EXECUTIVE SUMMARY

With over 80 per cent of global trade by volume and more than 70 per cent of its value being carried on board ships and handled by seaports worldwide, the importance of maritime transport for trade and development cannot be overemphasized. Recognizing the sector's strategic function, the global policy framework under the Addis Ababa Action Agenda and the 2030 Agenda for Sustainable Development underscores the role of trade – and by extension, seaborne trade – as an engine for inclusive and sustainable growth and development.

Sustaining seaborne trade flows

In 2016, demand for shipping services improved, albeit only moderately. World seaborne trade volumes expanded by 2.6 per cent, up from 1.8 per cent in 2015, but below the historical average of 3 per cent recorded over the past four decades. Total volumes reached 10.3 billion tons, reflecting the addition of over 260 million tons of cargo, about half of which was attributed to tanker trade.

UNCTAD forecasts world seaborne trade to increase by 2.8 per cent in 2017, with total volumes reaching 10.6 billion tons. Projections for the medium term also point to continued expansion, with volumes growing at an estimated compound annual growth rate of 3.2 per cent between 2017 and 2022. Cargo flows are set to expand across all segments, with containerized and major dry bulk commodities trades recording the fastest growth.

Uncertainty and various positive and negative risk factors are shaping the world economic and merchandise trade outlook. A positive development is the Economic Partnership Agreement concluded between the European Union and Japan in July 2017. The Agreement could support trade flows and the European Union–Canada Comprehensive Economic and Trade Agreement, which is likely to come into force in 2017–2021. In the longer term, growing cross-border electronic commerce (e-commerce) could also support demand for container shipping. Negative risk factors include the continued rebalancing of the Chinese economy towards domestic demand, the emerging trade policy direction of the United States of America, as well as uncertainties associated with the decision of the United Kingdom of Great Britain and Northern Ireland to leave the European Union. These uncertainties require strong commitment and measures at all levels, including coherent and coordinated multilateral policies, to ensure sustained recovery in world shipping demand.

Opportunities in maritime businesses

The world shipping fleet provides not only transport connectivity to global trade but also livelihoods to those working in maritime businesses. In 2016, world fleet capacity increased by an estimated 3.2 per cent, down from 3.5 per cent in 2015. Dead-weight capacity of the world commercial fleet was 1.86 billion dead-weight tons (dwt) in early 2017, worth $829 billion.

Industry consolidation – different countries specializing in different maritime subsectors – continues. Different countries, including in developing regions, benefit from building, owning, registering, operating and scrapping ships. Specialization in maritime business requires that policymakers carefully identify possible market niches for their respective countries and decide between seemingly conflicting policy choices. For example, they may have to choose between protecting national shipping businesses from foreign competition or increasing trade competitiveness by improving connectivity and reducing trade costs. In the latter case, there may be a need to liberalize domestic shipping and port markets.

The shipping business – both offshore and onshore – is traditionally a male-dominated sector. At sea, 1 per cent of seafarers are women. Onshore, women hold 55 per cent of global maritime junior-level positions, compared with 9 per cent of executive-level positions. By promoting the employment of women, maritime businesses may not only help overcome shortages in labour supply, but may also contribute to achieving key Sustainable Development Goals.

Achieving environmental sustainability, including in maritime transport, is an imperative of the 2030 Agenda for Sustainable Development. In this respect, the growing importance of liquefied natural gas is relevant. Growing trade in this area has promoted investment in carriers of liquefied natural gas and has led to about a 10 per cent increase in dead-weight tonnage in the 12 months leading to January 2017. In parallel, the use of liquefied natural gas as a fuel is on the rise. The share of gross tonnage from liquefied natural gas-capable ships on the order book for delivery in 2018 and beyond currently stands at 13.5 per cent. This is more than twice the value of 2017 and more than three times that of 2015. By promoting liquefied natural gas-powered ships, the industry can reduce costs and use a cleaner

source of energy, in line with energy and climate-related targets under Sustainable Development Goals 7 (on energy) and 13 (on climate change).

Balancing demand and supply

For the fifth year in a row, world fleet growth has been decelerating. Nevertheless, the supply of ship-carrying capacity increased faster than demand, leading to a continued situation of global overcapacity and downward pressure on freight rates and earnings. The current low demand–high overcapacity environment has constrained freight rates and dampened profitability in most shipping market segments. The collective operating loss reported by the container-shipping market in 2016 amounted to $3.5 billion.

In 2017, projected growth in world shipping demand and continued management of ship supply capacity are likely to support improved market fundamentals and therefore support freight rates. However, for this to materialize, it will be necessary to reduce ship supply overcapacity by building less ships and increase scrapping and capacity sharing, for example, through alliances.

The recent mergers and mega alliances among container carriers can support better handling of supply and fleet utilization, which in turn can help improve the container-shipping sector's financial situation. However, there is a danger that the growing market concentration may lead to oligopolistic structures. Regulators will need to monitor developments in container-shipping mergers and alliances to ensure competition in the market. It may also be necessary to revisit the rules governing consortiums and alliances to determine whether these would require revised regulation. This will make it possible to balance the interests of shippers, ports and carriers to prevent potential market power abuse.

In 2016, UNCTAD estimates that countries spent on average about 15 per cent of the value of their imports on international transport and insurance. Smaller and structurally vulnerable economies pay significantly more, reaching an average of 22 per cent for small island developing States and 19 per cent for landlocked developing countries, and 21 per cent for the least developed countries. Lower efficiency in ports, inadequate infrastructure, limited economies of scale, and less competitive transport markets are behind the persistent transport cost burden in many developing countries. Owing to growing vessel size and further consolidation, there is a risk that the situation will deteriorate further in the case of small and structurally weak economies.

Seaports: The nodes supporting maritime and hinterland connectivity

Growth rates in 2015, 2016 and 2017 were among the lowest recorded by the industry over the 2000–2016 period, with the exception of 2009. At the same time, world container ports must cope with the continued deployment of ever-larger ships, cascading of vessels from main trade routes to secondary routes, growing concentration in liner shipping, increased consolidation activity, a reshuffling of liner shipping alliances and growing cybersecurity threats.

Because of the heightened competitive pressure on ports, it is essential to improve performance levels that extend beyond the optimization of operations, cost reduction, time efficiency and trade promotion objectives. Ports are increasingly expected to meet other performance criteria by ensuring the highest service reliability and standards relating to quality, security, safety, financial sustainability, resource conservation, environmental protection and social inclusion, many of which are linked to key Sustainable Development Goals.

Ports should formulate policies and devise plans on how best to adapt to the requirements of the changing liner shipping market environment. Greater cooperation among ports and their stakeholders are required to help mitigate the negative impact on growing cost pressures. Competing in maritime operations for trans-shipment traffic may not always be sustainable in the context of the new operating landscape. Ports will need to reconsider their offering by considering other services to customers, which would increase their revenue streams. The adoption of relevant technologies and solutions in ports, including for customs automation and port community systems, should be promoted; the assessment of port performance to inform transport planning, port management, policy and regulatory processes should be promoted as well. In this respect, port performance measurements should be supported by investments in data collection capabilities and supporting information and communications technology platforms that lower data collection and analysis costs.

The growing need to provide modern ports and sophisticated cargo-handling facilities with terminal management and security systems has substantially increased capital and technical requirements of ports in recent years. Consequently, greater collaboration between the private and public sector has become necessary. Between, 2000 and 2016 some $68.8 billion of private investment was committed across 292 port projects including port infrastructure, superstructures, terminals, channels for container, dry bulk, liquid bulk and multipurpose terminals. Governments can build on various public–private partnership models and make them a viable and effective tool for the development of sustainable ports. Important prerequisites for a successful public–private partnership are a well-designed contract to ensure clear distribution of roles and activities, appropriate risk sharing and flexibility, a clear policy framework, a legal and regulatory system that ensures contracts are effective and enforceable, and an institutional framework to properly manage the process. The partnership should ensure not only that improved port performance is achieved, but also that

improvements are passed on to shippers through better services and lower charges.

Not all port investment may be worthwhile, however. Pressure from shipping lines to expand and dredge so as to accommodate ever larger ships, especially for trans-shipment operations, may not be worth the extra cost. Without additional volumes, increasing ship size alone will reduce the effective capacity of seaports as they would require larger yards and additional equipment to handle the same total volume.

Legal and regulatory developments

Two important international conventions affecting the maritime industry entered into force in 2017. The International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, entered into force on 8 September, and the International Labour Organization Work in Fishing Convention, 2007 (No. 188), on 16 November. Also worth noting is the decision of the International Maritime Organization (IMO) to implement a global cap of 0.5 per cent on sulphur content in fuel oil used on board ships from 1 January 2020, an important development with respect to human health and the environment.

Progress is being made in ongoing negotiations at the United Nations on an international legally binding instrument under the United Nations Convention on the Law of the Sea, 1982 on the conservation and sustainable use of the marine biological diversity of areas beyond national jurisdiction. In this context, and in particular with regard to questions on the sharing of benefits from marine genetic resources, capacity-building and the transfer of marine technology, it is important for the special requirements of developing countries, in particular the least developed countries, landlocked developing countries, geographically disadvantaged States, small island developing States and coastal African States, to be taken into account when drafting the instrument.

New technologies are transforming the maritime transport industry and providing opportunities to improve economic efficiency, optimize logistics management systems and operations, and expand connectivity, including digital connectivity. At the same time, such technologies are raising new concerns such as increased cybersecurity threats and risks. To ensure that ships navigate safely and that important information offshore and onshore remains secure, public and private stakeholders should work together to better understand, assess, manage and implement relevant emerging technologies.

In addition, despite the new possibilities that emerging technology, such as blockchain technology, might offer for identity generation and management, there are concerns regarding its use in applications that involve identity authentication or the protection of privacy or financial data. Therefore, developments regarding this technology, as well as related legal, cost, infrastructure and other implications should be monitored.

Cybersecurity concerns should be reflected in the regulatory frameworks governing the maritime sector, and regulatory compliance encouraged and supported. The enforcement of existing cybersecurity regulations is important, as is the development of additional standards and policies. In addition, best practices, guidance and standards adopted to date should be considered, along with the five functional elements contained in the IMO guidelines on maritime cybersecurity risk management (2017), namely identify, protect, detect, respond and recover.

Liner shipping connectivity: Understanding and strengthening container shipping networks

Low transport connectivity continues to undermine the access of smaller and weaker economies to global markets. Many landlocked developing countries, small island developing States and least developed countries are among those most affected, given their access to fewer, less frequent, less reliable and more costly transport connections. UNCTAD data and research show that planning and forecasts can be significantly improved if data on maritime transport networks are included in relevant policy processes such as negotiating trade deals and formulating transport infrastructure development plans.

National, regional and intercontinental liner shipping services should be interconnected to the extent possible. In many countries today, domestic shipping services for cabotage transport are protected from foreign competition. Such market restrictions can lead to unnecessary inefficiencies and loss of maritime connectivity. Well-designed policies that allow – under clearly defined conditions – international shipping lines to also carry domestic trade and cargo from feeder vessels can enhance both the competitiveness of a nation's seaports and the access of importers and exporters to international shipping services.

Fostering competition among ports is important to ensure that port operators maximize efficiency, and pass on efficiency gains to their clients. Inter-port competition should not be limited to national seaports, but also to ports of neighbouring countries. Improved maritime connectivity thus also depends on effective port hinterland access through inland and multimodal transport connections. Efficient trucking regional markets, inland waterways, rail and road infrastructure, as well as transit regimes are all important instruments to enhance inter-port competition. Transit can be facilitated in line with international standards and recommendations, including those of the United Nations, the World Customs Organization and the World Trade Organization.

Customs and other border agencies need to continuously modernize and facilitate trade and its transport. The long-standing technical cooperation work of UNCTAD on the automation of customs procedures and the integration of trade and other processes of government agencies through the Automated System for Customs Data shows that these efforts can reduce transaction costs, shorten cargo dwell time and increase transparency – and thus the accountability of all stakeholders. Under the Agreement on Trade Facilitation of the World Trade Organization and IMO Convention on Facilitation of International Maritime Traffic, members should establish committees or other collaborative platforms in which stakeholders coordinate and cooperate in the implementation of trade and transport facilitation reforms. Such collaborative platforms should go beyond compliance issues alone and aim to achieve all necessary reforms to facilitate international trade and transport connectivity.

Ocean shipping will remain the most important mode of transport for international merchandise trade. Ministries of transport and planning, and maritime and port authorities need to understand the determinants of maritime transport connectivity, as well as the associated opportunities and risks, to ensure informed policy and decision-making processes and adequate investment plans in shipping, ports and their hinterland connections.

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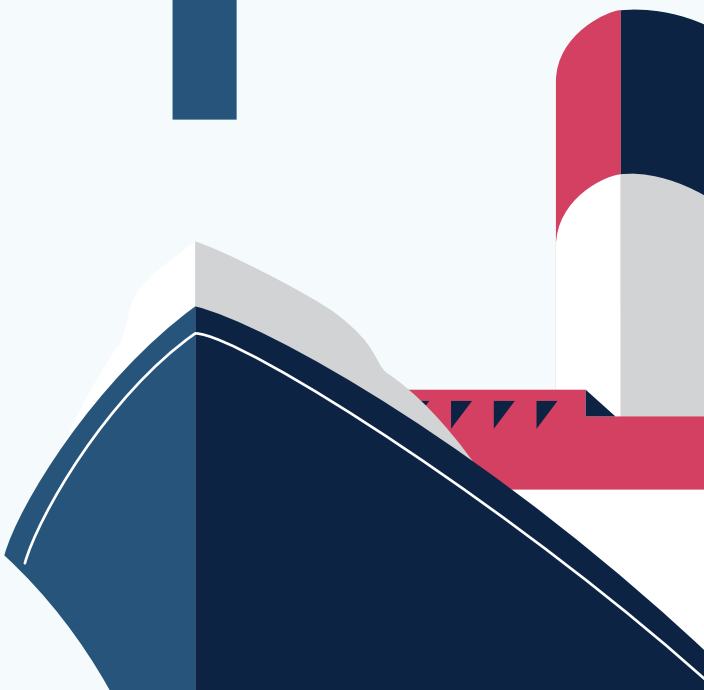


DEVELOPMENTS IN INTERNATIONAL SEABORNE TRADE

In 2016, the maritime transport sector continued to face the prolonged effects of the economic downturn of 2009. Seaborne trade remained under pressure owing to continued weak global demand and heightened uncertainty stemming from factors such as trade policy and low commodity and oil prices. Moreover, several trends with relevant implications for maritime transport continued to gradually unfold and raise attention, in particular digitalization, the rapid expansion of electronic commerce (e-commerce) and growing concentration in the liner shipping market.

Reflecting the state of the world economy, demand for shipping services increased moderately in 2016. World seaborne trade volumes expanded by 2.6 per cent, up from 1.8 per cent in 2015, which was below the historical average of 3 per cent recorded over the past four decades. Total volumes reached 10.3 billion tons, reflecting the addition of over 260 million tons of cargo, about half of which was attributed to tanker trade.

In 2017, the outlook for the world economy and merchandise trade is expected to improve somewhat. However, uncertainty and other factors, both positive and negative, continue to shape this outlook. In this context, UNCTAD estimates that seaborne trade will increase by 2.8 per cent, with total volumes reaching 10.6 billion tons. Its projections for the medium-term point to continued expansion, with volumes growing at an estimated compound annual growth rate of 3.2 per cent between 2017 and 2022. Volumes are set to expand across all segments, with containerized trade and major dry bulk commodities trade recording the fastest growth.

WORLD SEABORNE TRADE

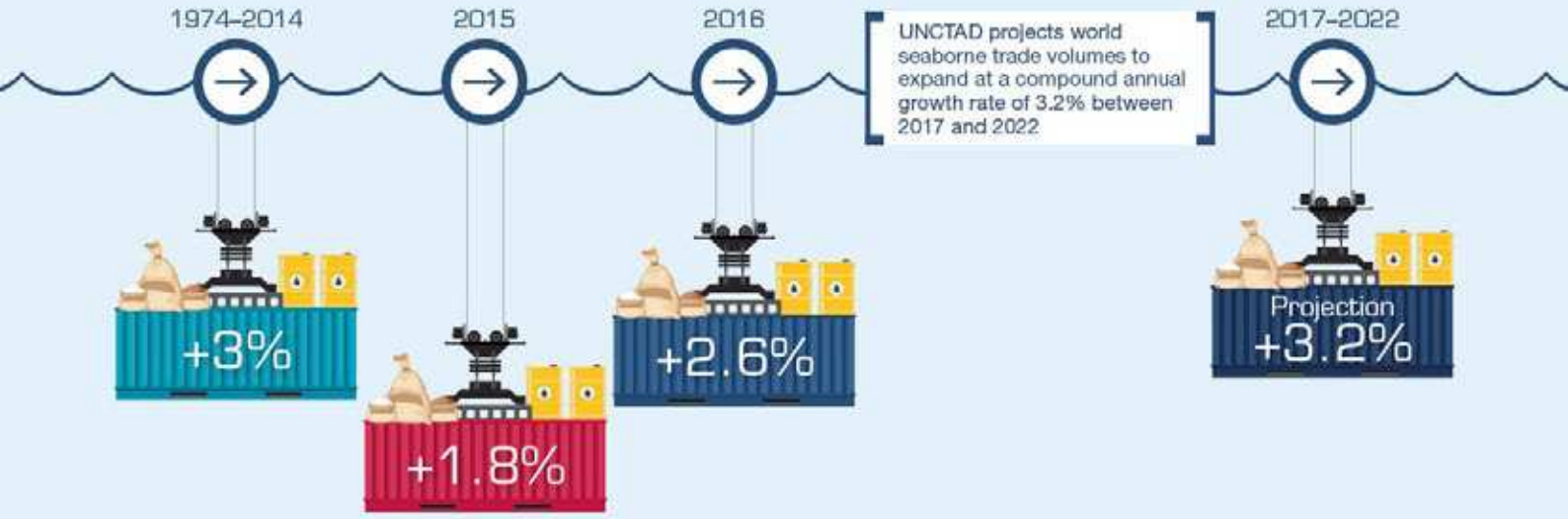
(Percentage share in world tonnage)

10.3 billion tons Total volumes reached reflecting the addition of over 260 million tons of cargo

+2.6% in 2016 up from 1.8% in 2015

	Developed economies	Developing economies	Transition economies
Loaded (outbound/exports)	35%	59%	6%
Unloaded (inbound/imports)	35%	64%	1%

EVOLUTION OF WORLD SEABORNE TRADE VOLUMES



A. WORLD ECONOMIC SITUATION

1. World economic growth

World seaborne trade continues to be largely determined by developments in the world economy and trade. Although the relationship between economic output and merchandise trade seems to be shifting, with an observed decline in the growth ratio of trade to gross domestic product (GDP) over recent years,[1] demand for maritime transport services remains heavily dependent on the performance of the world economy.

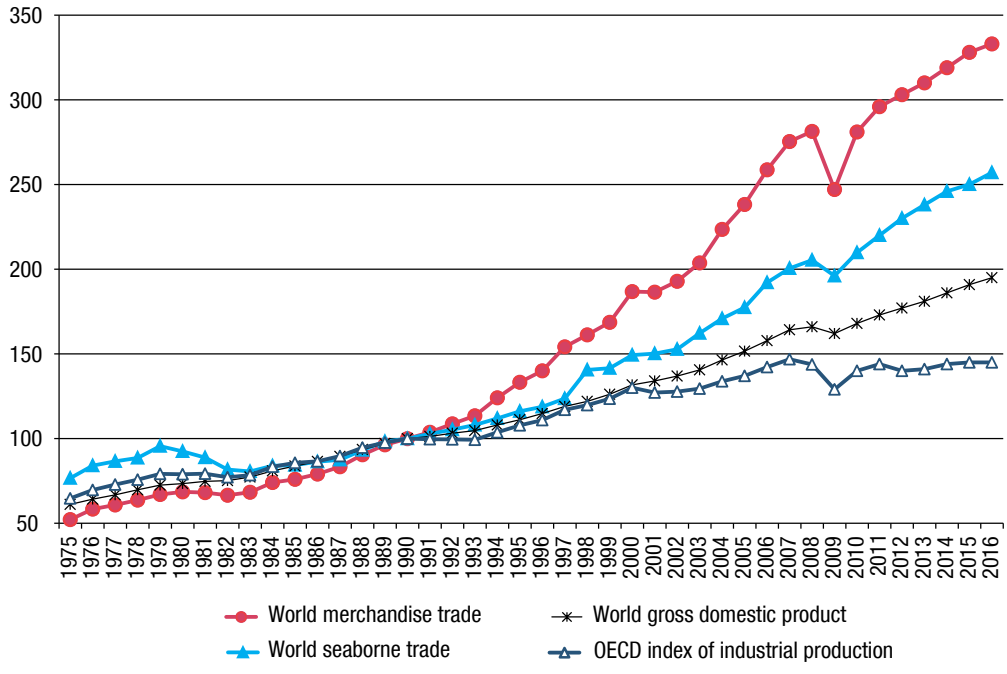
While industrial activity, economic output, merchandise trade and seaborne trade shipments may be growing at different speeds, these variables remain, nevertheless, positively correlated, as shown in figure 1.1 on factors relating to the index of industrial production of the Organization for Economic Cooperation and Development (OECD) and world indices.

World economic growth decelerated in 2016 with GDP expanding by 2.2 per cent, down from 2.6 per cent in 2015 and below the 2001–2008 average annual growth rate of 3.2 per cent (table 1.1). Explanatory factors include a weak global investment environment, limited growth in world merchandise trade, increased trade policy uncertainty and the continued negative impact of low commodity price levels both on investment and the export earnings of commodity-exporting countries.

Economic output in developed economies also dropped from 2.2 per cent in 2015 to 1.7 per cent in 2016, reflecting slower growth in the European Union (1.9 per cent), the United States (1.6 per cent) and Japan (1.0 per cent). In the developing economies, GDP growth fell to 3.6 per cent, down from 3.8 per cent in 2015. Despite a firm GDP growth of 6.7 per cent – supported by government stimulus measures introduced during the year – China continued its gradual transition towards a consumption-driven economy powered by its own internal growth. In India, strong GDP growth (7 per cent) continued but at a slightly slower pace than in 2015.

Limited activity in oil-exporting countries of Africa, Latin America and the Caribbean, Western Asia and the transition economies, together with the recession in Brazil and the Russian Federation, continued to hold back growth in the developing economies, as well as in the transition economies. In the least developed countries, GDP growth expanded by 3.7 per cent in 2016, a rate well below the growth target of at least 7 per cent set under the Sustainable Development Goals, in particular Goal 8 to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Figure 1.1. Organization for Economic Cooperation and Development index of industrial production and world indices: Gross domestic product, merchandise trade and seaborne shipments, 1975–2016 (1990 = 100)



Sources: UNCTAD secretariat calculations, based on data from OECD, 2017; United Nations, 2017; *UNCTAD Review of Maritime Transport*, various issues; World Trade Organization, 2012.

Note: Index calculations are based on GDP and merchandise trade in dollars, and seaborne trade in metric tons.

Table 1.1. World economic growth, 2015–2017 (Annual percentage change)

Region or economic grouping	2001–2008	2015	2016	2017
World	3.2	2.6	2.2	2.6
Developed economies	**2.2**	**2.2**	**1.7**	**1.9**
of which:				
United States	2.5	2.6	1.6	2.1
European Union 28	2.2	2.3	1.9	1.9
Japan	1.2	1.2	1.0	1.2
Developing economies	**6.2**	**3.8**	**3.6**	**4.2**
of which:				
Africa	5.7	3.0	1.5	2.7
Asia	7.3	5.2	5.1	5.2
China	10.9	6.9	6.7	6.7
India	7.6	7.2	7.0	6.7
Western Asia	5.8	3.7	2.2	2.7
Latin American and the Caribbean	**3.9**	**-0.3**	**-0.8**	**1.2**
Brazil	3.7	-3.8	-3.6	0.1
Least developed countries	**7.2**	**3.6**	**3.7**	**4.4**
Transition economies	**7.1**	**-2.2**	**0.4**	**1.8**
Russian Federation	6.8	–2.8	–0.2	1.5

Source: UNCTAD, 2017a.
Note: Data for 2017 are projected figures.

2. World merchandise trade

World merchandise trade underperformed in 2016 with volumes (that is, trade in value terms but adjusted to account for inflation and exchange rate movements), expanding by a modest 1.9 per cent (average growth rate of imports and exports), up from 1.7 per cent in 2015 (table 1.2). Weaker trade is both a cause and an effect of a slowdown in global economic activity in view of the strong linkages between investment, growth and trade. World export volumes and import demand both accelerated in 2016, compared with 2015. Exports expanded at the faster rate of 1.7 per cent up from 1.4 per cent in 2015, while the import demand increased by 2.1 per cent, up from 1.9 per cent in 2015.

Weakness in trade flows affected developed and developing economies alike; yet, some differences in regional performance were observed. Developed economies' exports increased at a slower rate (1 per cent) in 2016, compared with 2015 (2.1 per cent). Their import demand decelerated to 2.7 per cent, down from 3.3 per cent in 2015.

Trade growth in developing regions underperformed in 2016. While exports increased by 2.8 per cent, up from 0.6 per cent in 2015, this rate remains below the 4.4 per cent growth recorded in 2013. Reflecting in particular the reduced purchasing power of many commodity-exporting countries that faced an erosion of terms of trade because of lower commodity prices (for example, Africa, and Latin America and the Caribbean)

Table 1.2. Growth in volume of merchandise trade, 2013–2016 (Annual percentage change)

Exports				Economies or regions	Imports			
2013	2014	2015	2016		2013	2014	2015	2016
3.1	2.0	1.4	1.7	**World**	**2.3**	**2.5**	**1.9**	**2.1**
2.1	1.7	2.1	1.0	**Developed economies**	**0.0**	**2.8**	**3.3**	**2.7**
2.6	3.3	–1.1	–0.2	United States	**0.8**	**4.7**	**3.7**	**3.6**
1.9	1.6	3.3	1.1	European Union	**–1.0**	**3.2**	**4.1**	**2.8**
–1.5	0.6	–1.0	0.3	Japan	**0.3**	**0.6**	**–2.8**	**–0.3**
4.4	**2.5**	**0.6**	**2.8**	**Developing economies**	5.5	2.7	1.1	1.1
2.4	2.3	3.2	2.3	Latin America and the Caribbean	**3.8**	**0.0**	**–2.0**	**–4.2**
–1.6	–2.0	0.6	2.9	Africa	**6.8**	**3.6**	**0.7**	**–4.6**
6.7	4.9	–0.6	0.6	Eastern Asia	**7.0**	**3.4**	**–1.1**	**2.2**
8.5	5.6	–0.9	0.0	China	**9.1**	**2.9**	**–1.8**	**3.1**
0.0	1.1	–1.4	18.1	Southern Asia	**–0.4**	**4.7**	**7.4**	**8.9**
8.5	3.5	–2.1	6.7	India	**–0.3**	**3.2**	**10.1**	**7.3**
5.0	3.7	3.7	3.9	South-East Asia	**4.2**	**2.4**	**5.7**	**4.4**
3.7	–3.2	–0.6	3.5	Western Asia	**6.7**	**2.2**	**3.1**	**–2.4**
2.0	**0.5**	**1.0**	**–1.6**	**Transition economies**	–0.4	–7.9	–19.9	7.3

Source: UNCTAD, 2017a.
Note: Trade volumes are derived from international merchandise trade values deflated by UNCTAD unit value indices.

the import demand of developing economies expanded at the modest rate of 1.1 per cent in 2016. Much of the contraction in the import demand of Latin America and the Caribbean was also driven by the recession in Brazil.

In 2016, export volumes in the transition economies declined, reflecting in particular the negative impact of the recession in the Russian Federation. In contrast, the import demand of these economies recovered from the deep contraction recorded in 2015 due to the erosion of their terms of trade resulting from lower commodity and oil prices. The relative improvement in oil price levels in 2016 and the ability of transition economies to absorb the shock affecting their terms of trade helped support their demand for imports.

Overall merchandise trade growth was also weak in relation to world GDP growth, a trend that has increased since 2008. In addition to cyclical factors such as the weakness in global demand and the slowdown in economic activity, the apparent shift in the traditional relationship between GDP and trade also reflects structural factors such as the slowdown in the pace of globalization and supply chain fragmentation (UNCTAD, 2016; Bems et al, 2013). For example, the share of Chinese imports of parts and components in merchandise exports decreased from 60 per cent in 2000 to less than 35 per cent in recent years (United Nations, 2017). These developments may have contributed to reducing trade–GDP elasticity. The latter was estimated at 1.3 in 1970–1985, 2.2 in 1986–2000, 1.3 in the 2000s and 0.7 in 2008–2013.[2]

A shift in the composition of global demand seems to have also contributed to moderating the GDP and trade link. Investment – the most trade-intensive component of global demand – has weakened in recent years. Also, slower progress in trade liberalization under the World Trade Organization, uncertainty about the future of regional trade agreements, notably the Trans-Pacific Partnership Agreement, and growing protectionist trends, including as measured by the proliferation of trade restrictions, constitute additional constraining factors. In addition to the uncertainty arising from the trade policy stance of the new Administration in the United States, the rise in the overall stock of trade-restrictive measures since the 2008/2009 downturn is also a concern. Of the 1,671 trade-restrictive measures recorded in Group of 20 economies since 2008, only 408 had been removed by mid-October 2016. Today, the total number of restrictive measures still in place is estimated to exceed 1,250 (World Trade Organization, OECD and UNCTAD, 2016).