Recent trade patterns: slowdown, volatility and heterogeneity
KEY STATISTICS and TRENDS in INTERNATIONAL TRADE 2023

Recent trade patterns: slowdown, volatility and heterogeneity
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NOTE

*Key Statistics and Trends in International Trade* is a yearly publication of the Division on International Trade and Commodities of UNCTAD. This publication monitors the trends of international trade in goods and services in the medium term.

The series is part of a larger effort by UNCTAD to analyse trade-related issues of particular importance for developing countries, as outlined in paragraphs 107 and 113 of the Bridgetown Covenant of UNCTAD XV. Alessandro Nicita and Ksenia Koloskova compiled this study, which also benefited from inputs and comments from other staff members, including the UNCTAD statistics team. Desktop publishing was carried out by Jenifer Tacardon-Mercado.
OVERVIEW

Global trade has followed a highly volatile pattern since the onset of the COVID-19 pandemic. Fragmentation and increased heterogeneity of trade performance characterize not only the rebound of 2021 and 2022 but also the recent trade slowdown, albeit to a lesser extent. While it is premature to definitively assert whether the recent trend is a substantial departure from established global trade trends, it appears possible that COVID-19 disruptions initiated a significant shift in global trade, now fuelled by systemic patterns tied to geopolitical issues and risk-mitigating strategies. The convergence of these factors raises the possibility that global trade patterns will be undergoing more significant changes, ushering in a new era with distinct challenges and opportunities for economies worldwide. Monitoring these developments closely is crucial in understanding the implications of evolving trade dynamics for developing countries.

This report is structured into two parts. The first part presents a short-term overview of the status of international trade using preliminary statistics on merchandise trade until the first half of 2023. The second part provides illustrative statistics on international trade in goods and services covering the medium term. The second part is divided into two sections. Section 1 provides trade statistics at various levels of aggregation that illustrate the evolution of trade across economic sectors and geographic regions. Section 2 presents trade indicators to inform on some specifics of the trade patterns at the country level.
DATA SOURCES

The statistics in this publication were produced by UNCTAD using data from various sources. This report relies on the United Nations Commodity Trade Statistics Database (COMTRADE) (comtrade.un.org) data for merchandise trade statistics. UNCTADStat (unctadstat.unctad.org) is the source of service statistics. Quarterly data for merchandise trade comes from national authorities’ statistics. The data has been standardized to facilitate cross-country comparisons. Data, although comprehensive and comparable across countries, does not perfectly reflect national statistics, and thus some discrepancies with specific national statistics may be present. Unless otherwise specified international trade is defined as trade in goods (merchandise) and services. Countries are categorized by geographic region as defined by the United Nations classification (UNSD M49). Developed countries are those identified in the UNSD M49 according to the distinction as of December 2021. Product sectors are categorized according to the Broad Economic Categories (BEC) classification and the International Standard Industrial Classification (ISIC) augmented by five broad agricultural sectors based on the Harmonized System (HS) classification. Figures are in current United States of America dollars, except where otherwise specified.

The boundaries, colours, denominations, and other information shown on any map in this work do not imply any judgment on the part of UNCTAD concerning the legal status of any territory or the endorsement or acceptance of such boundaries.
Global trade has followed a highly volatile pattern since the onset of the COVID-19 pandemic. Both economic and non-economic disruptions have had significant effects on global trade since 2020. Fragmentation and increased heterogeneity of trade performance characterize not only the rebound of 2021 and 2022 but also the most recent trade slowdown, albeit to a lesser extent.

**Global trade trends**

Several key phases describe the trends of global trade in the last few years. First, the decline of global trade in 2020 was the largest since the global financial crisis of 2008/09 and worse than that resulting from the economic instabilities of 2015. Second, the trade decline was short-lived, as the value of global trade rapidly rebounded in 2021 due to a strong recovery in global demand and rising commodity prices. Third, the rebound carried into 2022 as the value of global trade reached record levels. Fourth, the rebound started to fade in the second half of 2022 as mounting geopolitical tensions increased economic uncertainty and contributed to changes in trading patterns. As of 2023, global trade has entered a new phase marked by a significant decline compared to the record reached in 2022. Moreover, lingering economic

**Trade and GDP Growth**

Source: UNCTAD calculations, based on data from UNCTADStat, UN Comtrade and National Statistics.
risks, geopolitical tensions, lower commodity prices and evolving economic dynamics will likely weaken trade growth in the near future.

In value terms, global trade in goods and services rebounded to about US$ 28 trillion in 2021 from the lows of the COVID-19 pandemic and further grew to about US$ 32 trillion in 2022. The value of international trade is expected to moderately decline to around US$ 31 trillion in 2023, driven by lower global demand, particularly for goods. On a positive note, trade volumes have been less volatile in recent years and are expected to remain stable in 2023. Trade in services has also proved to be more resilient, with its value reaching approximately US$ 7 trillion in 2022 and expected to increase by about US$ 500 billion in 2023. Similar to 2019, 2023 will be a year when the expansion of global GDP is accompanied by negative trade growth. The ratio of global exports to global output is expected to decline by about 1.5 percentage points from the all-time record 30.5 per cent in 2022.

Export trends in first half of 2023

The trade decline in the first half of 2023 has been geographically widespread as many economies experienced negative export growth. Among the countries where the declines were larger are those which exports are mainly energy and fuels. Nevertheless, energy markets have also been influenced by geopolitical factors with some of the energy exporting countries seeing an increase in their exports. Countries where exports have increased during the first half of 2023 include Brazil, Mexico, the Bolivarian Republic of Venezuela, the European Union, some African countries, and most of the central Asian economies. However, for many economies with positive export growth, the numbers were mostly modest (less than 10 per cent).

On an aggregated basis, the recent decline in international trade has occurred both for developed and developing countries, to varying extents. Trade among developed countries (North-North) declined relatively less than trade in other directions. Moreover, exports of developed countries to developing countries (North-South) also fared better than trade among developing countries (South-South).
originating from developing countries. Exports of developing economies to both developing (South-South) and
developed (South-North) countries performed worse than average during the first half of 2023. Importantly, when
not considering the three major global economies these patterns become even more negative. This suggests that
demand for imported goods in the United States
and the European Union was above average, and
that China remains not only an important supplier
to developed countries but also a significant source
of South-South trade. More generally, these trends
indicate that trade involving the three major global
economies continues to be the catalyst of global trade trends. Conversely, the below-average growth of other
developed countries’ trade during the first half of 2023 can be explained by weak export performance in some
developed economies in East Asia and by the decline in commodity prices.

The relatively better performance of the European Union and the United States in trade is also evident
in the regional statistics for Europe and North America. While all geographic regions experienced
negative export growth in the first half of 2023, overall trade declined less in these two regions.
Among other regions, trade declines were more substantial in East Asia and the Rest of Asia regions.
On the other hand, trade declined relatively less in Latin America and the Caribbean. Importantly, while
both intra-regional and extra-regional trade growth was negative for all regions, their changes have been quite diverse. Intra-regional trade performed substantially below its extra-regional counterpart for the European, East Asian, and Rest of Asia regions. Conversely, the
decline in intra-regional trade was marginal for Africa, North America and the Latin America and
Caribbean regions. In these regions, the decline in trade was almost exclusively driven by a decrease in
trade with other geographic areas.

Differences in trade trends are also found in relation
to trade within regional trade agreements (RTAs).
Trade within RTAs is generally expected to be more resilient relative to trade with other countries. One reason
is that such agreements provide mechanisms that can contribute to economic stability, recovery,
and resilience. Notably, this has been the case for trade within the MERCOSUR agreement, which
increased during the first half of 2023. The relatively better performance of intra-RTA trade is also evident
for the Africa Continental Free Trade Area (AfCFTA),
for the United States–Mexico–Canada agreement (USMCA),
and for the intra-European Union trade.
The relatively better performance of intra-RTA trade was observed to a lesser extent for the Eurasian
Economic Union (EAEU) agreement and the Regional
Comprehensive Economic Partnership (RCEP).
Conversely, intra-RTA trade performed relatively worse
within the Comprehensive and Progressive
Agreement for Trans-Pacific Partnership (CPTPP).
One important element of current trade dynamics is the significant difference in the growth rates of trade among economies. Before 2020, trade growth was more uniform across countries, particularly when considering trade performance among high-income countries. However, since 2020, trade performance has become significantly more heterogeneous. The recovery from the COVID-19 pandemic in 2021 was uneven and subsequent economic and non-economic shocks in 2022 were accompanied by substantially higher differences in trade growth rates across countries. While heterogeneity in trade performance has been historically high among low-income countries, the recent trends indicate a substantial increase in the heterogeneity of trade performances among middle and high-income countries.

As of early 2023 these differences have remained higher than historical values for high income economies and above averages for middle-income countries. While this increased heterogeneity is partly driven by volatility in commodity prices, it is not the only cause, as trade performance also displays considerable variation among economies with similarly structured exports. Overall, despite some convergence in the rate of export growth across countries by the end of 2022, differences in trade performance remain substantially above the pre COVID-19 period.

Considering all factors, prevailing evidence suggests that current trade trends are still characterized by heightened volatility and increased heterogeneity compared to historical patterns. While it is premature to definitively assert whether this signifies a substantial departure from established global trade trends, it appears possible that COVID-19 disruptions initiated a significant shift in global trade, now fuelled by systemic patterns tied to geopolitical issues and risk-mitigating strategies. The convergence of these factors raises the possibility that global trade patterns will be undergoing significant changes, ushering in a new era with distinct challenges and opportunities for economies worldwide. Monitoring these developments closely is crucial in understanding the implications of these evolving trade dynamics for developing countries.

Source: UNCTAD calculations, based on data from UNCTADStat, UN Comtrade and National Statistics.

Note: Countries are split into three equal groups according to their level of GDP per capita in 2019. For each time period, top and bottom 5 per cent of observations are dropped to avoid the standard deviation being driven by extreme values.
1. TRENDS IN INTERNATIONAL TRADE

The following section presents a series of figures illustrating the general trends in international trade during the last decade.
In 2022, world trade in goods was valued around US$25 trillion, while trade in services accounted for about US$6.5 trillion. Global trade had been severely affected by the COVID-19 pandemic in 2020 but bounced back strongly in 2021 and continued growing in 2022. While trade in services has been historically more resilient, it has declined considerably more than goods trade during 2020 and has also been recovering at a slower pace, especially for developed countries.

Figure 1
Values and growth rates of world trade in goods and services

International trade can be broadly distinguished between trade in goods (merchandise) and services. The bulk of international trade concerns physical goods, while services account for a much lower share. During the last decade the value of the trade in goods has been volatile. Goods trade increased from about US$15 trillion in 2010 to about US$18 trillion in 2011 but remained almost unchanged between 2011 and 2014. Following a trade slump in 2015 and 2016, goods trade peaked again in 2019 but then fell to about US$17 trillion in 2020 because of the COVID-19 trade disruptions and economic downturn. Trade in goods bounced back in already in 2021 and peaked in 2022 at about US$ 25 trillion. By contrast, trade in services shows little volatility and steadily increased between 2010 and 2019 (from about US$4 trillion to close to US$6 trillion). Since 2020, trade in services has been recovering at a slower pace than trade in goods (Figure 1a). The decline in export growth rates for goods was rather similar for developed and developing countries during the trade slump in 2015/16 and the COVID-19 pandemic, however, pronounced differences are observable for services. Unlike the recovery from the 2015/2016 episode, when developed and developing countries showed similar export growth rates for both goods and services trade, trade growth in 2021/2022 was higher for developing countries (Figure 1b).
Since 2010, the volume of international trade in goods has increased by about 40 per cent. Trade volumes stalled during the 2015 trade slowdown and declined more recently in 2020 as a consequence of the COVID-19 pandemic. The growth in trade volumes (both imports and exports) has been generally stronger for developing countries. Among major trading economies, China’s export volumes have almost doubled since 2010 but stalled during 2022. For the rest of the major economies, trade volumes have increased at a much lower pace, although United States imports volumes strongly increased in 2021/2022.

**Figure 2**
Volumes of international trade in goods

The volume of international trade in goods has increased dramatically since 2010 (Figure 2a). While developing countries performed better compared to developed countries and have almost doubled their volume of trade in goods since 2010, developed countries have not been lagging much behind over the same period. Since 2016, import volumes have been growing relatively more than export volumes for developing countries. The relatively larger increase in the volumes of imports can be explained by the increase in consumer demand in developing countries. Growth in trade volumes has slowed down substantially in 2015 and turned negative during 2020 as a consequence of the COVID-19 pandemic. Trade volumes rebounded strongly in 2021 and continued to increase in 2022, both for developing and developed countries. Notably, in 2022 import of developed countries increased at a higher pace than that of developing economies. Among major trading economies, the trade volumes of China have almost doubled since 2010, with exports and imports volumes increasing at a similar pace, except for the last two years when exports performed better than imports. Moreover, even during 2020, the growth of trade volumes remained positive for China. However, after a strong increase in 2021, China export volumes have stalled during 2022, while import volumes have declined. For the other major economies, trade volumes have increased at a much lower pace, although United States imports has performed particularly strongly in the wake of the COVID-19 pandemic.
The value of trade in goods is about equally shared between developing and developed countries. By contrast, about two thirds of trade in services are associated with developed countries. BRICS account for an important share of trade in both goods and services. Least Developed Countries (LDCs) share in overall trade remains low.

Figure 3
Values of trade in goods and services by country groups

The relative importance of developed countries as suppliers in international markets is declining. Still, they account for over half of the value of trade in goods and about two thirds of trade in services. In 2022, developed countries’ exports of goods was US$13.5 trillion (Figure 3a), while that of services added up to about US$4.6 trillion (Figure 3b). In 2022, developing countries’ exports summed to around US$11 trillion in regard to goods and about US$1.9 trillion for services. BRICS – Brazil, the Russian Federation, India, China, and South Africa – accounted for more than 40 per cent of developing countries’ goods and services exports. LDCs’ contribution to world trade remains small, although some increases in exports and imports of these countries have been recorded over the past decade.

Source: UNCTAD calculations, based on COMTRADE and UNCTADStat data.
International trade in goods is largely concentrated in developed countries and the East Asian region. Trade among other developing regions is much smaller, with some exceptions for trade in primary products.

Table 1
Composition of trade flows in goods, by importing and exporting regions

<table>
<thead>
<tr>
<th>Trade in 2022 (billion US$)</th>
<th>Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Developed</td>
</tr>
<tr>
<td>Developed</td>
<td>8,370</td>
</tr>
<tr>
<td>East Asia</td>
<td>1,991</td>
</tr>
<tr>
<td>South Asia</td>
<td>254</td>
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<tr>
<td>Rest of Asia</td>
<td>570</td>
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<tr>
<td>Africa</td>
<td>44</td>
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<tr>
<td>Latin America</td>
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<table>
<thead>
<tr>
<th>Change 2021-2022 (per cent)</th>
<th>Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Developed</td>
</tr>
<tr>
<td>Developed</td>
<td>9</td>
</tr>
<tr>
<td>East Asia</td>
<td>3</td>
</tr>
<tr>
<td>South Asia</td>
<td>19</td>
</tr>
<tr>
<td>Rest of Asia</td>
<td>16</td>
</tr>
<tr>
<td>Africa</td>
<td>43</td>
</tr>
<tr>
<td>Latin America</td>
<td>127</td>
</tr>
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<td></td>
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<td></td>
<td>57</td>
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<table>
<thead>
<tr>
<th>Trade in 2015 (billion US$)</th>
<th>Exporters</th>
</tr>
</thead>
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<td>Developed</td>
<td>5,758</td>
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<tr>
<td>East Asia</td>
<td>1,377</td>
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<td>South Asia</td>
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<tr>
<td>Rest of Asia</td>
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<tr>
<td>Africa</td>
<td>469</td>
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<tr>
<td>Latin America</td>
<td>234</td>
</tr>
<tr>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>533</td>
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<tr>
<td></td>
<td>64</td>
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</table>

Source: UNCTAD calculations, based on COMTRADE data.

The number given in the top left of each cell shows the value of bilateral trade in billion US$, the upper right figure in each cell depicts the traded value in agriculture, the bottom left is natural resources and bottom right, manufactures.
Developing countries’ share in international trade in goods has increased during the last decade. In particular, the share of South-South trade steadily increased from around 17 per cent in 2010 to 21 per cent in 2022. Its growth was particularly strong in 2021/2022, adding almost US$ 1.5 trillion relative to pre-pandemic levels. A significant share of South-South trade is with China, which in many cases accounts for a larger share than intraregional trade. Still, the relative significance of intraregional and other South-South (interregional) trade excluding China increased in 2022 compared to 2021 for all developing country regions except Rest of Asia.

The increase in world trade during the last decade was driven to a large extent by the rise of trade between developing countries (South–South) (Figure 4a). Despite the trade slumps in 2015 and during the COVID-19 pandemic of 2020, the share of South-South trade in global trade continuously increased from around 17 per cent in 2010 to 21 per cent in 2022. In value terms, South-South trade reached US$ 5.3 trillion in 2022 compared to US$ 3.9 trillion in 2019, corresponding to more than 50 per cent of the trade between developed countries (North-North). Figure 4b highlights the contribution of South–South trade to total trade of developing regions. South–South trade flows represented more than half of the trade of developing country regions (imports and exports), ranging from about 40 per cent in Latin America to about 60 per cent in South and East Asia. A significant proportion thereof represents trade relations with China. Compared to the year 2021, the share of South-South trade has slightly decreased for most regions, mainly due to a decrease in trade with China. The share of interregional trade (Other South-South) has increased across most developing country regions, apart from Latin America, Africa, and East Asia (excl. China). The share of intraregional trade has been decreasing for all developing country regions, except for small increases in Latin America and East Asia (excl. China).
The trade growth of 2022 resulted in increased value of trade for the majority of the largest bilateral trade flows, with particularly large changes in the natural resources sector. Notable exceptions are negative growth in manufacturing from the European Union to the United Kingdom as a consequence of the Brexit transition, and some instances of less trade with China in manufacturing and natural resources. By contrast, strong increases were recorded for imports of natural resources by the European Union.

### Table 2
Changes in the value of the largest bilateral trade flows between 2021 and 2022, by product group

#### Agriculture

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Importer</th>
<th>Change 2022 vs 2021 (%)</th>
<th>Value in 2022 (US$ Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>European Union</td>
<td>5</td>
<td>427</td>
</tr>
<tr>
<td>Brazil</td>
<td>China</td>
<td>16</td>
<td>51</td>
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<tr>
<td>European Union</td>
<td>United Kingdom</td>
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<tr>
<td>Mexico</td>
<td>United States of America</td>
<td>14</td>
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<td>Canada</td>
<td>United States of America</td>
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<td>China</td>
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<tr>
<td>European Union</td>
<td>United States of America</td>
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<td>United States of America</td>
<td>Canada</td>
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<td>United States of America</td>
<td>Mexico</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Brazil</td>
<td>European Union</td>
<td>26</td>
<td>20</td>
</tr>
</tbody>
</table>

#### Natural Resources

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Importer</th>
<th>Change 2022 vs 2021 (%)</th>
<th>Value in 2022 (US$ Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>European Union</td>
<td>63</td>
<td>334</td>
</tr>
<tr>
<td>Canada</td>
<td>United States of America</td>
<td>50</td>
<td>167</td>
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<tr>
<td>Russian Federation</td>
<td>European Union</td>
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<td>156</td>
</tr>
<tr>
<td>Australia</td>
<td>China</td>
<td>-16</td>
<td>115</td>
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<tr>
<td>United States of America</td>
<td>European Union</td>
<td>170</td>
<td>113</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>China</td>
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<td>Australia</td>
<td>Japan</td>
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<td>Norway</td>
<td>European Union</td>
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<tr>
<td>Saudi Arabia</td>
<td>China</td>
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<td>67</td>
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<tr>
<td>United Kingdom</td>
<td>European Union</td>
<td>155</td>
<td>60</td>
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#### Manufacturing

<table>
<thead>
<tr>
<th>Exporter</th>
<th>Importer</th>
<th>Change 2022 vs 2021 (%)</th>
<th>Value in 2022 (US$ Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>European Union</td>
<td>0</td>
<td>2,753</td>
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<td>China</td>
<td>European Union</td>
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<td>China</td>
<td>Hong Kong SAR</td>
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<td>252</td>
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<tr>
<td>Taiwan, Province of China</td>
<td>China</td>
<td>-5</td>
<td>237</td>
</tr>
<tr>
<td>European Union</td>
<td>United Kingdom</td>
<td>-5</td>
<td>231</td>
</tr>
</tbody>
</table>

Source: UNCTAD calculations, based on COMTRADE data.

The table reports the percentage changes between 2021 and 2022, and the value in 2022, of the 10 largest bilateral flows in each of the three product groupings.
Intermediate products represent more than 40 per cent of world trade in goods (exceeding US$ 10 trillion in 2022). While the amount of trade in each category has grown substantially since 2010, the relative importance of goods at different stages of processing remained relatively stable. In 2022, trade in all categories increased, with the strongest growth observed for primary products, followed by intermediate products. Differentiated by broad category, three quarters of world trade in goods is comprised of manufacturing products (about US$ 17.5 trillion in 2022). Trade in natural resources saw a particularly strong increased by almost 50 per cent (to US$ 4.5 trillion in 2022).

Figure 5
Values of world trade in goods by stage of processing and broad category

International trade in goods can be differentiated by stage of processing, depending on the intended use along the production chain. Goods are therefore classified as primary, intermediate, consumer and capital goods (the latter comprising machinery used for the production of other goods). Goods can also be differentiated by broad category, including natural resources, agricultural products and manufactures. Regarding the stage of processing, intermediate products made up the bulk of world trade in 2022 with a share above 40 per cent (exceeding US$ 10 trillion), followed by primary products amounting to 20 per cent (US$ 5 trillion) (Figure 5a). In 2022, the value of trade in all categories increased compared to the levels of 2021, with the composition across categories remaining relatively unchanged. Trade in primary products was negatively affected in 2015 and 2020 but saw an increase of more than 30 per cent between 2021 and 2022. Similarly, trade in natural resources dropped markedly in 2015 and 2020 but recorded a strong increase of almost 50 per cent in 2022 (Figure 5b).
Composition of international trade varies significantly among country groupings. More than half of trade of developed countries is in intermediate goods, with significant role of consumer and capital goods as well. Intermediates also represent a large share of developing countries trade. Notably, capital goods are an important share of BRICS exports. By contrast, LDCs exports of capital goods is negligible, while they rely more heavily on primary and consumer goods for their exports. As to broad categories of international trade, more than half constitutes manufacturing, with trade in natural resources also being important for developing countries. Agricultural exports remains important for developing countries but not for BRICS as a group.

Source: UNCTAD calculations, based on COMTRADE data.

Developed countries account for the bulk of world trade, with about 50 per cent of their trade being in intermediate goods, and the rest approximately equally balanced between primary, capital, and consumer goods (Figure 6a). Among developing country regions, an important share of trade is also in intermediates, especially for BRICS, where it exceeds 40 per cent. BRICS countries also have a total 40 per cent of their exports in capital and consumer goods, but their import relies more heavily on primary goods (about 35 per cent). In contrast, other developing countries rely more on primary goods for their exports. This is especially true for LDCs, where primary goods constituted half of the exports in 2022. LDCs also have a significant share of their exports in consumer goods, while capital and intermediate goods are much less prominent. Turning to trade by broad category, manufacturing is the dominant export category for all groups of countries, ranging from about 50 per cent of developing countries exports to more than 80 per cent for BRICS (Figure 6b). It also amounts to more than two-thirds of imports for all groups. The second largest category is natural resources, especially in LDCs and developing countries exports and BRICS imports, with agriculture share generally being in single digits. One notable exception is LDCs imports of agricultural products, which in 2022 amounted to 16 per cent of all imports for these countries.
With trade flows of more than US$2.5 trillion each, chemicals and communication equipment, as well as oil, gas and coal, represented a substantial share of world trade in goods in 2022. Other large sectors include machinery and motor vehicles, metals and petroleum products. In 2022, the value of international trade increased in all sectors, except for precision instruments, office machinery and mining. Trade values grew the most in the sectors comprising energy products (oil, coal, natural gas and petroleum products). Compared to 2015, developing countries gained market shares in almost all sectors and more so in transport equipment and motor vehicles. For oil, gas, coal, non-metallic minerals and tanning export market shares have shifted towards developed countries.

Figure 7
Values of world trade in goods by sectors

(a) Trade in Goods, by Sector

(b) Export Market Share

Source: UNCTAD calculations, based on COMTRADE data.

Figure 7a displays the value of world trade in 25 categories of goods. A large amount of world trade value relates to chemicals, communications equipment, metals, machinery, motor vehicles, and energy products (oil, gas, coal and petroleum products). In contrast, light manufacturing sectors (textiles, apparel and tanning), comprise a much smaller share of world trade. Agricultural sectors – which include food, vegetable and animal products, as well as oils and fats, and tobacco and beverages – accounted for less than 10 per cent of international trade. The value of trade increased at double-digit growth rates for about half of the sectors in 2022, while it declined for precision instruments, office machinery and mining. During the last decade, developing countries’ presence in international markets has increased substantially compared to developed countries. Since 2015, developing countries gained market shares in the majority of sectors. However, for some sectors, export market shares have shifted back towards developed countries, notably for the energy sector with the emergence of shale oil production in North America, and more recently for the non-metallic minerals with European countries increasing their export shares (Figure 7b).
World trade in services is largely driven by travel and transport services. However, the importance of these sectors has declined during the COVID-19 pandemic. While the transport sector recovered to pre-pandemic levels already in 2021, travel services remained below that level in 2022. Since 2015, trade continued to increase in most of the other sectors, especially in the R&D and professional consulting and in telecommunication and IT services. Developed countries remain the main exporters in all sectors. However, developing countries are becoming increasingly important suppliers of services in construction and transportation.

With trade flows of almost US$ 1.5 trillion, the travel sector was by far the largest services sector prior to the COVID-19 pandemic, followed by the transport sector with more than US$ 1 trillion. In 2020, these sectors were hardest hit; in particular, the travel sector did shrink to almost a third of its 2019 value. While the transport sector experienced strong growth in 2021, the travel sector has been lagging behind and recovered only in 2022, exceeding US$ 1 trillion in value. Since 2015, trade continued to increase in most of the other sectors, especially in R&D and professional consulting and in telecommunication and IT services. (Figure 8a). Figure 8b depicts the share of global exports of different service categories pertaining to developed and developing countries, and their change between 2015 and 2022. Although developed countries still account for the largest part of the exports of services, the export market share has been increasing to the advantage of developing countries in almost all sectors (Figure 8b). Notable exceptions are travel and government services, for which market shares have shifted towards developed countries. Despite low levels in 2015, market shares of developing countries showed sizeable increases in IPR, R&D professional and consulting, and financial services.
2. TRADE INDICATORS

The following section presents a series of trade indicators where the magnitude of the indicator is represented by the shading of a country on the world map.
A substantial number of developing countries are dependent on imports, and a relatively high share of their gross domestic product (GDP) goes to exports of goods and services to foreign markets. Exports are particularly important for many Southeast Asian economies, Central and Eastern European countries, and several African countries.

Index 1
Import and export propensities

a) Imports of goods and services over gross domestic product, 2022

Import and export propensities are computed as the value of imports or exports divided by current GDP. The import propensity expresses the proportion of income spent on imports. The export propensity shows the overall degree of reliance of domestic producers on foreign markets. Higher values imply greater dependence on foreign demand.

b) Exports of goods and services over gross domestic product, 2022
World trade is largely unbalanced. China maintained the largest surplus position in 2022, followed at some distance by the Russian Federation, United Arab Emirates, Ireland, and Saudi Arabia. Singapore and Norway also showed considerable surpluses. By contrast, the United States maintained the largest deficit position, followed by India and Japan. Even though these imbalances are sometimes large in level, they often tend to be low relative to the country’s GDP. However, the trade imbalances of many countries in Africa tend to be large relative to their GDP, while being small for the world as a whole.

Foreign trade balances (exports minus imports of goods and services) as a percentage of total world imbalances are computed as each country’s share of total imbalances in the world. Negative values denote countries in deficit, while positive values denote countries with a surplus. The foreign trade balance-to-GDP ratio is the ratio of the foreign trade balance to GDP. It indicates how large trade imbalances are relative to the size of the economy.
Agriculture and natural resources still represent a large share of export baskets for many developing countries. Commodity dependence is more evident for energy-exporting countries in different regions, raw material suppliers in Africa, and for Latin American countries, where agriculture represents a large share in total exports. Dependence indices have declined over the past years for many countries in Africa, but increased for many countries in Latin America, Asia, and Middle East, as well as for the United States and Canada.

Index 3
Commodity export dependence

a) Agricultural and natural resources dependence index, 2022

The commodity dependence index is computed as the share of the value of exports in primary products (i.e. agricultural goods and natural resources) over the total value of exports. It varies from 0 to 100 per cent. High dependence implies more exposure to volatility in the prices of natural resources and agricultural commodities.
Food and energy trade positions are very diverse across regions. In general, countries in Latin America, Eastern Europe, East Africa and South Asia are net food exporters, while most of the rest of Asia and Africa remain net food importers. With regards to energy, Europe and many of the countries in East and South Asia are dependent on imports. In contrast, West and Central Asia, as well as many of the countries in Africa and South and North America, are net energy exporters.

**Index 4**

Food and energy net positions

**a) Food net position, 2022**

The food net position is computed as a country’s exports minus its imports of agricultural products. It is then normalized by dividing it by agricultural trade (imports plus exports). The index varies between -1 and 1, with positive values meaning that the country exports more agricultural products than it imports. The energy net position is computed in the same manner.

**b) Energy net position, 2022**

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
The export basket of many developing countries is often poorly diversified, both in terms of products varieties and destinations. Among developing countries, only a few emerging economies have reached levels of diversification similar to those of developed countries. African countries remain poorly diversified, as their exports are concentrated in few products exported to few destinations.

Index 5
Export diversification

a) Export diversification index by product, 2022

Diversification is measured by the Hirschmann–Herfindahl index where lower values reflect higher diversification. It indicates the degree to which a country’s exports are dispersed across different destinations or different goods (at the HS 6-digit level). Low diversification is interpreted as an indication of vulnerability since an exporter being limited to a small number of export markets or goods is more exposed to economic shocks.
Export diversification allows exporting countries to better confront price volatility and economic shocks in foreign markets. While there have been little changes in export diversification in developed countries, there have been significant heterogeneity in the export diversification trends of developing countries since 2015.

Index 6
Changes in export diversification

a) Changes between 2015 and 2022, by product

The export diversification change reflects whether countries are becoming more or less diversified in terms of products or products (index 6a) and destinations (index 6b). Overall, since 2015 there have been no consistent patterns in the diversification trends among developing countries.
Since 2015, the export growth for goods and services was strong. However, there are a few developing countries that experienced a decrease in exports between 2015 and 2022. During the same period, many countries, especially those in Western and Central Africa and Central Asia have increased their competitiveness in their main export markets.

Index 7
Export performance and export competitiveness

a) Export growth in goods and services, 2015–2022

b) Change of export competitiveness in top 20 markets, 2015–2022

The growth rate of exports is calculated as the percentage change of the value of exports between two periods. Export competitiveness reflects the development of a country’s exports relative to its top 20 trading partners in 2022 and is measured as the ratio of a country’s market share in the reference group in 2022 over that in 2015. Positive values indicate that the country is becoming more competitive with respect to its peers.
North America, Europe and Asian countries export sophisticated products, while those in Africa export products with the lowest sophistication levels. Mexico, Europe, and most of South and East Asia tend to export more sophisticated products also in comparison to countries with similar levels of GDP per capita. By contrast, countries in the Middle East and South America, as well Australia, Canada and the United States export relatively less sophisticated goods in relation to their level of income. The situation is more heterogeneous across Africa.

Export sophistication is measured by the EXPY index. Countries with a higher EXPY are those that export goods that are more sophisticated (as measured by the PRODY index). The export sophistication gap measures the gap between the EXPY and GDP per capita of a country. A positive gap implies an export structure that is more sophisticated than the country's GDP per capita would predict. Conversely, a negative gap implies an export structure that is more typical of countries at a lower level of development.