represents the sum of imports (either in US$ or volume terms) of a particular good of all countries who reported these data to the UN Comtrade database. Important to mention, the term doesn't include local production of that good, which may account for a large part. Thus, the term covers only global Imports flow.

The Harmonized Commodity Description and Coding Systems (HS, Harmonized System): an internationally recognized commodity classification developed and maintained by The World Customs Organization (WCO). The system is used by more than 200 countries and economies as a basis for their Customs tariffs and for the collection of international trade statistics. Over 98 % of the merchandise in international trade is classified in terms of the HS. The HS comprises over 5,600 separate groups of goods identified by a 6-digit code, arranged in 99 chapters, grouped in 21 sections.

HS Code: At the international level, the Harmonized System for classifying goods is a six-digit code system (HS code, Commodity Code, Product Code), which can be broken down into three parts. The first two digits (HS-2) identify the chapter the goods are classified in, e.g., 01 Animals; live. The next two digits (HS-4) identify groupings within that chapter (the heading), e.g., 0104 - Sheep and goats; live. The following two digits (HS-6) are even more specific (the subheading), e.g., 010410 - Sheep; live. Up to the HS-6 digit level, all countries classify products in the same way (a few exceptions exist where some countries apply old versions of the HS).

Imports penetration: Import penetration ratios are defined as the ratio between the value of imports as a percentage of total domestic demand. The import penetration rate shows to what degree domestic demand D is satisfied by imports M. It is calculated as M/D, where the domestic demand is the GDP minus exports plus imports i.e. [D = GDP-X+M]. From a macroeconomic perspective, a country that produces manufactured goods with a high degree of international competitiveness will see decreasing imports. Under these circumstances, the import penetration rate will fall. Conversely, a country that produces manufactured goods with a low degree of international competitiveness will see increasing imports. In this case, the import penetration will rise. It must be noted, however, that the relationship described here does not always hold. Two factors – Import barriers and transaction costs – may interfere with it. If a country has established import barriers, another country's comparatively better manufactured goods will have little impact on its imports, and its import penetration rate will not rise. Likewise, if transportation and other transaction costs are extremely high for traded goods, differences in international competitiveness may not be reflected in the import penetration rate.

LIST OF ABBREVIATIONS AND TERMS USED

International merchandise trade statistics: Refers to both foreign (or external) merchandise trade statistics as compiled by countries and international merchandise trade statistics as represented by the consolidated and standardized country data sets that are compiled and maintained by the international or regional agencies.

Importer/exporter: In general, refers to the party in the customs territory who signed the contract of purchase/sale and/or who is responsible for executing the contract (i.e., the agent responsible for effecting import into or export from a country). Each importer or exporter is usually assigned a unique identification number.

Imports volume: The number or amount of Imports in general, typically measured in kilograms.

Imputation: Procedure for entering a value for a specific data item where the response is missing or unusable.

Imports value: The price actually paid for all imported units (by quantity unit) of the given commodity (unit price multiplied by quantity), or the cost of the commodity if not sold or purchased.

Institutional unit: The elementary economic decision-making center characterized by uniformity of behavior and decision-making autonomy in the exercise of its principal function.

K: thousand (e.g. US$ 10K)

Ktons: thousand tons (e.g. 1 Ktons)

LTM: For the purpose of this report, LTM means Last Twelve Months for which the trade data are available. This period may not coincide with calendar period though, which is often the case with the trade data.

Long-term growth rate: For the purpose of this report, it is a metric that is used to express the change in a variable, represented as a percentage, ans is used interchangeably with CAGR.

Long-Term: For the purpose of this report, it is equivalent to a period used for calculation of CAGR.

M: million (e.g. US$ 10M)

Market: For the purpose of this report the terms Market and Imports may be used interchangeably, since both refer to a particular good which is bought and sold in particular country. The distinctive feature is that the Market term includes only imports of a particular good to a particular country. It does not include domestic production of such good or anything else.

Microdata: Data on the characteristics of individual transactions collected by customs or other sources (such as administrative records or surveys) or estimated.

Macrodata: Data derived from microdata by grouping or aggregating them, such as total exports of goods classified in a particular HS subheading.

Mirror statistics: Mirror statistics are used to conduct bilateral comparisons of two basic measures of a trade flow and are a traditional tool for detecting the causes of asymmetries in statistics.

Mean value: The arithmetic mean, also known as "arithmetic average", is a measure of central tendency of a finite set of numbers: specifically, the sum of the values divided by the number of values.

Median value: Is the value separating the higher half from the lower half of a data sample, a population, or a probability distribution.

Marginal Propensity to Import: Is the amount imports increase or decrease with each unit rise or decline in disposable income. The idea is that rising income for businesses and households spurs greater demand for goods from abroad and vice versa.

Trade Freedom Classification: Trade freedom is a composite measure of the absence of tariff and non-tariff barriers that affect imports and exports of goods and services. The trade freedom score is based on two inputs:

> The trade-weighted average tariff rate and

> Non-tariff barriers (NTBs).

For more information on the methodology, please, visit: https://www.heritage.org/index/trade-freedom

Market size (Market volumes): For the purpose of this report, it refers to the total number of specific good (in US$ or volume values) which added to the stock of relevant material resources in a certain period of time (often measured over the course of a year). This term may refer to country, region, or world (global) levels.

Net weight (kilograms): the net shipping weight, excluding the weight of packages or containers.

LIST OF ABBREVIATIONS AND TERMS USED

OECD: The Organisation for Economic Co-operation and Development (OECD) is an intergovernmental organisation with 38 member countries, founded in 1961 to stimulate economic progress and world trade. It is a forum whose member countries describe themselves as committed to democracy and the market economy, providing a platform to compare policy experiences, seek answers to common problems, identify good practices, and coordinate domestic and international policies of its members. The majority of OECD Members are high-income economies ranked as "very high" in the Human Development Index, and are regarded as developed countries. Their collective population is 1.38 billion. As of 2017, OECD Member countries collectively comprised 62.2% of global nominal GDP (USD 49.6 trillion) and 42.8% of global GDP (Int$54.2 trillion) at purchasing power parity.

The OECD Country Risk Classification measures the country credit risk and the likelihood that a country will service its external debt. The index uses a scale of eight risk categories to determine a country's credit risk, with 0 representing the lowest level of country risk. For more information, visit https://www.oecd.org/

Official statistics: Statistics produced in accordance with the Fundamental Principles of Official Statistics by a national statistical office or by another producer of official statistics that has been mandated by the national government or certified by the national statistical office to compile statistics for its specific domain.

Proxy price: For the purpose of this report, the term is a broad representation of actual price of a specific good in a specific market. Proxy price acts as a substitute for actual price for the reason of being calculated rather than obtained from the market directly. Proxy price implies very closer meaning as unit values used in international trade statistics.

Prices: For the purpose of this report the term always refers to prices on imported goods, except for explicit definitions, e.g. consumer price index.

Production: Economic production may be defined as an activity carried out under the control and responsibility of an institutional unit that uses inputs of labor, capital, and goods and services to produce outputs of goods or services.

Physical volumes: For the purpose of this report, this term indicates foreign trade (imports or exports flows) denominated in units of measure of weight, typically in kilograms.

Quantity units (Volume terms): refer to physical characteristics of goods. The use of appropriate quantity units may also result in more internationally comparable data on international movements of goods, because differences in quantity measurements between the importing country and the exporting country can be less significant than in value measurements. Therefore, quantities are often used in checking the reliability of the value data via the calculation of so-called unit values (value divided by quantity). It is recommended that countries collect or estimate, validate and report quantity information in the World Customs Organization (WCO) standard units of quantity (e.g. kilograms) and in net weight (i.e. not including packaging) on all trade transactions.

RCA Index: Revealed Comparative Advantage Index Comparative advantage underlies economists' explanations for the observed pattern of inter-industry trade. In theoretical models, comparative advantage is expressed in terms of relative prices evaluated in the absence of trade. Since these are not observed, in practice we measure comparative advantage indirectly. Revealed comparative advantage indices (RCA) use the trade pattern to identify the sectors in which an economy has a comparative advantage, by comparing the country of interests' trade profile with the world average. The RCA index is defined as the ratio of two shares. The numerator is the share of a country's total exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports.

$$RSA = \frac{\sum_d x_{isd} \big/ \sum_d X_{sd}}{\sum_{wd} x_{iwd} \big/ \sum_{wd} X_{wd}},$$

where
s is the country of interest,
d and **w** are the set of all countries in the world,
i is the sector of interest,
x is the commodity export flow and
X is the total export flow.

The numerator is the share of good i in the exports of country s, while the denominator is the share of good i in the exports of the world.

Re-imports: Are imports of domestic goods which were previously recorded as exports.

Re-exports: Are exports of foreign goods which were previously recorded as imports.

LIST OF ABBREVIATIONS AND TERMS USED

Real Effective Exchange Rate (REER): It is an indicator of a nation's competitiveness in relation to its trading partners. It is a measure of the relative strength of a nation's currency in comparison with those of the nations it trades with. It is used to judge whether the nation's currency is undervalued or overvalued or, ideally, fairly valued. Economists use REER to evaluate a country's trade flow and analyze the impact that factors such as competition and technological changes are having on a country and its economy. An increase in a nation's REER means businesses and consumers have to pay more for the products they export, while their own people are paying less for the products that it imports. It is losing its trade competitiveness, but the environment gets more favorable to Imports.

Short-term growth rate: For the purpose of this report, it is a metric that is used to express the change in a variable, represented as a percentage, and used interchangeably with LTM.

Statistical data: Data collected, processed or disseminated by a statistical organization for statistical purposes.

Seasonal adjustment: Statistical method for removing the seasonal component of a time series.

Seasonal component: Fluctuations in a time series that exhibit a regular pattern at a particular time during the course of a year which are similar from one year to another.

Short-Term: For the purpose of this report, it is equivalent to the LTM period.

T: tons (e.g. 1T)

Trade statistics: For the purposes of this report, the term will be used to refer to international, foreign or external merchandise trade statistics, unless otherwise indicated, and the term "merchandise" has the same meaning as the terms, "products", "goods" and "commodities".

Total value: The price actually paid for all units (by quantity unit) of the given commodity (unit price multiplied by quantity), or the cost of the commodity if not sold or purchased.

Re-exports: Are exports of foreign goods which were previously recorded as imports.

Time series: A set of values of a particular variable at consecutive periods of time.

Tariff binding: Maximum duty level on a product listed in a member's schedule of commitments; it represents the commitment not to exceed the duty applied on the concerned product beyond the level bound in the schedule. Once a rate of duty is bound, it may not be raised without compensating the affected parties. For developed countries, the bound rates are generally the rates actually charged. Most developing countries have bound the rates somewhat higher than the actual rates charged, so the bound rates serve as ceilings.

The terms of trade (ToT): is the relative price of exports in terms of imports and is defined as the ratio of export prices to import prices. It can be interpreted as the amount of import goods an economy can purchase per unit of export goods. An improvement of a nation's terms of trade benefits that country in the sense that it can buy more imports for any given level of exports. The terms of trade may be influenced by the exchange rate because a rise in the value of a country's currency lowers the domestic prices of its imports but may not directly affect the prices of the commodities it exports.

Trade Dependence, %GDP: Is the sum of exports and imports of goods and services measured as a share of gross domestic product. This indicator shows to what extent the country's economy relies on foreign trade as compared to its GDP.

US$: US dollars

WTO: the World Trade Organization (WTO) is an intergovernmental organization that regulates and facilitates international trade. The World Trade Organization (WTO) is the only global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to ensure that trade flows as smoothly, predictably and freely as possible. With effective cooperation in the United Nations System, governments use the organization to establish, revise, and enforce the rules that govern international trade. It officially commenced operations on 1 January 1995, pursuant to the 1994 Marrakesh Agreement, thus replacing the General Agreement on Tariffs and Trade (GATT) that had been established in 1948. The WTO is the world's largest international economic organization, with 164 member states representing over 98% of global trade and global GDP.

Y: year (e.g. 5Y – five years)

Y-o-Y: Year-over-year (YOY) is a financial term used to compare data for a specific period of time with the corresponding period from the previous year. It is a way to analyze and assess the growth or decline of a particular variable over a twelve-month period.

METHODOLOGY

Following is a list of use cases of application of specific words combinations across the report. The selection is based on calculated values of corresponding indicators.

1. **Country Market Trend:**
   - In case the calculated growth rates for the LTM period exceeded the value of 5Y CAGR by 0.5 percentage points or more, then **"surpassed"** is used, if it was 0.5 percentage points or more lower than 5Y CAGR then it is **"underperformed"**. In case, if the calculated growth rate for the LTM period was within the interval of 5Y CAGR +- 5 percentage points (including boundary values), then either **"followed"** or **"was comparable to"** is used.

2. **Global Market Trends US$-terms:**
   - If the "Global Market US$-terms CAGR, %" value was less than 0%, the **"declining"** is used,
   - If the "Global Market US$-terms CAGR, %" value was more than or equal to 0% and less than 4%, then **"stable"** is used,
   - If the "Global Market US$-terms CAGR, %" value was more than or equal to 4% and less than 6%, then **"growing"** is used,
   - If the "Global Market US$-terms CAGR, %" value was more than 6%, then **"fast growing"** is used.

3. **Global Market Trends t-terms:**
   - If the "Global Market t-terms CAGR, %" value was less than 0%, the **"declining"** is used,
   - If the "Global Market t-terms CAGR, %" value was more than or equal to 0% and less than 4%, then **"stable"** is used,
   - If the "Global Market t-terms CAGR, %" value was more than or equal to 4% and less than 6%, then **"growing"** is used,
   - If the "Global Market t-terms CAGR, %" value was more than 6%, then **"fast growing"** is used.

4. **Global Demand for Imports:**
   - If the calculation of the change in share of a specific product in the total imports of the country was more than 0.5 percentage points, then the **"growing"** was used,
   - If the calculation of the change in share of a specific product in the total imports of the country was less than 0.5%, then the **"declining"** was used,
   - If the calculation of the change in share of a specific product in the total imports of the country was within the range of +- 0.5% (including boundary values), then the **"remain stable"** was used,

5. **Long-term market drivers:**
   - **"Growth in Prices accompanied by the growth in Demand"** is used, if the "Global Market t-terms CAGR, %" was more than 2% and the "Inflation 5Y average" was more than 0% and the "Inflation contribution to US$-term CAGR%" was more than 50%,
   - **"Growth in Demand"** is used, if the "Global Market t-terms CAGR, %" was more than 2% and the "Inflation 5Y average" was more than 0% and the "Inflation contribution to US$-term CAGR%" was less than or equal to 50%,
   - **"Growth in Prices"** is used, if the "Global Market t-terms CAGR, %" was more than 0% or less than or equal to 2%, and the "Inflation 5Y average" was more than 4%,
   - **"Stable Demand and stable Prices"** is used, if the "Global Market t-terms CAGR, %" was more than or equal to 0%, and the "Inflation 5Y average" was more than of equal to 0% and less than or equal to 4%,
   - **"Growth in Demand accompanied by declining Prices"** is used, if the "Global Market t-terms CAGR, %" was more than 0%, and the "Inflation 5Y average" was less than 0%,
   - **"Decline in Demand accompanied by growing Prices"** is used, if the "Global Market t-terms CAGR, %" was less than 0%, and the "Inflation 5Y average" was more than 0%,
   - **"Decline in Demand accompanied by declining Prices"** is used, if the "Global Market t-terms CAGR, %" was less than 0%, and the "Inflation 5Y average" was less than 0%,

6. **Rank of the country in the World by the size of GDP:**
   - **"Largest economy"**, if GDP (current US$) is more than 1,800.0 B,
   - **"Large economy"**, if GDP (current US$) is less than 1,800.0 B and more than 1,000.0 B,
   - **"Midsize economy"**, if GDP (current US$) is more than 500,0.0 B and less than 1,000.0 B,
   - **"Small economy"**, if GDP (current US$) is more than 50.0 B and less than 500.0 B,
   - **"Smallest economy"**, if GDP (current US$) is less than 50.0 B,
   - **"Impossible to define due to lack of data"**, if the country didn't provide data.

7. **Economy Short Term Growth Pattern:**
   ◦ **"Fastest growing economy"**, if GDP growth (annual %) is more than 17%,
   ◦ **"Fast growing economy"**, if GDP growth (annual %) is less than 17% and more than 10%,
   ◦ **"Higher rates of economic growth"**, if GDP growth (annual %) is more than 5% and less than 10%,
   ◦ **"Moderate rates of economic growth"**, if GDP growth (annual %) is more than 3% and less than 5%,
   ◦ **"Slowly growing economy"**, if GDP growth (annual %) is more than 0% and less than 3%,
   ◦ **"Economic decline"**, if GDP growth (annual %) is between -5 and 0%,
   ◦ **"Economic collapse"**, if GDP growth (annual %) is less than -5%,
   ◦ **"Impossible to define due to lack of data"**, if the country didn't provide data.

8. **Classification of countries in accordance to income level.** The methodology has been provided by the World Bank, which classifies countries in the following groups:
   ◦ **low-income economies** are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of $1,135 or less in 2022,
   ◦ **lower middle-income economies** are those with a GNI per capita between $1,136 and $4,465,
   ◦ **upper middle-income economies** are those with a GNI per capita between $4,466 and $13,845,
   ◦ **high-income economies** are those with a GNI per capita of $13,846 or more,
   ◦ **"Impossible to define due to lack of data"**, if the country didn't provide data.

For more information, visit https://datahelpdesk.worldbank.org

9. **Population growth pattern:**
   ◦ **"Quick growth in population"**, in case annual population growth is more than 2%,
   ◦ **"Moderate growth in population"**, in case annual population growth is more than 0% and less than 2%,
   ◦ **"Population decrease"**, in case annual population growth is less than 0% and more than -5%,
   ◦ **"Extreme slide in population"**, in case annual population growth is less than -5%,
   ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

10. **Short-Term Imports Growth Pattern:**
   ◦ **"Extremely high growth rates"**, in case if Imports of goods and services (annual % growth) is more than 20%,
   ◦ **"High growth rates"**, in case if Imports of goods and services (annual % growth) is more than 10% and less than 20%,
   ◦ **"Stable growth rates"**, in case if Imports of goods and services (annual % growth) is more than 0% and less than 10%,
   ◦ **"Moderately decreasing growth rates"**, in case if Imports of goods and services (annual % growth) is less than 0% and more than -10%,
   ◦ **"Extremely decreasing growth rates"**, in case if Imports of goods and services (annual % growth) is less than -10%,
   ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

11. **Country's Short-Term Reliance on Imports:**
   ◦ **"Extreme reliance"**, in case if Imports of goods and services (% of GDP) is more than 100%,
   ◦ **"High level of reliance"**, in case if Imports of goods and services (% of GDP) is more than 50% and less than 100%,
   ◦ **"Moderate reliance"**, in case if Imports of goods and services (% of GDP) is more than 30% and less than 50%,
   ◦ **"Low level of reliance"**, in case if Imports of goods and services (% of GDP) is more than 10% and less than 30%,
   ◦ **"Practically self-reliant"**, in case if Imports of goods and services (% of GDP) is more than 0% and less than 10%,
   ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

12. **Short-Term Inflation Profile:**
   ◦ **"Extreme level of inflation"**, in case if Inflation, consumer prices (annual %) is more than 40%,
   ◦ **"High level of inflation"**, in case if Inflation, consumer prices (annual %) is more than 20% and less than 40%,
   ◦ **"Elevated level of inflation"**, in case if Inflation, consumer prices (annual %) is more than 10% and less than 20%,
   ◦ **"Moderate level of inflation"**, in case if Inflation, consumer prices (annual %) is more than 4% and less than 10%,
   ◦ **"Low level of inflation"**, in case if Inflation, consumer prices (annual %) is more than 0% and less than 4%,
   ◦ **"Deflation"**, in case if Inflation, consumer prices (annual %) is less than 0%,
   ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

13. **Long-Term Inflation Profile:**
   ◦ **"Inadequate inflationary environment"**, in case if Consumer price index (2010 = 100) is more than 10,000%,
   ◦ **"Extreme inflationary environment"**, in case if Consumer price index (2010 = 100) is more than 1,000% and less than 10,000%,
   ◦ **"Highly inflationary environment"**, in case if Consumer price index (2010 = 100) is more than 500% and less than 1,000%,
   ◦ **"Moderate inflationary environment"**, in case if Consumer price index (2010 = 100) is more than 200% and less than 500%,
   ◦ **"Low inflationary environment"**, in case if Consumer price index (2010 = 100) is more than 150% and less than 200%,
   ◦ **"Very low inflationary environment"**, in case if Consumer price index (2010 = 100) is more 100% and less than 150%,
   ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

14. **Short-term ForEx and Terms of Trade environment:**
   ◦ **"More attractive for imports"**, in case if the change in Real effective exchange rate index (2010 = 100) is more than 0,
   ◦ **"Less attractive for imports"**, in case if the change in Real effective exchange rate index (2010 = 100) is less than 0,
   ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

15. **The OECD Country Risk Classification:**
   ◦ **"Risk free country to service its external debt"**, in case if the OECD Country risk index equals to 0,
   ◦ **"The lowest level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 1,
   ◦ **"Low level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 2,
   ◦ **"Somewhat low level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 3,
   ◦ **"Moderate level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 4,
   ◦ **"Elevated level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 5,
   ◦ **"High level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 6,
   ◦ **"The highest level of country risk to service its external debt"**, in case if the OECD Country risk index equals to 7,
   ◦ **"Micro state: not reviewed or classified"**, in case of Andorra, Morocco, San Marino, because these are very small countries that do not generally receive official export credit support.
   ◦ **"High Income OECD country"**: not reviewed or classified", in case of Australia, Austria, Belgium, Croatia, Cyprus, Canada, Chile, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Rep., Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States, because these are high income OECD countries and other high income Euro zone countries that are not typically classified.
   ◦ **"Currently not reviewed or classified"**, in case of Barbados, Belize, Brunei Darussalam, Comoros, Dominica, Grenada, Kiribati, Liechtenstein, Macao SAR, China, Marshall Islands, Micronesia, Fed. Sts., Nauru, Palau, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Samoa, Sao Tome and Principe, Seychelles, Sint Maarten, Solomon Islands, Tonga, Tuvalu, Vanuatu, because these countries haven't been classified.
   ◦ **"There are no data for the country"**, in case if the country is not being classified.

16. **Trade Freedom Classification.** The Index of Economic Freedom is a tool for analyzing 184 economies throughout the world. It measures economic freedom based on 12 quantitative and qualitative factors, grouped into four broad categories, or pillars, of economic freedom: (1) Rule of Law (property rights, government integrity, judicial effectiveness), (2) Government Size (government spending, tax burden, fiscal health), (3) Regulatory Efficiency (business freedom, labor freedom, monetary freedom), (4) Open Markets (trade freedom, investment freedom, financial freedom). For the purpose of this report we use the Trade freedom subindex to reflect country's position in the world with respect to international trade.
   ◦ **"Repressed"**, in case if the Trade freedom subindex is less than or equal to 50 and more than 0,
   ◦ **"Mostly unfree"**, in case if the Trade freedom subindex is less than or equal to 60 and more than 50,
   ◦ **"Moderately free"**, in case if the Trade freedom subindex is less than or equal to 70 and more than 60,
   ◦ **"Mostly free"**, in case if the Trade freedom subindex is less than or equal to 80 and more than 70,
   ◦ **"Free"**, in case if the Trade freedom subindex is less than or equal to 100 and more than 80,
   ◦ **"There are no data for the country"**, in case if the country is not being classified.

17. **The competition landscape / level of risk to export to the specified country:**
    ◦ **"risk free with a low level of competition from domestic producers of similar products"**, in case if the RCA index of the specified product falls into the 90th quantile,
    ◦ **"somewhat risk tolerable with a moderate level of local competition"**, in case if the RCA index of the specified product falls into the range between the 90th and 92nd quantile,
    ◦ **"risk intense with an elevated level of local competition"**, in case if the RCA index of the specified product falls into the range between the 92nd and 95th quantile,
    ◦ **"risk intense with a high level of local competition"**, in case if the RCA index of the specified product falls into the range between the 95th and 98th quantile,
    ◦ **"highly risky with extreme level of local competition or monopoly"**, in case if the RCA index of the specified product falls into the range between the 98th and 100th quantile,
    ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

18. **Capabilities of the local businesses to produce similar competitive products:**
    ◦ **"low"**, in case the competition landscape is risk free with a low level of competition from domestic producers of similar products,
    ◦ **"moderate"**, in case the competition landscape is somewhat risk tolerable with a moderate level of local competition,
    ◦ **"promising"**, in case the competition landscape is risk intense with an elevated level of local competition or risk intense with a high level of local competition,
    ◦ **"high"**, in case the competition landscape is highly risky with extreme level of local competition or monopoly,
    ◦ **"Impossible to define due to lack of data"**, in case there are not enough data.

19. **The strength of the effect of imports of particular product to a specified country:**
    ◦ **"low"**, in case if the share of the specific product is less than 0.1% in the total imports of the country,
    ◦ **"moderate"**, in case if the share of the specific product is more than or equal to 0.1% and less than 0.5% in the total imports of the country,
    ◦ **"high"**, in case if the share of the specific product is equal or more than 0.5% in the total imports of the country.

20. **A general trend for the change in the proxy price:**
    ◦ **"growing"**, in case if 5Y CAGR of the average proxy prices, or growth of the average proxy prices in LTM is more than 0,
    ◦ **"declining"**, in case if 5Y CAGR of the average proxy prices, ot growth of the average proxy prices in LTM is less than 0,

21. **The aggregated country's ranking to determine the entry potential of this product market:**
    ◦ **Scores 1-5:** Signifying high risks associated with market entry,
    ◦ **Scores 6-8:** Indicating an uncertain probability of successful entry into the market,
    ◦ **Scores 9-11:** Suggesting relatively good chances for successful market entry,
    ◦ **Scores 12-14:** Pointing towards high chances of a successful market entry.

22. **Global market size annual growth rate, the best-performing calendar year:**
    ◦ **"Growth in Prices accompanied by the growth in Demand"** is used, if the "Country Market t-term growth rate, %" was more than 2% and the "Inflation growth rate, %" was more than 0% and the "Inflation contribution to $-term growth rate, %" was more than 50%,
    ◦ **"Growth in Demand"** is used, if the "Country Market t-term growth rate, %" was more than 2% and the "Inflation growth rate, %" was more than 0% and the "Inflation contribution to $-term growth rate, %" was less than or equal to 50%,
    ◦ **"Growth in Prices"** is used, if the "Country Market t-term growth rate, %" was more than 0% and less than or equal to 2%, and the "Inflation growth rate, %" was more than 4%,
    ◦ **"Stable Demand and stable Prices"** is used, if the "Country Market t-term growth rate, %" was more than or equal to 0% and less than or equal to 2%, and the "Inflation growth rate, %" was more than of equal to 0% and less than or equal to 4%,
    ◦ **"Growth in Demand accompanied by declining Prices"** is used, if the "Country Market t-term growth rate, %" was more than 0%, and the "Inflation growth rate, %" was less than 0%,
    ◦ **"Decline in Demand accompanied by growing Prices"** is used, if the "Country Market t-term growth rate, %" was less than 0%, and the "Inflation growth rate, %" was more than 0%.

23. **Global market size annual growth rate, the worst-performing calendar year:**

- **"Declining average prices"** is used if "Country Market t term growth rate, % is more than 0%, and "Inflation growth rate, %" is less than 0%

- **"Low average price growth"** is used if "Country Market t term growth rate, % is more than 0%, and "Inflation growth rate, %" is more than 0%,

- **"Biggest drop in import volumes with low average price growth"** is used if "Country Market t term growth rate, % is less than 0%, and "Inflation growth rate, %" is more than 0%,

- **"Decline in Demand accompanied by decline in Prices"** is used if "Country Market t term growth rate, % is less than 0%, and "Inflation growth rate, %" is less than 0%.

24. **TOP-5 Countries Ranking:**
Top-10 biggest suppliers in last calendar year are being ranked according to 4 components:

   1. share in imports in LTM,

   2. proxy price in LTM,

   3. change of imports in US$-terms in LTM, and

   4. change of imports in volume terms in LTM

Each of the four components ranges from 1 to 10, with 10 being the highest. The aggregated score is being formed as a sum of scores of ranking of each component. However, in case if countries get similar scores, the ranking of the first component prevails in selection.

25. **Export potential:**
As a part of risks estimation component and business potential of export to the country, a system of ranking has been introduced. It helps to rank a country based on a set of macroeconomic and market / sectoral parameters covered in this report. Seven ranking components have been selected:

   1. Long-term trends of Global Demand for Imports (refer to pages 17-20 of the report)

   2. Strength of the Demand for Imports in the selected country (refer to pages 22-23 of the report)

   3. Macroeconomic risks for Imports in the selected country (refer to pages 22-23 of the report)

   4. Market entry barriers and domestic competition pressures for imports of the good (refer to pages 22-24 of the report)

   5. Long-term trends of Country Market (refer to pages 26-29 of the report)

   6. Short-term trends of Country Market, US$-terms (refer to pages 30-31 of the report)

   7. Short-term trends of Country Market, volumes and proxy prices (refer to pages 32-35 of the report)

Each component includes 4-6 specific parameters. All parameters are evaluated on a scale from 0 to 6, with 0 being the lowest/ less favorable value or characteristic. An aggregated rank is a total country's score that includes scores of each specific ranking component. Each component is evaluated on a scale from 0 to 2, with 0 being the lowest score. The highest possible aggregated country's score is 14 points (up to 2 points for each of 7 ranking components). Aggregated country's rank is a sum of points gained for each ranking component. It ranges from 0 to 14 points. An aggregated rank describes risks and imports potential of the selected country with the selected product.

26. **Market volume that may be captured in the mid-term:**
The result of the market research is an approximation of the potential supply volume for the specific product in the designated market, provided the continuation of the identified trends in the future. The potential supply volume comprises two components:

   1. **Component 1** is related to the ongoing trend in market development. The calculation is based on the anticipated average monthly market growth, derived from the trend observed over the past 24 months (you can find this trend currently calculated for tons on the report page 32). The assumption is that the identified trend will remain unchanged, and the calculated average monthly increase is applied to actual data on the volume of average monthly import supplies over the last 12 months, along with the corresponding average price. Simultaneously, the computation is based on the idea that a new supplier could secure a market share equivalent to the average share held by the top 10 largest suppliers in this market over the past 12 months: The potential supply in dollars per month for a new player, according to Component 1, is calculated by multiplying the following factors: Average monthly volume of imports into the country in tons × Average monthly increase in imports over the last 24 months (month-on-month growth) × Average market share for the top 10 supplying countries × Average import price over the last 12 months Component 1 could be zero in the event of a negative short-term trend in imports of the specified product into the country over the past 24 months.

   2. **Component 2** signifies the extra potential supply linked to the potential strong competitive advantage of the new supplier. Its calculation is based on the factual parameters of supplying countries that have experienced the highest growth in their supplies to the chosen country over the past 12 months. The assumption is that this increase is attributed to their respective competitive advantages. The potential supply volume in dollars per month for a new player, based on Component 2, is calculated by dividing the average increase in imports in tons over the last 12 months compared to the previous 12 months for the top 5 countries that have most increased imports into the country by 12 months. The result is then multiplied by the average import price over the last 12 months.

The total increase is determined by summing the values obtained from the two components.

CONTACTS & FEEDBACK

We encourage you to stay with us, as we continue to develop and add new features to GTAIC. Market forecasts, global value chains research, deeper country insights, and other features are coming soon.

If you have any ideas on the scope of the report or any comment on the service, please let us know by e-mailing to sales@gtaic.ai. We are open for any comments, good or bad, since we believe any feedback will help us develop and bring more value to our clients.

Connect with us

EXPORT HUNTER, UAB
Konstitucijos pr.15-69A, Vilnius, Lithuania

sales@gtaic.ai

Follow us:

{ GTAIC } Global Trade Algorithmic
Intelligence Center